

Baseline Survey on the Proposed Nuclear Power Plant in Kilifi County

Final Report



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LIST OF ABBREVIATIONS

Abbreviation/Acronym	Full Meaning
CJGEA	Center for Justice, Governance, and Environmental Action
CSOs	Civil Society Organizations
CBOs	Community Based Organizations
CATI	Computer Assisted Telephonic Interviews
ICI	Infotrak CATI Interviewer
FGDs	Focus Group Discussions
KIIs	Key Informant Interviews
PAZ	Precautionary Action Zone
SESA	Strategic Environmental and Social Assessment
UPZ	Urgent Protective Action Zone
FRPZ	Food Restriction Planning Zone
NuPEA	Nuclear Power and Energy Agency

EXECUTIVE SUMMARY

Introduction

The establishment of a nuclear power plant in Matsangoni Kilifi County necessitates strong emergency preparedness measures to mitigate potential risks. According to international nuclear safety standards set by the International Atomic Energy Agency (IAEA), nuclear power plants require well-defined emergency planning zones to enhance public safety. These zones include:

- a) **Precautionary Action Zone (PAZ):** Covers areas within 5 km of the plant where preventive protective measures, such as evacuation planning and sheltering, must be in place.
- b) **Urgent Protective Action Zone (UPZ):** Extends 5–25 km from the plant, focusing on early protective actions, including iodine distribution and public awareness campaigns.
- c) **Food Restriction Planning Zone (FRPPZ):** Extends up to 300 km, requiring long-term monitoring of environmental and public health risks.

Survey Background and Objectives

There is a need, therefore, to assess whether community members and other affected stakeholders have been adequately involved and informed about the intended power plant. As such, the Center for Justice, Governance, and Environmental Action (CJGEA) commissioned Infotrak research & consulting to conduct a baseline survey; firstly to assess whether community members and other stakeholders have exercised their right to public participation in matters related to the development of the nuclear plant in Matsangoni Ward, Kilifi County, and secondly, to establish whether community members and other stakeholders have been provided with information related to the nuclear plant, and whether this information was clear, relevant, and accessible.

Survey Methodology

The baseline survey adopted a mixed-methods approach, including both quantitative and qualitative data collection methods. Quantitative data was collected through Computer Assisted Telephone Interviews (CATI) using a structured questionnaire, while qualitative data was gathered through key informant interviews (KIs) stakeholders and focus group discussions (FGDs) with community members. A total of 813 quantitative interviews were conducted across three buffer zones. In addition, 14 KIs and 4 FGDs were conducted to triangulate and enrich the quantitative survey findings.

Key Findings

Surveyed respondents cited mainstream and social media as their primary sources of information, with community WhatsApp groups and Facebook pages being used to share information among community

members. Other mentioned sources of information include; word of mouth and updates from administrative and elected leaders.

The survey established that community members to be affected by the nuclear power plant were not adequately involved in decision-making processes of the plant. The survey revealed several barriers to public participation including but not limited to lack of information on when and where public forums were being held. Others felt that public participation forums to discuss the plant were merely a formality, leading to discouragement. Short notices also deterred attendance. Furthermore, select surveyed respondents who attended the public participation forums indicated that they were not given adequate opportunity to air their views, further discouraging their participation.

A majority of the surveyed respondents felt that the information provided by the Nuclear Power and Energy Agency (NuPEA) and other government agencies about the proposed nuclear power plant was scanty and insufficient.

To address the aforesaid challenges, this survey report recommends robust awareness-raising campaigns, and stronger community and stakeholder engagement to foster informed decision making.

I. SURVEY BACKGROUND AND OBJECTIVES

I.1. Survey Background

In Kenya, public participation and access to information are fundamental rights enshrined in the Constitution. Article 10 highlights public participation as a core national value and principle of governance, while Article 35 guarantees every citizen the right to access information held by the State. However, despite these constitutional provisions, challenges remain in their implementation, particularly in large-scale development projects. Many communities, especially in rural and marginalized areas, often find themselves excluded from decision-making processes, with limited access to relevant information.¹ This has led to grievances and distrust between the government and local communities.²

Despite ongoing efforts by civil society and advocacy groups to enhance public participation and information dissemination, significant gaps persist. Many communities still struggle to exercise their right to participate effectively in matters that affect their lives.³ This is often due to limited awareness of their rights, inadequate communication channels, and the technical complexity of the information provided.

The situation in Kilifi County, particularly in Matsangoni Ward, highlights significant challenges in public participation and access to information. The plan to establish a nuclear plant in the area has sparked widespread concern among community members regarding their exclusion from the decision-making process. Media reports suggest that many residents feel inadequately informed and consulted regarding the project. In 2021, the community strongly opposed the nuclear plant, citing the absence of meaningful consultation and insufficient information on the potential environmental and health impacts.⁴ This has led to widespread fear and uncertainty, as residents struggle to access clear and comprehensive information about the project's implications for their well-being and the ecologically rich environment.

The proposed establishment of a nuclear power plant in Kilifi County necessitates strong emergency preparedness measures to mitigate potential risks. According to international nuclear safety standards

¹ Ndubi, Alice. "Access to Information in Kenya: Implementation and Barriers." *Information Development* 36, no. 2 (2020): 211-225.

² Munyua, Jane. "Public Participation in Kenya: Challenges and Opportunities." *Journal of African Law* 62, no. 3 (2018): 379-398.

³ Mwangi, Karanja, and Wamuyu, John. "The Role of Civil Society in Enhancing Public Participation in Kenya: A Case of Environmental Advocacy." *African Journal of Environmental Studies* 5, no. 1 (2019): 45-57

⁴ Obara, Valentine, and Maureen Ongala. "Inside Kilifi village set for Kenya's nuclear power dream." Nation Media. Last modified 2015. <https://nation.africa/kenya/counties/kilifi/inside-kilifi-village-set-for-kenya-nuclear-power-dream-4492384#story>

set by the International Atomic Energy Agency (IAEA), nuclear power plants require well-defined emergency planning zones to enhance public safety.⁵ These zones include:

- Precautionary Action Zone (PAZ): Covers areas within 5 km of the plant where preventive protective measures, such as evacuation planning and sheltering, must be in place.
- Urgent Protective Action Zone (UPZ): Extends 5–25 km from the plant, focusing on early protective actions, including iodine distribution and public awareness campaigns.
- Food Restriction Planning Zone (FRPZ): Extends up to 300 km, requiring long-term monitoring of environmental and public health risks.

The Center for Justice, Governance, and Environmental Action (CJGEA) recognizes the need to address the above preparedness measures in Matsangoni Ward and its environs at large. The development of the nuclear plant has highlighted the existing gaps in public participation and access to information. There is a need therefore to assess whether community members feel they have been adequately involved in the project's decision-making processes and whether they have access to relevant and comprehensible information about the plant.

CJGEA has consequently commissioned this survey to understand the community's experiences and perceptions regarding their right to public participation and access to information concerning the nuclear plant. This survey provides critical insights into the effectiveness of current engagement strategies and identifies areas where more inclusive and transparent approaches are needed. CJGEA will use the survey findings to empower community members to participate meaningfully in decisions that impact their lives and advocate for their rights.

International nuclear safety protocols highlight the importance of community awareness in nuclear emergency planning, including evacuation routes, early warning systems, and radiation exposure responses.⁶ As such, the study also assessed whether affected communities are informed about these preparedness plans and their ability to respond effectively in case of an emergency.

⁵International Atomic Energy Agency. "Emergency Facilities, Locations and Zones." Pages - GNSSN Home. Accessed March 11, 2025.

<https://gnssn.iaea.org/main/ANNuR/Activity%20Documents%20%20Public/Regional%20Workshop%20on%20Emergency%20Preparedness%20and%20Response/L-015%20Emergency%20Facilities,%20Locations%20and%20Zones%20updated.pdf>

⁶International Atomic Energy Agency. "Emergency Facilities, Locations and Zones." Pages - GNSSN Home. Accessed March 11, 2025.

<https://gnssn.iaea.org/main/ANNuR/Activity%20Documents%20%20Public/Regional%20Workshop%20on%20Emergency%20Preparedness%20and%20Response/L-015%20Emergency%20Facilities,%20Locations%20and%20Zones%20updated.pdf>

1.2. Survey Objectives

The survey mainly sought to:

- i. Assess whether community members and other stakeholders have exercised their right to public participation in matters concerning the development of the nuclear plant in Matsangoni Village.
- ii. Examine whether community members and other stakeholders have accessed information related to the nuclear plant and whether this information is clear, relevant, and accessible.

1.3. Report Structure

This report is structured into seven main sections. It begins with an **executive summary**, followed by the **study background and objectives** that outlines the context and objectives of the baseline survey. The **methodology** section details the approaches and tools used in data collection and analysis. The core of the report is presented in the **survey findings and interpretation of results**, which covers general observations, levels of **awareness of the planned nuclear power plant** and the **sources of information**, **awareness of the possible effects** of the nuclear plant, citizenry feedback on **public participation**, and key **environmental concerns**. The report ends with a **conclusion** summarizing the key insights, followed by **recommendations**.

2. SURVEY APPROACH AND METHODOLOGY

The survey adopted a two-pronged approach, which entailed quantitative and qualitative research approaches. The quantitative phase involved Computer Assisted Telephonic Interviews (CATI) with the community members. On the other hand, the qualitative phase included Key Informant Interviews (KIIs) and Focus Group Discussions (FGDs) with key stakeholders and community members respectively, as illustrated below;

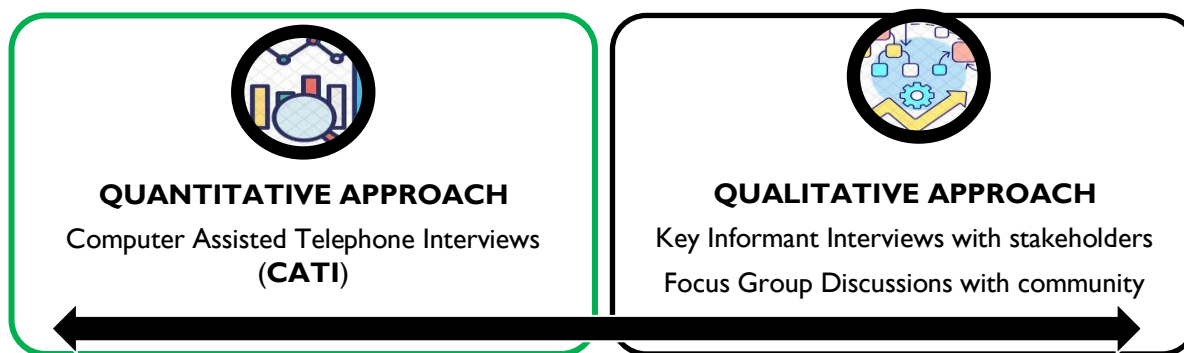


Figure 1: Survey Approach

2.1. Inception phase

The study started with an inception meeting between Infotrak and CJGEA team. During this phase, the scope, objectives, methodology, and deliverables of the survey were discussed and agreed upon. This meeting was crucial in ensuring a shared understanding and commitment to the evaluation. It also provided an opportunity for the Infotrak team as well as the CJGEA team to clarify any questions or unclear issues.

2.2. Field Investigation Phase

This phase commenced upon approval of the inception report and tools. It involved training of the field team; pretesting the data collection tools for validity and reliability (pilot); selecting samples for interviewing. The consultant employed both qualitative and quantitative research approaches. For qualitative data collection, key informant interviews and focus group discussions were conducted.

2.2.1. Qualitative Approach

Focus Group Discussions (FGDs)

The FGDs targeted community members residing in zones 1 and 2 (i.e. within 25 kilometres from the planned nuclear power plant). The focus group discussions were moderated using a predominantly open-ended guide, with deep probing questions covering the survey objectives. The table below highlights the achieved FGDs:

Table 1: FGDs breakdown

Group	Number of FGDs	Gender	Focus Areas
Youth	2	Mixed Gender	First FGD in Zone 1 Second FGD in Zone 2
Adult (36+ years, One male, One Female)	2	Single Gender	First FGD in Zone 1 Second FGD in Zone 2
Total	4		

Key-Informant Interviews (KIIs)

Key informant interviews were conducted with key stakeholders, policy makers, local government officials, emergency responders, and opinion leaders with specialized knowledge or influence over the proposed nuclear power plant. These interviews provided data in the form of opinions, experiences and recommendations that are not quantifiable. The respondents were purposively sampled. The table below highlights the composition of the attained KIIs.

Table 2: KIIs Breakdown

Respondent Group	# of Respondents
Local National Government Administrators (NGAO representatives)	2
County Government Representatives	1
Religious Leaders	2
Representatives of local Community Forest Associations	1
Local CSOs/CBOs	2
Education Sector Representatives	1
Representatives of nearby Hoteliers	2
Political Leader	1
Emergency Responder	1
Activist	1
Total	14

2.2.2. Quantitative Approach

The quantitative survey was conducted with community members using Computer-Assisted Telephone Interviews (CATI), while ensuring representation across different zones. Eligible respondents were 18 years and above, residing within a 300-kilometer radius from the proposed nuclear power plant. To achieve geographical balance, the survey was administered across three buffer zones, namely:

- PAZ (Protection Action Zone) – Less than 5 km
- UPZ (Urgent Protective Zone) – 5 to 25 km
- FRPZ (Food Restriction Planning Zone) – Up to 300 km

Sample size determination for the Individual interviews

To determine the appropriate sample size for the quantitative survey, four main criteria were considered:

- **Desired level of precision:** this is the margin of error indicating the range in which the true value of the population was estimated to be for outcome variables of interest. For this survey a precision of ± 3.5 was considered.
- **Confidence interval:** this is the level of confidence that the true population value for the variables of interest fell within the range of precision. In this survey, 95% confidence interval was used.
- **Estimated proportion:** This is the best estimate of the value of distribution of the attributes of interest in the population. A proportion of 50% was used for two reasons:
 - i. Because we don't have a good estimate of the proportion and using 50% assumes the maximum variability in a population and hence would produce a sample size larger than if the true variability was used;
 - ii. The survey measures several attributes of interest that certainly have different values; hence a 50% value would standardize the variability across these attributes.
- **Population size:** By treating the project intervention areas as our sampling units, we need to consider the size of the population being surveyed. The project has an infinite target population.

The sample size was therefore calculated as follows:

Step 1: Using the Cochran formula an initial sample size was calculated.

$$n_1 = \frac{Z^2 pq}{e^2}$$

Where:

n_1 = sample size

Z = standard normal mean deviation corresponding to 95% confidence interval (Z value = 1.96)

p = is the (estimated) proportion of the population which has the attributes of interest (For this survey it is set at 50% i.e. 0.5)

$$q = 1 - p$$

e = precision level (i.e. the margin of error) desired for the survey (taken as $\pm 3.5\%$ i.e. 0.035)

Hence using the above formula, the target sample size was 800 interviews. However, the survey achieved a sample size of 813 interviews distributed as shown below;

Table 3: Quantitative Sample Distribution

Zone 1		
EA	Target Sample	Achieved Sample
Matsangoni	150	153
Watamu	150	154
Zone 2		
Tezo	17	17
Watamu	17	17
Junju	17	17
Mwarakaya	17	17
Shimo La Tewa	16	17
Chasimba	17	18
Mtepeni	17	17
Ganze	17	17
Bamba	17	17
Sokoke	17	17
Jilore	16	16
Kakuyuni	16	16
Ganda	16	16
Malindi Town	16	16
Shella	17	19
Total	250	254
Zone 3		
Garsen	28	28
Hola	28	28
Voi	42	42
Kwale	43	44
Mombasa	42	42
Emali	8	8
Zone 3		
Mpeketoni	8	8

Bura	14	14
Lamu	15	15
South Kitui NR	8	8
Galana	14	15
Total	250	252

2.3. Data Analysis

Quantitative data cleaning and analysis were done using the Statistical Package for Social Sciences (SPSS) software. MS Excel was also used to generate tables. During data cleaning, consistency and logic checks were conducted to confirm the flow of responses. The Z-Score was used to do the checks, and a case was defined as an outlier if it exceeded +5/-5 deviations. A multiple-response variable was computed for the multiple-response questions. This was done by splitting the response into the maximum number of responses possible. For variables that had the option 'other', the responses were recorded back into that variable, and the additional value labels were included and analyzed along that variable. Qualitative data was captured by voice recording and note-taking. Audio recordings were transcribed word for word for analysis and reporting. Qualitative data was analyzed thematically.

2.4. Quality Control and Assurance

A well-planned system of procedures, performance checks, quality audits, and corrective actions was instituted to ensure that the data produced throughout the survey was of the highest achievable quality. The quality assurance planning involved the identification of key areas of quality used in quality assurance. Below is how quality control was ensured throughout the survey circle.

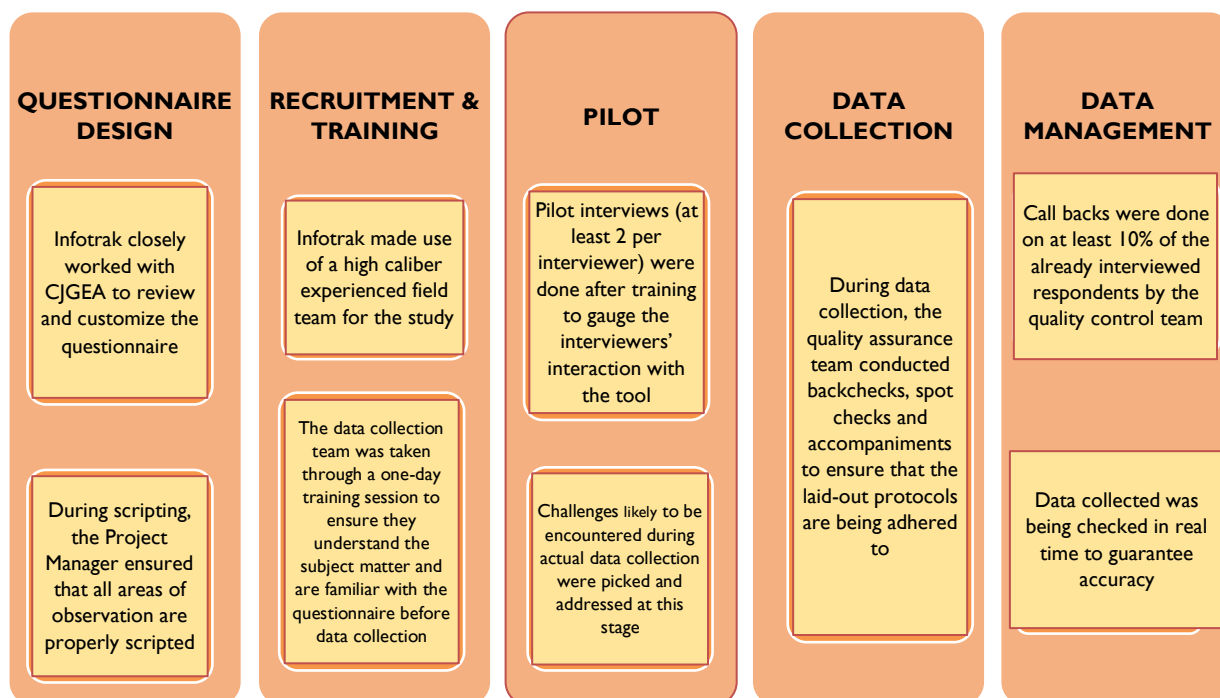


Figure 2: Quality control processes

3. EVALUATION FINDINGS AND INTERPRETATION OF RESULTS

3.1. Awareness of Constitutional Rights and Requirements

3.1.1. Awareness of the Right to Access Information

A majority (88%) of the surveyed respondents demonstrated awareness of their constitutional right to access information held by the government. Conversely, 9% lacked awareness of this right. This trend of awareness was consistent across all three buffer zones, as illustrated in the figure below.

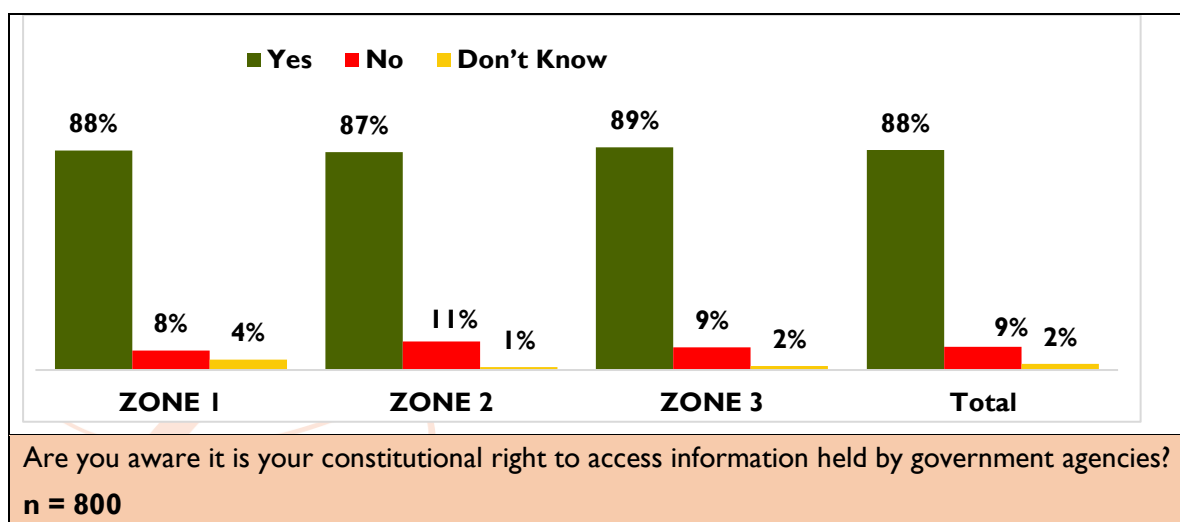


Figure 3: Awareness of the right to access information held by government agencies

Awareness of the right to access information held by the state agencies is slightly higher among males (90%) compared to their female (86%) counterparts. Further, those aged above 55 years are slightly less aware of the right to access information compared to other age groups, as shown below.

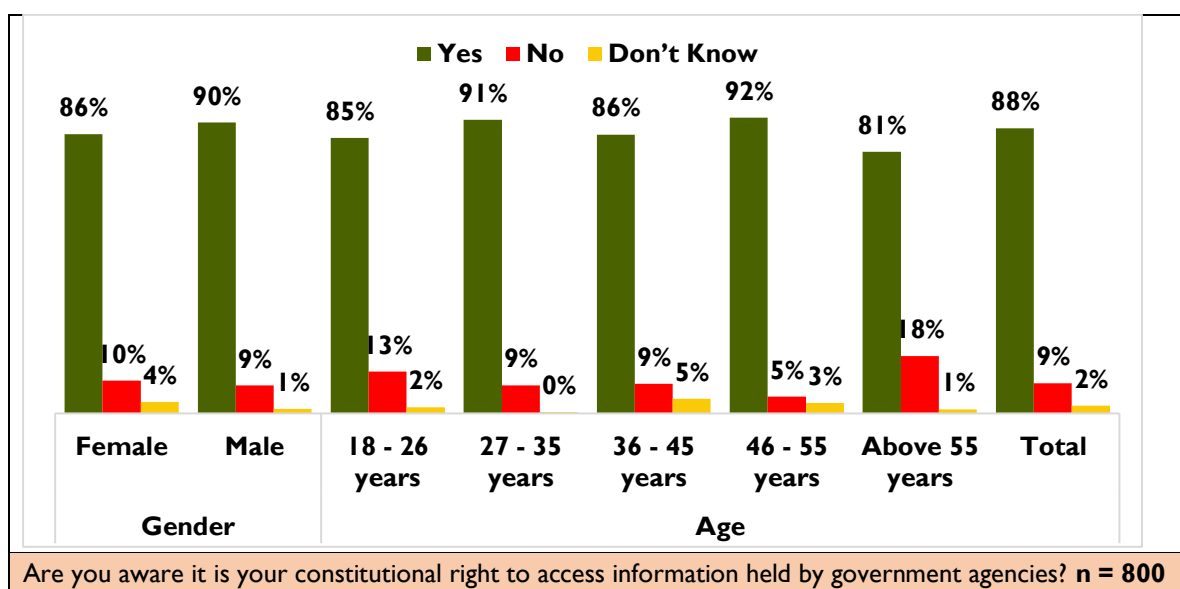


Figure 4: Awareness of the right to access information held by government agencies - by age and gender

Similarly, findings from focus group discussions validated high awareness levels of the right to access information. Discussants expressed awareness of their entitlement to obtain information from government agencies. Some of them had the following to say:

“... Yes, I know, that is my right to be told what the government is planning to do...” FGD respondent.

“...I should be told which project is coming and I should give my input...” FGD respondent.

3.1.2. Awareness of the requirement of public participation

A majority (85%) across the three buffer zones affirmed that they are aware of the constitutional requirement to involve people in government decision making processes. However, 12% were not aware that public participation is a constitutional requirement.

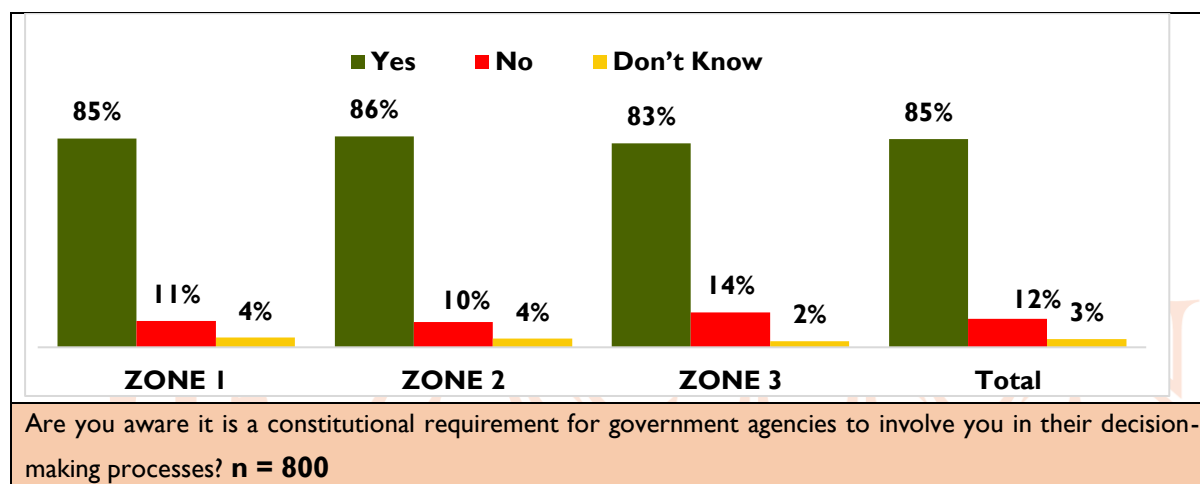


Figure 5: Awareness of the requirement of public participation

Despite the high levels of awareness, only 30% of the surveyed respondents affirmed to have participated in public participation forums within the last one year. Further analysis showed that more males (33%) than women (26%) are involved in public participation forums. Further, the youth (18 – 26 years) are less involved in public participation compared to the elderly.

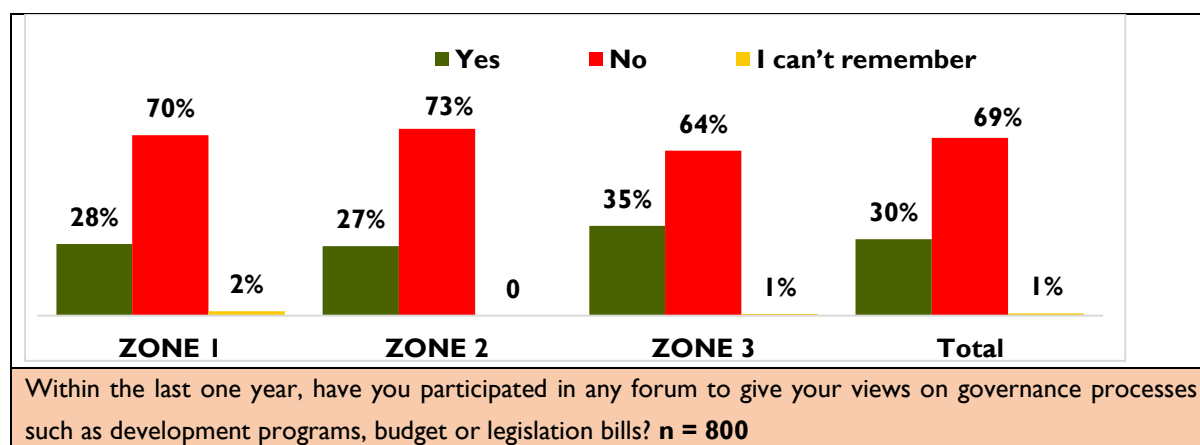


Figure 6: Involvement in public participation forums within the last one year

Qualitative findings from the focus group discussions reflected the quantitative findings, highlighting several barriers to public participation. Most respondents cited lack of information on when and where public participation forums were being held. Others felt that public participation was merely a formality, leading to discouragement. Insufficient advance notice also deterred attendance, as did challenges in understanding complex topics like the budget-making process. Furthermore, some respondents reported that even when they attended, they were not given an opportunity to contribute, further discouraging their participation. Highlighted below are some of the sentiments:

“...my input will not be included anywhere so why should I waste my time?” FGD respondent.

“They come to us with a huge book and expect us to pass the proposals the same day... “ FGD respondent.

“...we have been giving our inputs but we see the same bill being passed without any amendments, they just waste our time...I was once told, it was prepared by a professional so it is correct...” FGD respondent.

“... you can attend the forum, but unless you are supporting what is being discussed, you will not be allowed to ask any questions...” FGD respondent.

3.1.3. Sources of information on Government Projects

The media (77%) was mentioned as the main source of information about ongoing/planned government projects. It was followed by community meetings at 18%. Other mentioned sources include local government officers (14%), CSOs (7%), government websites (3%), and friends/neighbors (2%).

Table 4: Sources of Information on Government Projects

	ZONE 1	ZONE 2	ZONE 3	Total
Media	75%	79%	78%	77%
Community meetings	19%	17%	18%	18%
Local government offices	12%	11%	17%	14%
Civil Society Organizations (CSOs)	12%	3%	6%	7%
Government websites	2%	4%	4%	3%
Friends/Neighbors	2%	4%	1%	2%

Where do you usually get information about ongoing/planned government projects in your area?
n = 800

During FGDs, respondents cited traditional and social media as their primary sources of information, noting the use of WhatsApp groups and Facebook pages to share updates within the communities.

Other mentioned sources of information include; word of mouth, and updates by local administrators. Some of the discussants had the following to say:

".....When I want to know anything, I check online..." – FGD respondent Kilifi

".... Sometimes our chief will call people for a baraza, and inform us." – FGD respondent

".... I just hear people talking, and that is how I will know..." – FGD respondent

To improve access to information for the public, focus group discussants provided several recommendations including but limited to the following:

- **Use of public address systems:** Government agencies should use public address systems to move around and pass important information to members of the public, ensuring that even those without access to digital platforms receive updates.
- **Civic education campaigns:** Both the national and county governments should organize structured awareness programs to educate members of the public about key issues, policies, and upcoming engagements. These campaigns should be ongoing and tailored to the needs of different community groups.
- **Use of community leaders:** Government agencies should use trusted community leaders, including village elders, religious leaders, and community health promoters, to ensure that intended information reaches a wider audience.
- **Advance notices for public participation meetings:** Government agencies need to provide adequate notice before public participation meetings, to allow people to adjust their schedules, prepare, and participate meaningfully. The notices should include details such as the venue, time, and topics to be discussed.
- **Use of social media:** Government agencies should use platforms like WhatsApp, Facebook, and other social media channels to disseminate important information to members of the public.
- **Advance sharing of information:** Before public participation meetings, government agencies need to share relevant documents and discussion points. This will help attendees prepare questions, understand the topics being discussed, and contribute effectively during public participation meetings.
- **Use of mainstream traditional media:** Radio and TV remain key sources of information to members of the public. As such, government agencies should use them to pass information to the citizenry, as they reach a broad audience, including those who may not have internet access. Additionally, posters placed in strategic locations such as marketplaces, schools, and public offices can help inform members of the public about upcoming events and key government initiatives.

3.2. Awareness of the planned Nuclear Power Plant in Kilifi

3.2.1. Familiarity with the proposed nuclear power plant

Overall, a majority (54%) of the surveyed respondents were not familiar with the proposed nuclear power plant project in Kilifi County. Lack of familiarity with the project was higher in zone 3 (60%) and zone 2 (59%) compared to zone 1 (44%). Only 12% of the respondents affirmed to be very familiar with the proposed nuclear power plant project, as shown in the chart below.

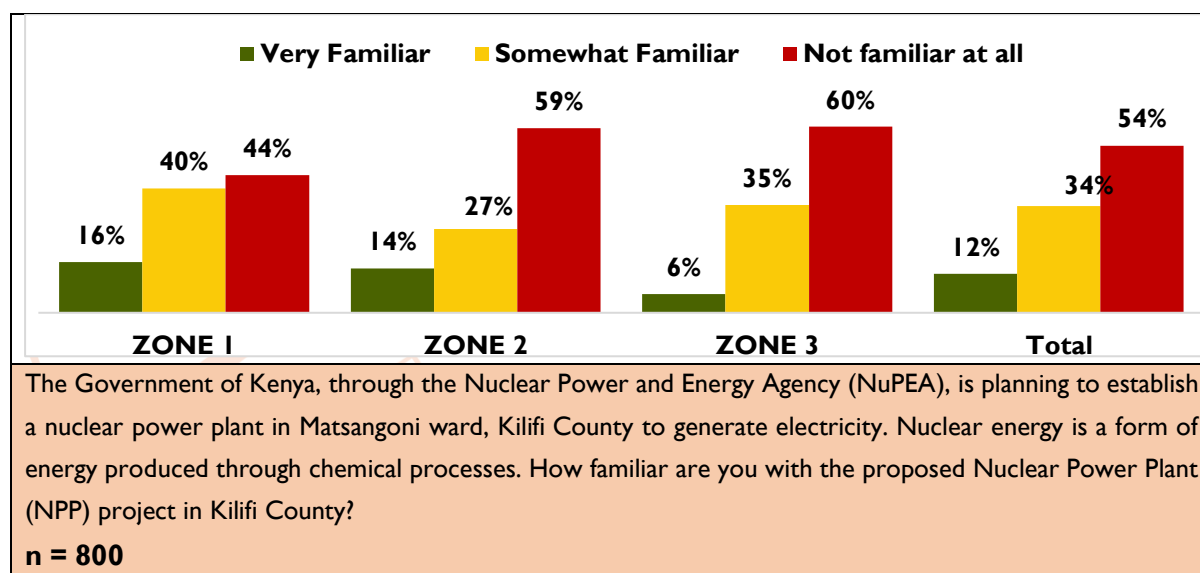


Figure 7: Familiarity with the Proposed Nuclear Power Plant Project in Kilifi County

Mass media (TV, Radio, Newspapers at 42%) was mentioned as the main source of information about the proposed nuclear power plant in Kilifi. It was followed by word of mouth (at 25%) and social media (11%), among other sources, as shown below.

Table 5: Sources of awareness of the proposed nuclear power plant

	ZONE 1	ZONE 2	ZONE 3	Total
Through mass media (TV, Radio, Newspapers)	34%	41%	57%	42%
Through word of mouth (Friends, Relatives)	27%	28%	17%	25%
Through social media (Facebook, WhatsApp, X etc)	8%	11%	16%	11%
Community meetings/barazas	12%	10%	4%	9%
Through local leaders (political and administrative)	13%	10%	2%	9%
Through the county government	3%	1%	3%	2%
Civil Society Organizations (CSOs)	3%	-	2%	2%

If familiar, how did you first hear about the planned Nuclear Power Plant in Kilifi? **n = 378**, Those familiar with the planned Nuclear Power Plant in Kilifi County

3.2.2. Provision of official information about the planned Nuclear Power Plant in Kilifi County

A majority (91%) of the surveyed respondents have not received verbal, written, or official information about the planned Nuclear Power Plant. Only 9% (mostly in zone 1) affirmed to have received verbal, written or official information about the nuclear power plant project in Kilifi County, as shown below.

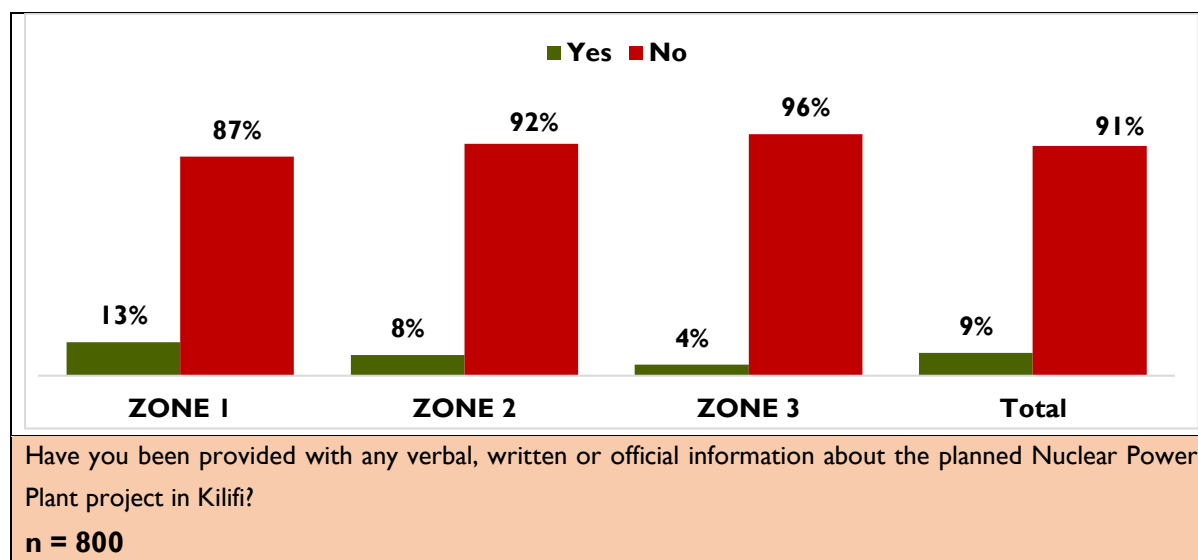


Figure 8: Provision of official information about the planned Nuclear Power Plant in Kilifi County

For those who received information about the planned Nuclear Power Plant in Kilifi, 31% got the information from local administrative leaders, 28% got it from local elected leaders, 24% from friends/relatives, 21% from media, while 13% got it from NuPEA officials, among others as shown in the figure below.

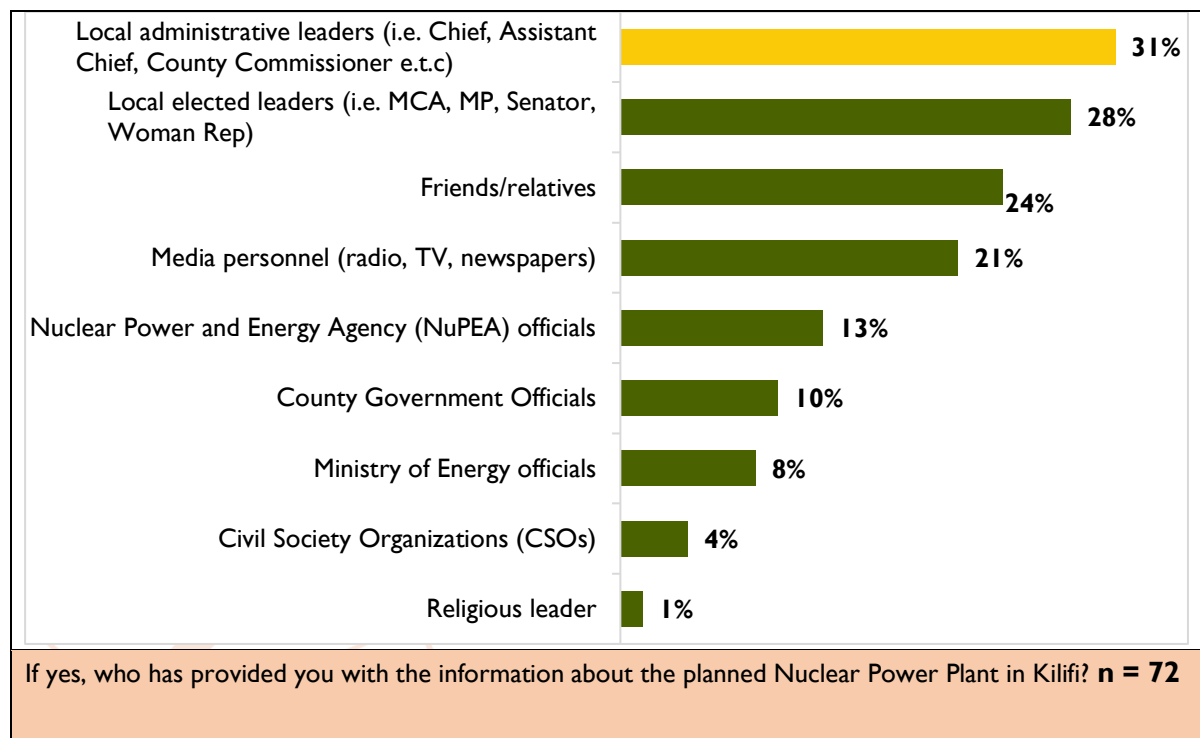


Figure 9: Sources of information about the Nuclear Power Plant

During focus group discussions, most respondents confirmed that they had heard about the proposed nuclear power plant in Kilifi County. However, they noted that the information they received was unofficial and often unreliable. Many community members were not informed through formal government channels but instead learned about the project through indirect sources. Most FGD respondents indicated that they first heard of the nuclear power project during demonstrations in Uyombo Village. Others learned about it through social media platforms, conversations with friends and family, and speeches by political figures. In another case, a stakeholder learnt about the proposed nuclear power plant when a meeting was held at his enterprise.

Lack of structured communication about the proposed nuclear plant has created uncertainty, anxiety, and curiosity among affected residents. Most community members expressed concerns about the transparency of the planning process, questioning why they had not been involved or provided with adequate information. The absence of official communication suggests that key stakeholders, including residents, were not properly consulted or informed about the proposed nuclear power project.

During FGDs, discussants shared their experiences regarding how they learned about the nuclear power project. Some of them had the following to say:

"I heard on the radio that there were demonstrations in Matsangoni to stop the nuclear power plant."

– FGD respondent

"I was carrying two customers in my tuk-tuk when I overheard them discussing the nuclear power plant that will be built in Uyombo." – FGD respondent

"I saw information about the project in a WhatsApp group." – FGD respondent

"I found out about the power plant when visitors came to my hotel for a meeting, and I later learned that they were discussing the project." – Key Informant Interview (KII) respondent

FGD discussants indicated that proper public participation about the proposed plant had not taken place, and they believed that key stakeholders, particularly residents, had been left out of discussions. Some suspected that consultations were conducted only with local leaders rather than the broader community. As a result, many people felt that their concerns were ignored and that the project was being pushed forward without their input. Below are their select sentiments;

"...there was no public participation, that is why we are not supporting it..." FGD respondent

"... they only call those who will support it but others are not invited..." FGD respondent.

"...if they did public participation, then they did not involve the local citizens, maybe they did with the leaders only but not us, we were not involved..." FGD respondent.

3.2.3. Perceived benefits of the Nuclear Power Plant to the surrounding Communities and institutions/organizations

A majority (51%) of the surveyed respondents felt that the planned nuclear power plant will not be of any benefit to the surrounding communities. Only 26% were of the view that the plant would benefit surrounding communities, especially those in buffer zone 2, as shown below.

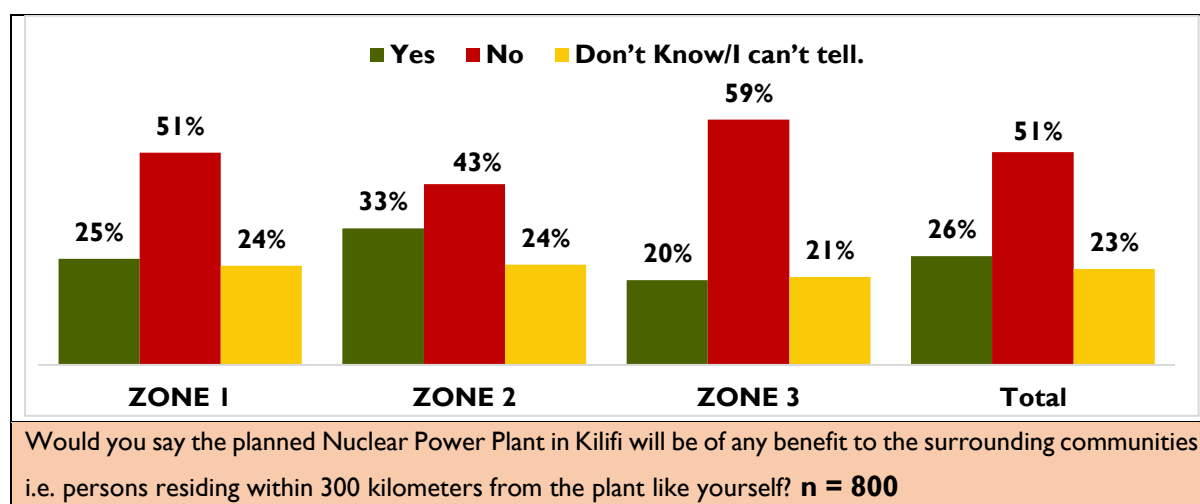


Figure 10: Whether the planned nuclear power plant would be of benefit to the surrounding communities

Similarly, during FGDs most of the FGD respondents believed the proposed nuclear plant will not be of any benefit to the surrounding communities. Discussants expressed their concerns about potential displacements, particularly among elderly community members who have lived in the area for generations. For those who rely on fishing, coconut farming, and tourism for their livelihoods, they fear they will lose their homes and sources of income if the nuclear power plant is built. The lack of clear relocation or compensation plans has created widespread anxiety. Additionally, the proposed location for the nuclear power plant is near key tourist attraction sites such as Watamu Beach, Gede ruins, and the Arabuko Sokoke Forest. Further, respondents were worried about the plant's environmental impacts, particularly on local wildlife and biodiversity. There was a concern that any damage to these natural resources could drive tourists away, ultimately harming the region's economy, which heavily depends on tourism.

On their part, hoteliers and other institutions near the proposed plant were concerned about the potential impacts of the project on the environment. Despite appreciating that there may be some benefits, such as increased energy supply, they expressed their apprehension about the adverse effects the plant will have on their businesses. They feared that the presence of a nuclear plant nearby could foster a negative perception of the area, deterring potential visitors and tourists due to safety or environmental risks associated with nuclear power. As a result, stakeholders raised doubts about the long-term impacts of the project, particularly the adverse effects on their businesses and people's health.

Interviewed public officers acknowledged that the project could have some benefits to the surrounding community but pointed out several critical concerns that could overshadow any perceived economic benefits. They cited waste management and the need for proper training and community engagement in preparation for the project. One of the respondents had the following to say:

"...It is a good initiative, but we need to know how to handle the waste and proper training or preparation in general towards community engagement and waste management will be quite critical...." KII respondent

3.2.4. Familiarity with the Nuclear Power and Energy Agency (NuPEA)

Only 6% of the surveyed respondents were very familiar with NuPEA and its mandate. Another 33% reported being somewhat familiar, while 60% were not familiar with the agency.

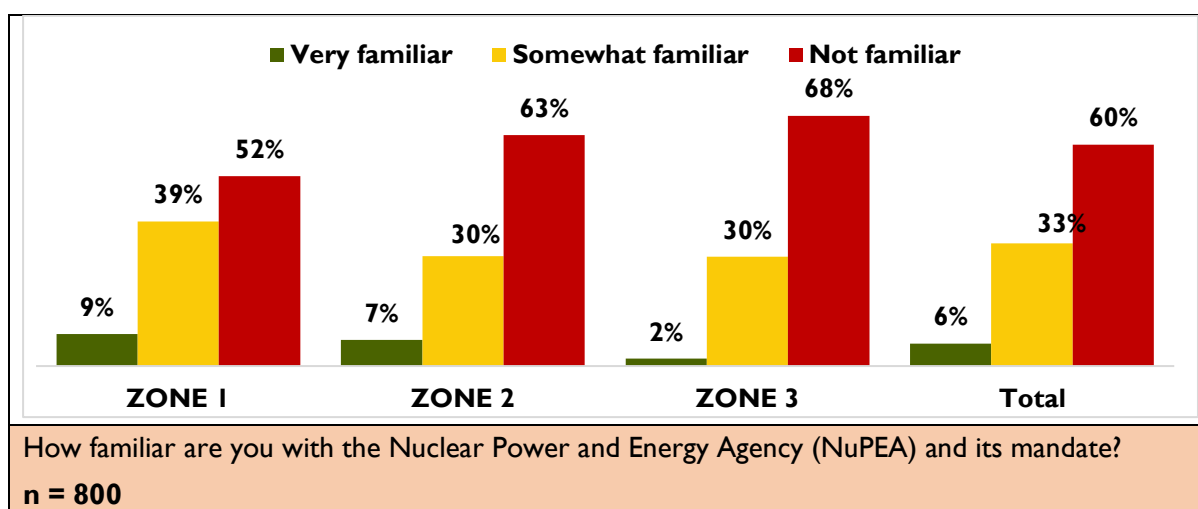


Figure 11: Familiarity with the Nuclear Power and Energy Agency (NuPEA)

Further, a majority (66%) of the surveyed respondents indicated that NuPEA had not provided any information about the Kilifi Nuclear Power Plant to the affected communities. Only 9% (especially in zone 1) affirmed that NuPEA had provided some information about the nuclear power plant to the affected communities. Out of the 9% who reported that they had been provided with information by NuPEA, 42% indicated that the information provided was clear and easy to understand, another 56% each felt that it was relevant and available in local languages respectively.

The frequency of receiving updates on the Nuclear Power Plant project from NuPEA or other responsible government agencies is rare as indicated by 56% of the surveyed respondents. Another 28% reported that they receive such information occasionally, while only 4% receive information about the plant frequently.

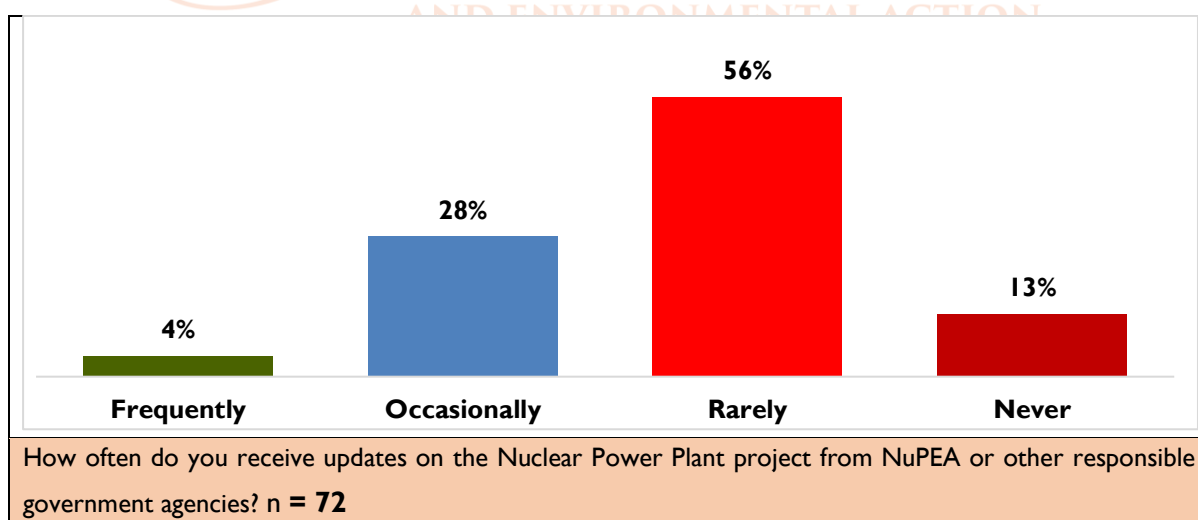


Figure 12: information frequency

Among those who indicated that NuPEA had provided information about the Kilifi Nuclear Power Plant to the affected communities, 36% felt that the nuclear energy agency had adequately informed affected persons about the possible effects of the Nuclear Power Plant. A majority (58%) felt that the Agency had not adequately briefed the affected persons about the possible effects of the plant.

3.2.5. Attempt to access information from NUPEA about the planned Nuclear Power Plant in Kilifi County

Only 5% of the respondents had attempted to access information from NuPEA about the planned nuclear plant in Kilifi. More males (8%) than females (2%) had attempted to access information from NuPEA.

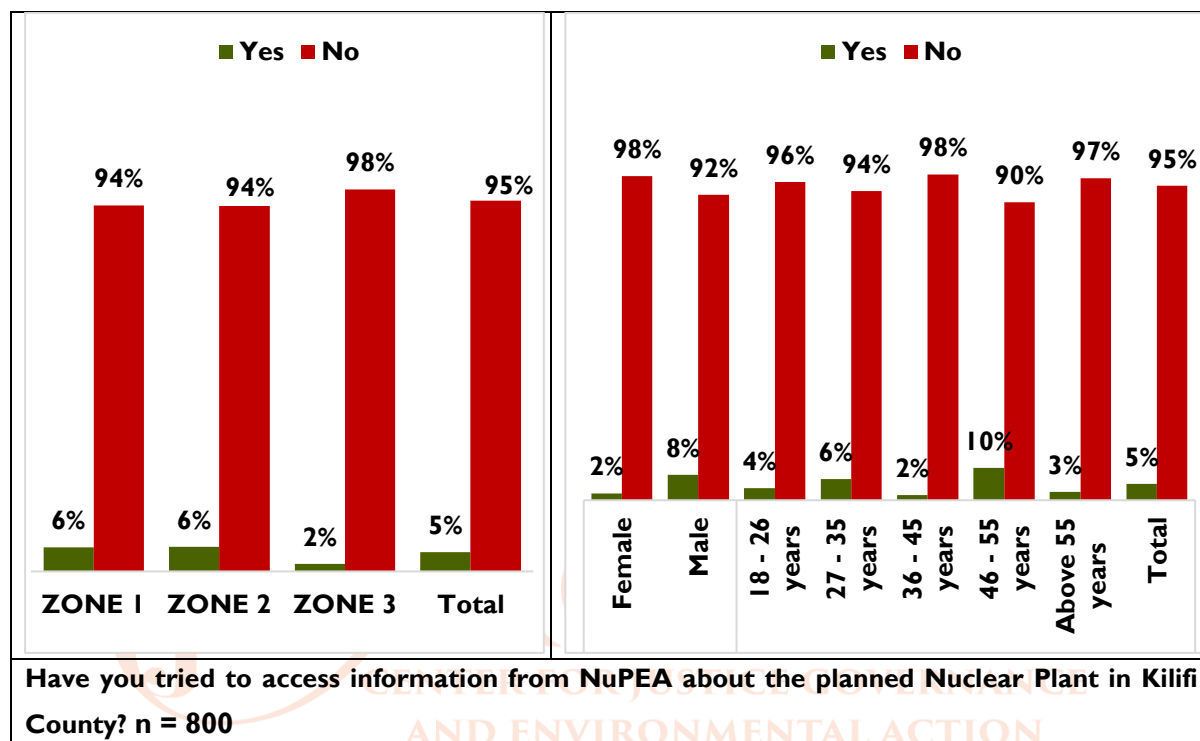


Figure 13: Attempt to access Information from NUPEA about the planned Nuclear Plant in Kilifi County

For those who have attempted to get information from NuPEA about the planned Nuclear Power Plant in Kilifi County, 53% got the information they were looking for, while 48% did not get it. Further, out of those who got the information they were looking for from NuPEA, 71% felt it was somewhat easy to get, while only 10% found it as very easy to get. Additionally, 40% felt that there are more avenues to request for more information from NuPEA.

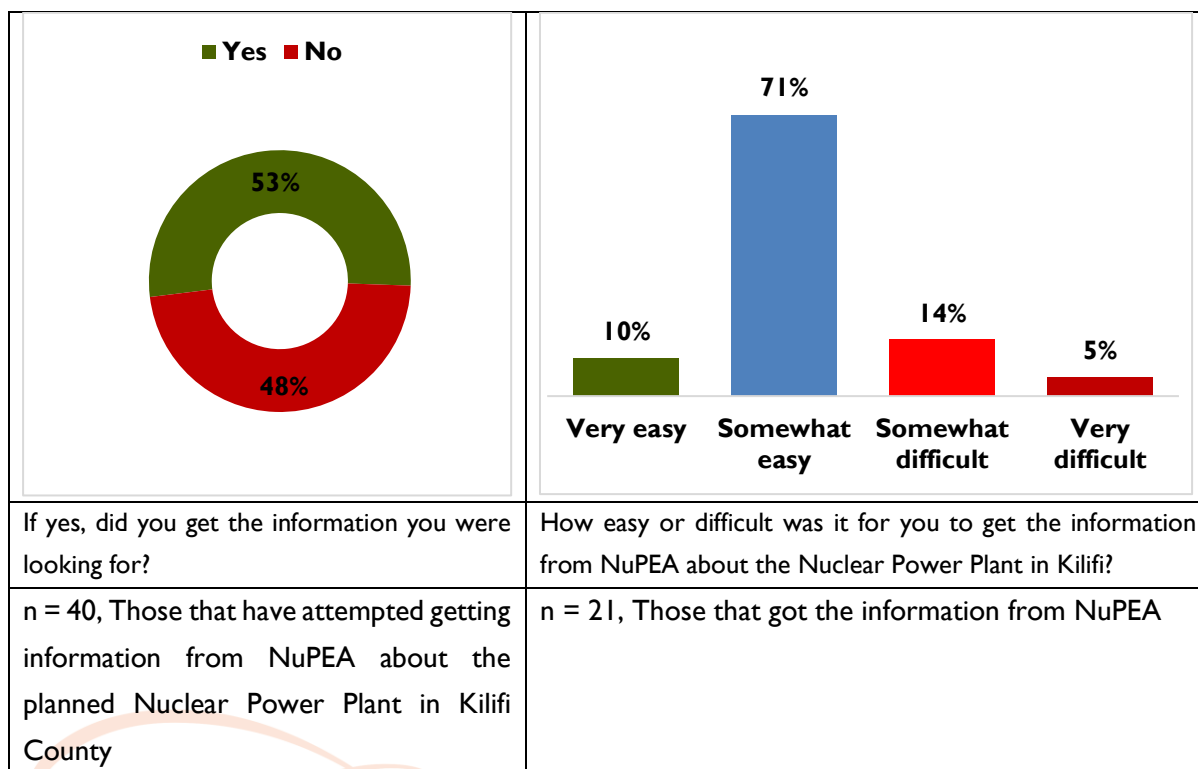


Figure 14: Ease/difficult of getting the information sought for from NuPEA

During focus group discussions (FGDs), discussants cited lack of sufficient public sensitization efforts by the Nuclear Power and Energy Agency (NuPEA). Many participants felt that NuPEA had not done enough to educate and engage local communities. FGD Respondents pointed out that NuPEA primarily focused on promoting the benefits of the nuclear power plant, such as improved energy supply and economic opportunities. However, the agency failed to provide adequate information on the potential risks and negative impacts associated with the project. This lack of balanced communication led to skepticism among community members, prompting them to seek information from alternative sources, including social media, word of mouth, and political figures. Unfortunately, some of these sources spread information about the adverse effects of the plant, further heightening anxiety and resistance.

Whereas some level of sensitization about the nuclear power plant had taken place, FGD respondents felt that access to credible information remained a significant challenge. Those with higher literacy levels were able to research and understand the available information. However, a majority of the community members, particularly persons with lower literacy levels, struggled to access and comprehend technical information about the project. As a result, many relied on speculation and rumors, which fueled fear and opposition.

“...No. People around there, most of them are illiterate. So, the information that was given to them was a bit minimal on the details because of their level of understanding on the same. So, I don't think it was adequate. The information given to them should be adequate and thorough as much.....” Kil respondent

“... for us we have read online, but imagine someone in the village who cannot read, how do they expect them to know about the nuclear power plant...” FGD respondent

“...I read online and when I search for the positive and negative impacts the negatives are many compared to the positives...” FGD respondent

“...I read about what happened in Japan and China, and to be sincere, unless the government wants to kill us...” FGD respondent.

3.3. Awareness of the possible effects of the Nuclear Power Plant

3.3.1. Awareness of the possible effects of a Nuclear Power Plant on people and livestock health

Most (35%) of the surveyed respondents are not informed at all, 27% are little informed, 25% are somewhat informed, while only 13% are very well informed about the possible effects of a Nuclear Power Plant on people's and livestock health.

Table 6: Level of information about the possible effects of a Nuclear Power Plant on people and livestock Health

	ZONE 1	ZONE 2	ZONE 3	Total
Very well informed	17%	12%	8%	13%
Somewhat informed	28%	20%	27%	25%
Little informed	26%	29%	26%	27%
Not informed at all	29%	39%	38%	35%

How would you rate your level of information about the possible effects of a Nuclear Power Plant on People and Livestock Health?

n = 800

The proposed nuclear power plant in Kilifi County has generated significant debate among residents, with the majority expressing concerns about its overall impact. While the project is expected to create temporary employment opportunities, most respondents believe the negative consequences far outweigh these potential benefits, especially on their health and the health of their livestock.

“... They also know it is not good for the people of Kilifi but just because they gain, they cannot refuse...” FGD Respondent.

“...People have to stay far from it because they used to tell us that there are zones that are restricted. So of course, it will lead to displacement....” KII Respondent

3.3.2. Level of Information about the possible effects of the Nuclear Power Plant on the environment

Regarding the level of information about the possible effects of a nuclear power plant on the environment, including ecosystems and food crops, 34% of the surveyed respondents are not informed at all, 28% are little informed, 26% are somewhat informed, while only 12% are very well informed.

Table 7: Level of information about the possible effects of a Nuclear Power Plant on the environment

	ZONE 1	ZONE 2	ZONE 3	Total
Very well informed	12%	13%	10%	12%
Somewhat informed	33%	18%	26%	26%
Little informed	29%	28%	25%	28%
Not informed at all	26%	41%	39%	34%

How would you rate your level of information about the possible effects of a Nuclear Power Plant on the environment, including ecosystems and food crops?

n=800

During FGDs, respondents raised significant concerns about the environmental and health risks associated with a nuclear facility. The potential dangers of radiation exposure and the long-term effects of nuclear waste management were among the most pressing issues. Many participants expressed frustration over the lack of clear information on how nuclear waste would be handled. This highlights the community’s demand for transparency and proper public engagement before the implementation of the nuclear power project.

3.3.3. Whether the Information Shared by NuPEA Included Potential Environmental & Health Impacts of the project

Only 17% of the surveyed respondents affirmed that the information shared by NuPEA included the potential environmental and health impacts, 58% indicated it did not include such information, while 25% were not sure.

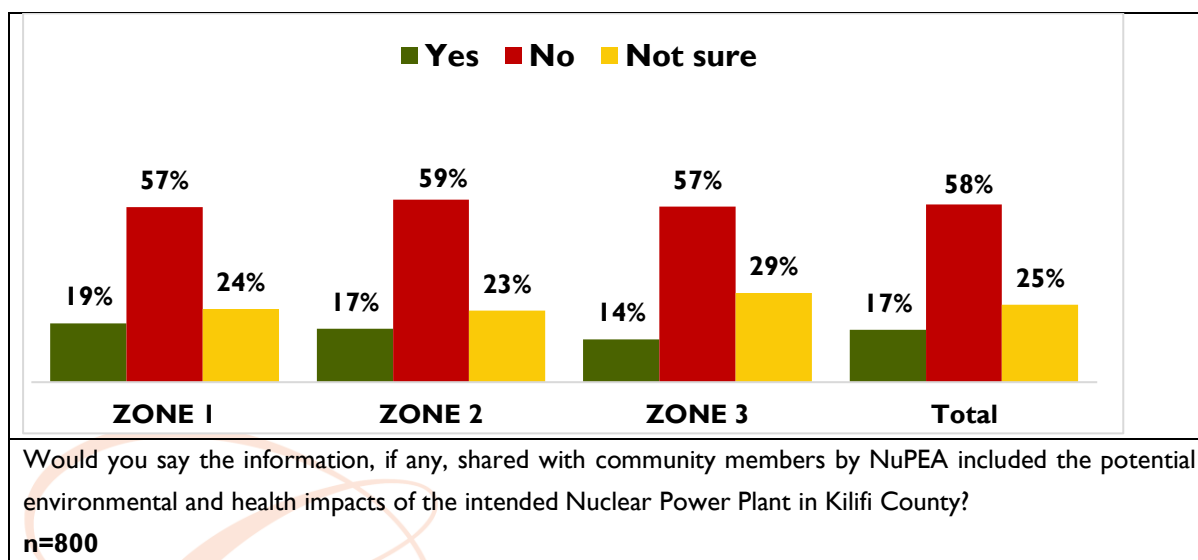


Figure 15: Whether the information shared by NuPEA included potential environmental & health impacts of the plant

From the qualitative phase, most respondents seemed to believe that the information provided by NuPEA was not adequate and did not focus on the potential environmental and health impacts of the intended nuclear power plant. In addition, some of the respondents pointed out that some people were compromised to remain silent with information, stating;

"...They give people money and instruct them on what to say. You'll find people saying yes to things that they know nothing about..." FGD Respondent

"...So many things we asked, for example, what are the long-term and short-term consequences? Because maybe we look at the benefits, what are we gaining as residents?They took us around in circles, they said that they would call people to come help us but people have not gotten feedback till now..." KII Respondent

From their own knowledge, the surveyed key informants pointed out the potential contamination of water, soil, and vegetation by the nuclear power plant, which could adversely affect livestock health and, through the food chain, impact the community members that feed on the animal products. In addition, FGD Respondents raised concerns about the long-term health effects of those living near the nuclear power plant, with many mentioning the risks of radiation exposure leading to diseases such as cancer and birth defects.

“...we depend on water for our livelihoods, so if we are taken to a desert what are we going to do there...?” FGD Respondent

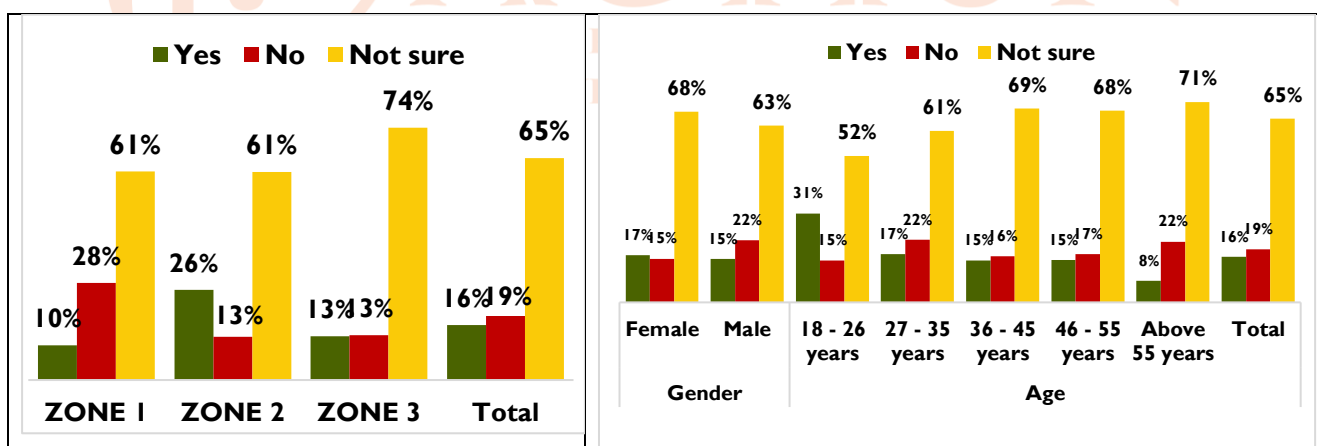
“...most of the old people have invested in coconut trees which take a long time to mature. If they are displaced even if they are given a piece of land to cultivate, how long will it take for them to start harvesting coconuts again or what are they going to do?...” FGD respondent

Furthermore, the uncertainty surrounding the project has caused psychological distress and social tension within the community. FGD discussants mentioned a strong sense of mistrust towards authorities, heightened by concerns over the unknown consequences of the plant’s operations.

“...Possible effects could be health effects, exposure to various cancers for both livestock and humans and the degradation of the soil making it less fertile or infertile at all depending on how the waste is disposed...” Kil respondent

3.3.4. Willingness to recommend the planned nuclear power plant in Kilifi to proceed

A majority (65%) of the surveyed respondents were not sure if to recommend the planned Nuclear Power Plant in Kilifi to proceed, 19% would oppose it, while only 16% would recommend it to proceed. Willingness to recommend the establishment of the nuclear power plant was highest in buffer zone 2 at 26%.



Based on your knowledge and what you may have heard from other people, would you recommend the planned Nuclear Power Plant in Kilifi to proceed?

n = 800

Figure 16: Willingness to recommend the planned nuclear power plant in Kilifi to proceed

During FGDs, participants expressed uncertainty about whether to support or oppose the proposed nuclear power plant, citing limited understanding of its potential impacts. They noted that without adequate information, they were unable to make an informed decision. As such, they recommended

that NuPEA engage directly with local communities and conduct comprehensive sensitization and education campaigns to enhance public awareness and understanding of the project.

Further, a number of respondents expressed strong opposition to the proposed plant, stating that they believed it would offer minimal, if any, benefits to the local community. They voiced concerns that the project could severely disrupt their livelihoods, particularly for those reliant on fishing, tourism, and agriculture. The prospect of displacement—especially of elderly community members who lack alternative means of income—was highlighted as a significant concern.

“...I don’t think the local people will benefit in any way, maybe only the fish vendors and food suppliers...” Kil respondent

“...We are not ready for the project...” FGD Respondent

3.3.5. Reasons for Recommending/Opposing the planned Nuclear Power Plant

Surveyed respondents had different reasons for recommending or opposing the nuclear power plant from proceeding, with 65% of them recommending it due the expected short term job opportunities. On the other hand, 37% oppose it because they believe it will possess health risks such as cancer.

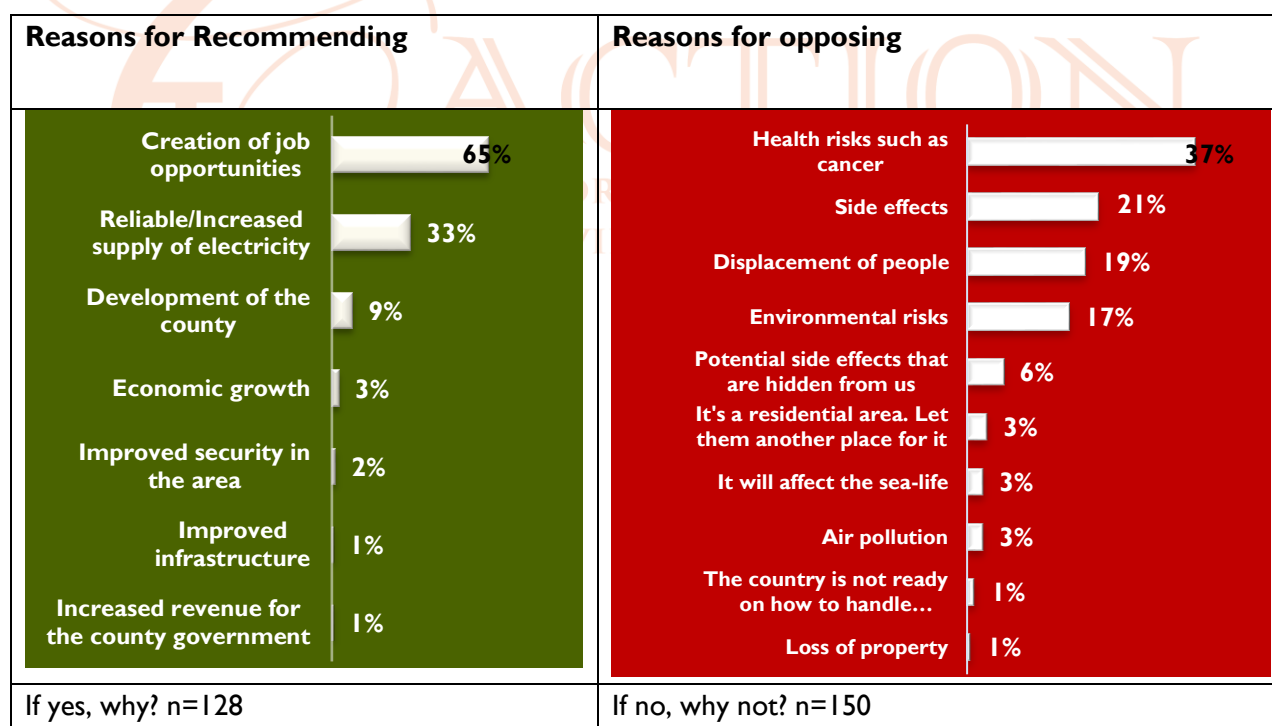


Figure 17: Reasons for Recommending/Opposing the planned nuclear power plant

FGD respondents expressed concerns that the proposed nuclear plant could lead to the displacement of residents. They feared losing their homes and livelihoods, creating significant social and economic challenges. The respondents also refused the project in their area as they believed it will cause negative

impacts even amongst themselves as they were not being involved and people were being paid to accept the project without having their own opinions.

“...The reason we refused the project is because there were people in there who were involved in the vote hunting exercise...” FGD Respondent

“...imagine someone who has lived in Uyombo the rest of his life then you want to take them to Shakaola, will that person survive there...” FGD respondent

The proposed project location is near key tourist attractions such as Watamu Beach, Gede Ruins, and Arabuko Sokoke Forest. Respondents feared that the plant could negatively impact biodiversity, driving tourists away and harming the local economy. Many questioned whether the project’s economic benefits would outweigh these losses.

FGD discussants were also skeptical about job opportunities, believing that positions at the plant would require specialized skills unavailable locally. A prevailing sentiment was that professionals from outside the community would be hired, limiting the direct economic benefits to Kilifi residents.

“As a country, we don’t have the skills and so we will not get jobs there” FGD respondent

“...the plant will only employ a few people but imagine the number of people who will have lost their jobs?” FGD respondent

3.3.6. Awareness of the different buffer zones from the proposed nuclear Power plant in Kilifi County

A majority (70%) of the surveyed respondents were not aware of the different buffer zones established for the proposed nuclear power plant in Kilifi County, 10% of the respondents were aware, while 19% were not sure. This was consistent across the 3 buffer zones.

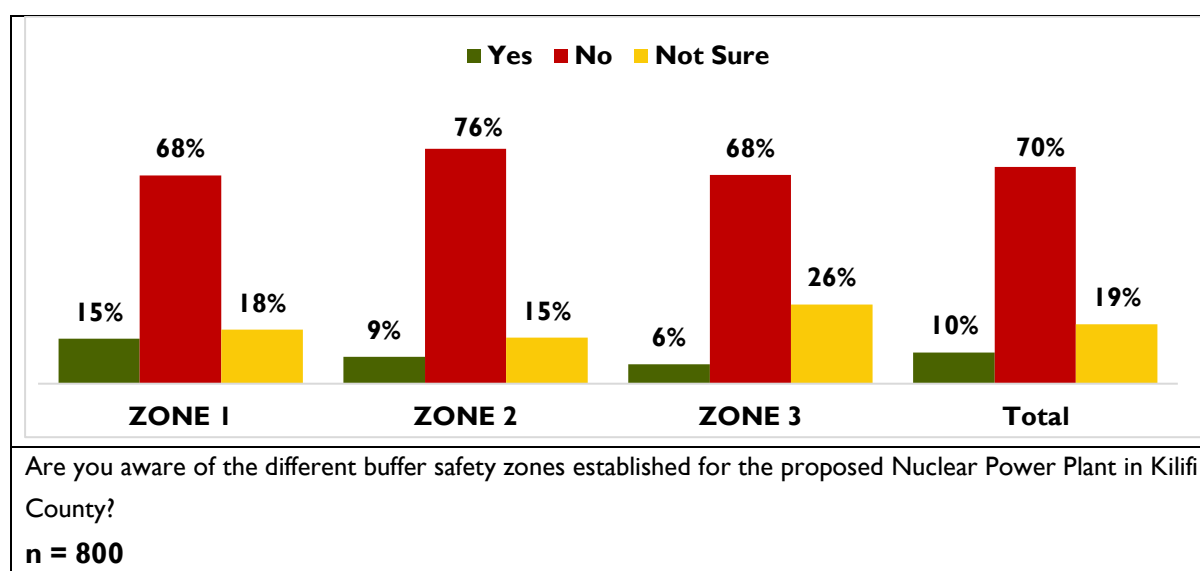


Figure 18: Awareness of the Different Buffer Zones from the Proposed Nuclear Power Plant in Kilifi County

Discussions with key informants indicated that there is insufficient awareness among residents within the three buffer zones regarding the specific risks posed by the nuclear power plant and the necessary precautionary actions. FGD discussants felt that if they were not even informed about the risks the plant could bring, they would naturally be unaware of the precautionary measures they should take.

Respondents pointed out that there has been little to no outreach to inform communities in these zones about the specific precautions required in case of a nuclear emergency. While some institutions and individuals within the immediate vicinity (Protection Action Zone) may have received limited information, those in the Urgent Protective Zone and Food Restriction Planning Zone appear to be largely uninformed.

"They are not all aware, because most of them have not been sensitized on protective measures..."
KII respondent

"...I know that people living up to 8 KM from Uyombo village will be displaced..." FGD respondent

About three in every four (77%) respondents were not aware of the radii of the different buffer zones around the proposed nuclear power plant in Kilifi County, while only 5% were aware. The level of awareness was low in both zone 2 and 3 while it was slightly high in zone 1 compared to the rest of the zones.

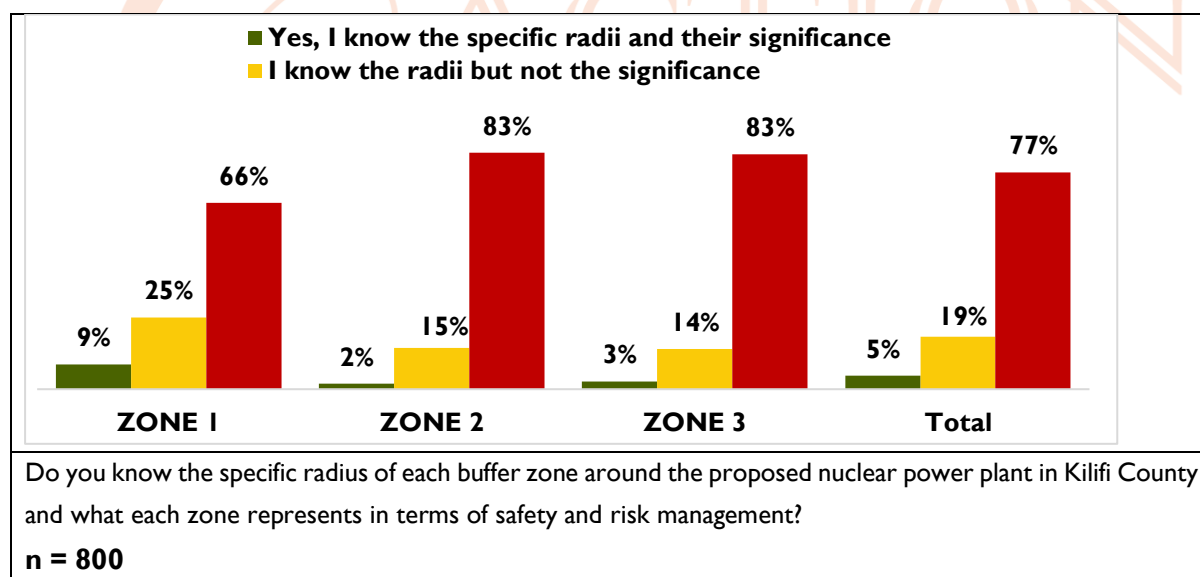


Figure 19: Awareness of the radii of the different buffer zones around the proposed nuclear power plant

Some of KII Respondents seem to believe that most of the affected persons are not aware as the project covers a larger area than what the residents know.

"...They are not aware at all because for example the 3rd zone that you have mentioned means that it will affect a large part of the plant to 300km. That is a very large area. ..." KII Respondent

“...They don’t know but in case they are aware then it’s them who should have been in the front-line to say no to such a project...” KII Respondent

3.3.7. Understanding how the buffer zones may be affected in case of an emergency or accident

A majority (59%) of the respondents do not understand how the buffer zones may be affected in case of an emergency or accident, while 16% percent affirmed to have an understanding of the same. This was the case across all the three zones.

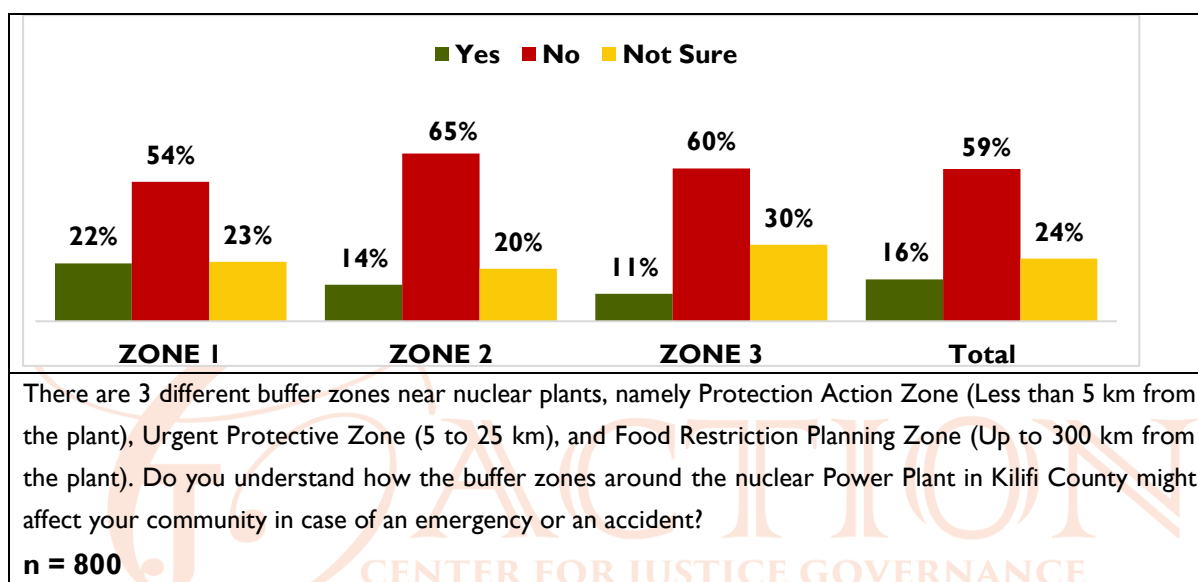


Figure 20: Understanding how the buffer zones may be affected in case of an emergency or accident

During FGDs, discussants affirmed that they do not understand how the buffer zones around the nuclear Power Plant in Kilifi County might affect their communities in case of an emergency or an accident, stating;

“... We do not understand...” FGD Respondent

“...The issue of lack of information is now clearer and from what we knew we only thought those in Uyombo would be affected but with 300 km, no one will be left out...” FGD Respondent

According to KII respondents, the surrounding community members do not understand how the buffer zones around the nuclear Power Plant in Kilifi County might affect the community in case of an emergency or an accident, stating;

“...Not all have the know-how. They have not been told the effects of how they will prevent themselves. They do not know how to handle nuclear effects...” KII Respondent

3.3.8. Whether communities are prepared to respond to a potential emergency or eventuality related to the proposed nuclear power plant in Kilifi

A majority (64%) of the surveyed respondents do not feel that their community members are adequately prepared to respond to a potential emergency or eventually related to the proposed nuclear power plant in Kilifi County. Only 11% felt that their community members can respond to the same while 25% are not sure.

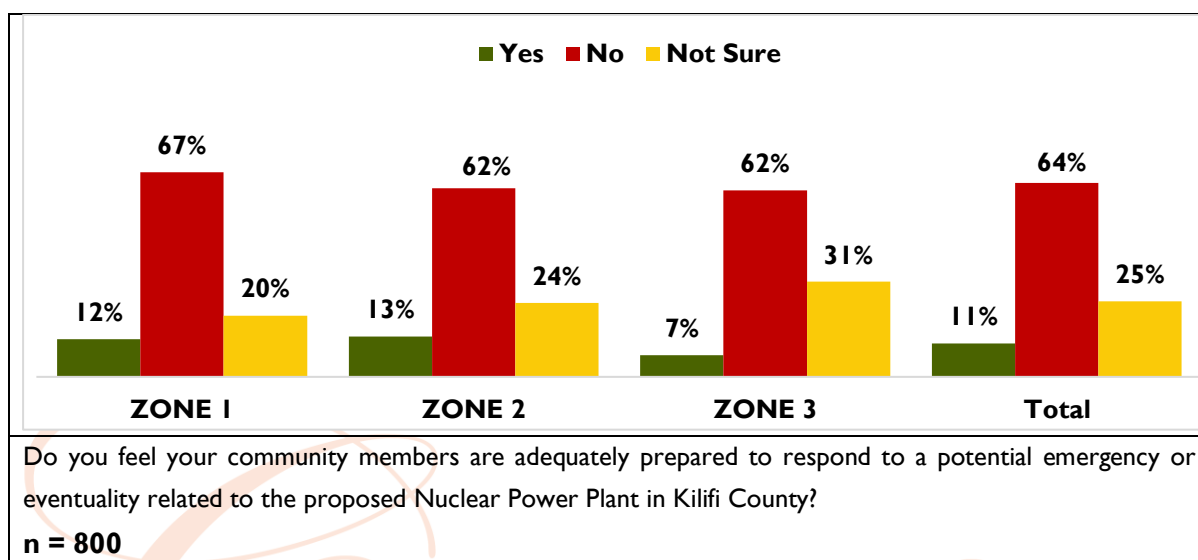


Figure 21: Whether communities are prepared to respond to a potential emergency or eventuality related to the proposed nuclear power plant in Kilifi

Similarly, FDG respondents stated that they are not on the know-how on how to deal with the potential emergencies as they have not been adequately trained or educated on the possible impacts of the nuclear power plant project.

Furthermore, most key informants expressed concern that community members have not been adequately informed, even about basic emergency risks they could manage independently. The lack of awareness and insufficient public education are particularly evident given that residents have never encountered a project of this nature before. According to the KII respondents, the people of Kilifi have not been prepared in any meaningful way for the introduction of such a project in their area.

"...As I said earlier, most people are old, they first need education...." KII Respondent

"They are not all aware, because most of them have not been sensitized on protective measures... their views have not been considered. And radiation equipment has not been put in place. So, they are not adequately aware and prepared..." KII respondent.

"On the preparation, I wouldn't know because details of the plant are quite sketchy. Nothing much has been shared, especially with the sub-county team about it...." KII respondent

3.4. Public Participation

3.4.1. Public Participations about the proposed nuclear power plant

A majority (84%) of the surveyed respondents have not been invited to participate in discussions or meetings about the proposed nuclear power plant in Kilifi County, only 9% acknowledged that they have been invited to meetings and discussions for the same, while 7% are not aware. Public participation invitation was slightly higher in zone I at 16%.

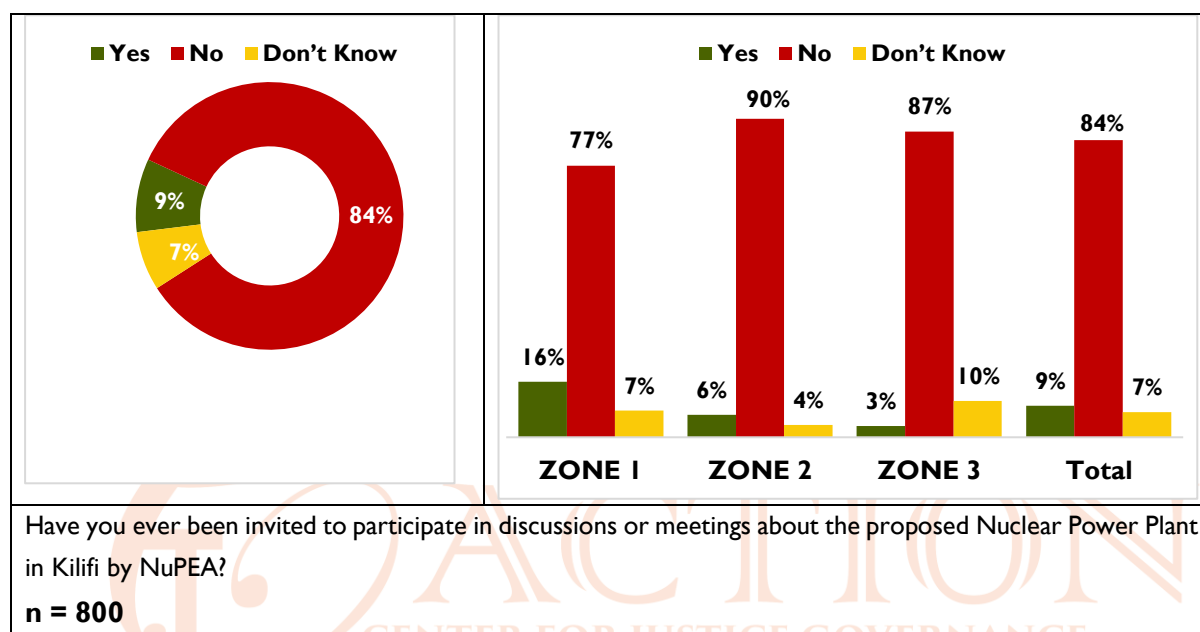


Figure 22: Public participations about the proposed nuclear power plant in Kilifi County

Regarding the qualitative findings, FGD respondents acknowledged that a public participation forum for the proposed nuclear power plant had taken place. However, they noted that these forums appeared to target select individuals rather than the broader community, indicating a lack of adequate representation. This sentiment was echoed by key informants, who confirmed that the forums lacked inclusivity and were characterized by favoritism driven by vested interests.

“...There was one in Kilifi and people were to do public participation, but the meeting was for specific people in government. This is because I am an environmental officer and we took like 3 people and we were removed from the meeting...” FGD Respondent

“...At the start they didn't inform anyone but when things got heated up and chaos erupted, they started organizing meetings with the people...” FGD Respondent

“...They were just ferrying people to Kilifi and back. People wanted them to go to the ground and hold meetings like even chief's barazas, they introduce themselves and say who they are and what they want to do and the citizens to give them their opinions but that was not what they did. They were

just picking joyriders from around and taking them there and took committee members from different places and some chiefs and took them there...” KII Respondent

Out of the 9% of the respondents who were invited for meetings and discussions, 51% were invited through community gatherings, 28% were invited through local leaders (both administrative and religious), 22% were received invitation through mass media, 14 % received invitation through local elected leader while 7% received the invitation through social media.

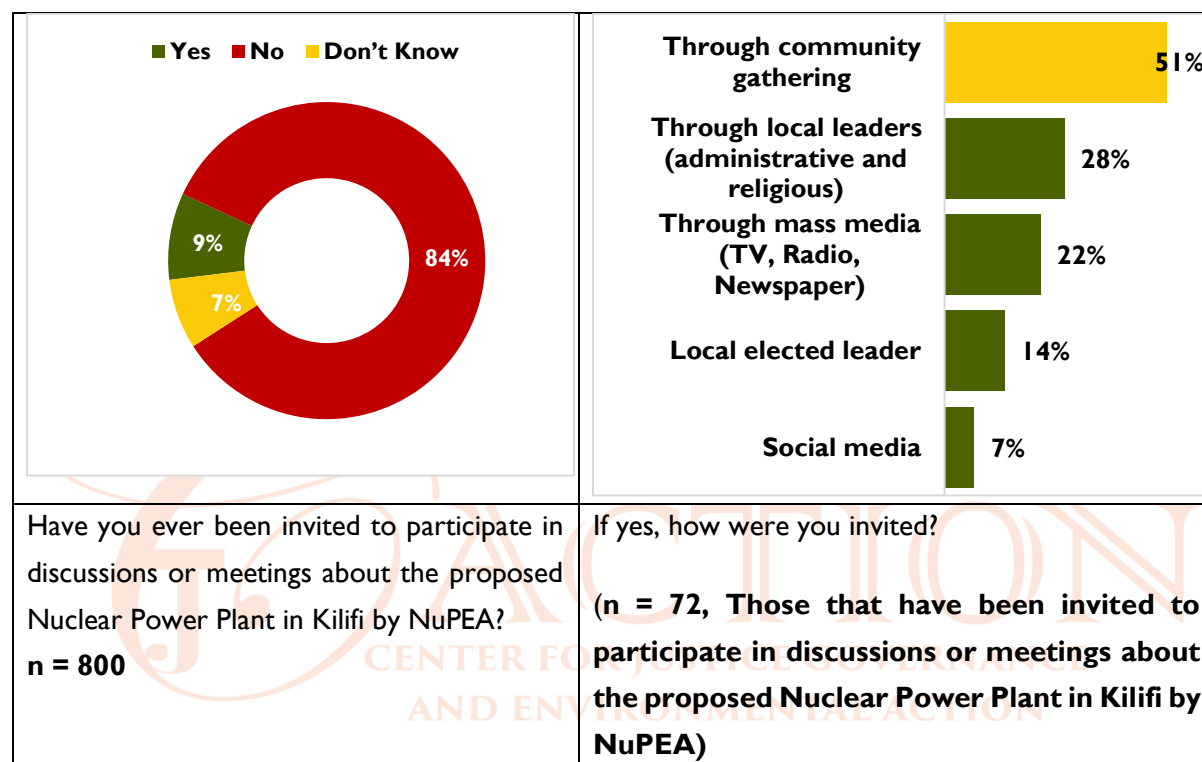


Figure 23: Mode of invitation to participate in the discussions/meetings about the proposed nuclear power plant in Kilifi County

On their part, KII respondents noted that the forums conducted were not public participation forums but rather selection of the few. That means that the forums were not done well to ensure inclusivity of the members of Kilifi County.

“...Public participation was not done. They were picking a few people from around and taking them to a hotel and sitting with them to talk but they didn’t bring the meeting to the ground...” KII respondent

“...the meetings were organized by honorable leaders...” FGD Respondent

3.4.2. Whether people attended the public participation meeting/forum about the nuclear power Plant

Of the 9% respondents who received invites through different platforms, only 43% attended the meetings/forums about the nuclear power, while 57% did not attend the meeting/forums.

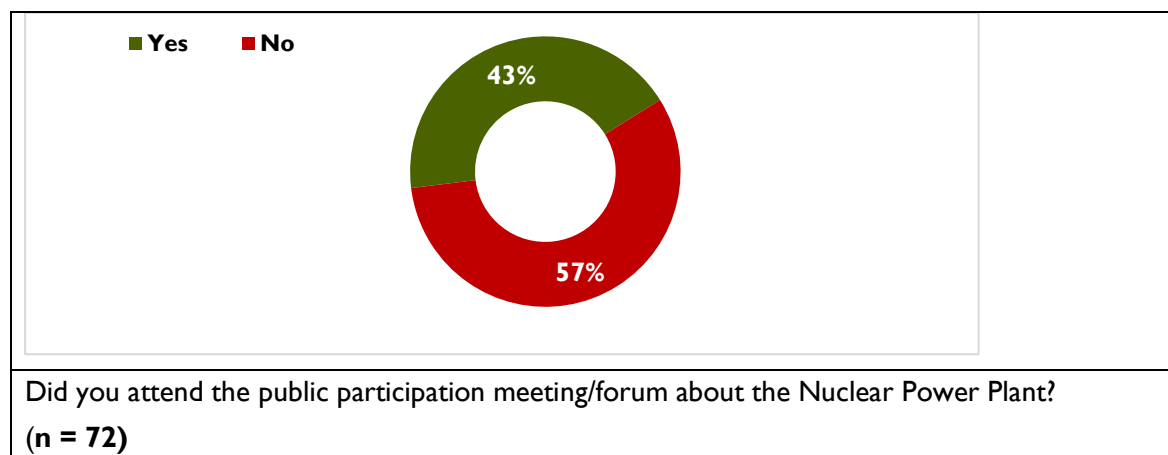


Figure 24: Whether the respondents attended the public participation meeting about the nuclear power plant

Out of those who were invited to participate in the discussions or meetings about the proposed nuclear plant, a majority of them (57%) did not attend the forums, while 43% attended. For those who attended the public participation meeting, a majority (65%) were able to express their views and concerns during the meeting. However, 35% were not able to express their views and concerns. Out of those who attended the public participation meeting, a majority (53%) believe that the decision-makers did not consider their views, while 27% believe that their views were considered.

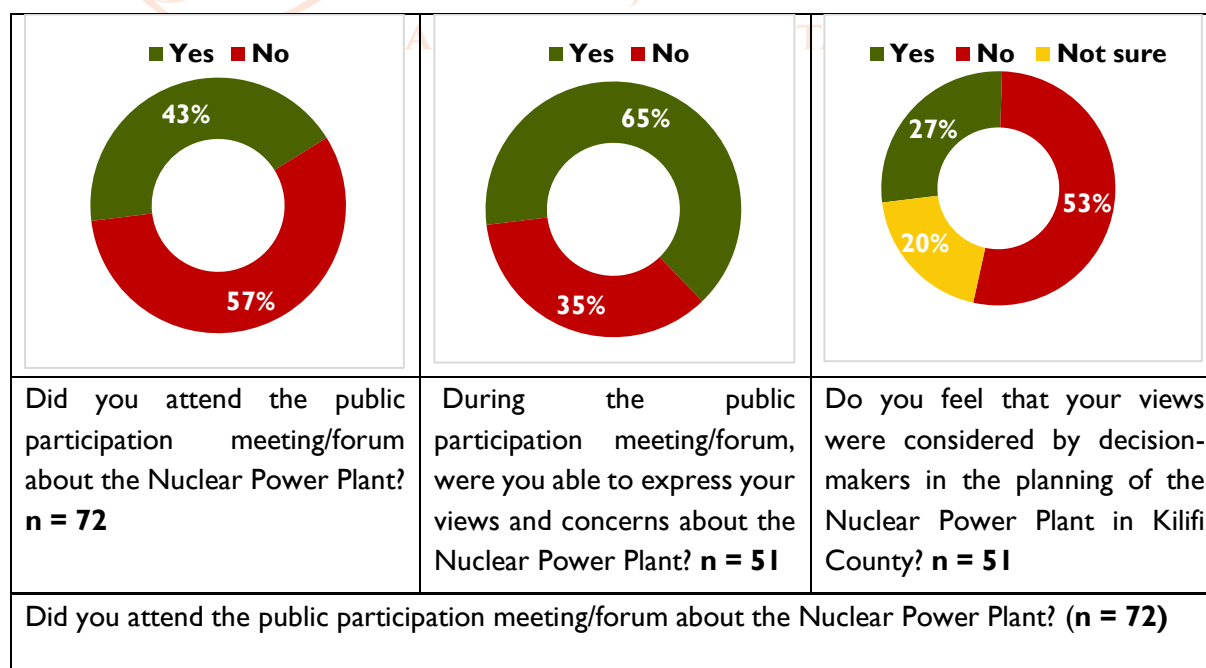


Figure 25: Whether the views of the respondents were considered by decision-makers in the planning of the nuclear power plant in Kilifi County

During FGDs, most respondents expressed their frustrations, indicating that they were not consulted during the early stages of the project, and that most of the information they received about the plant came only after the project had already been designed. This lack of engagement has led to a sense of exclusion, with many feeling that their views and concerns were not taken into consideration when key decisions were made. As a result, there is widespread skepticism and resistance to the project, with the affected communities and stakeholders feeling disconnected.

“...So, I think somebody must have been consulted. It is just that the information did not flow to everybody who is supposed to be in the loop on the same. So, somebody was in the know but many stakeholders are in the dark as concerns the nuclear power plant and the project in general....” Kil respondent.

“...all we know is that the project is already designed, but they did not involve us...” FGD respondent.

“...They are bringing to us what they have already decided and they want us to accept, that will not be easy for them...” FGD respondent

3.4.3. Awareness of the opportunity to submit written comments/petitions regarding the proposed nuclear power plant in Kilifi county

A majority (76%) of the surveyed respondents reported that they were not aware of the opportunity to submit written comments or petitions regarding the proposed Nuclear Power Plant in Kilifi County. Only 13% of them confirmed that they were aware, while 11% were not sure.

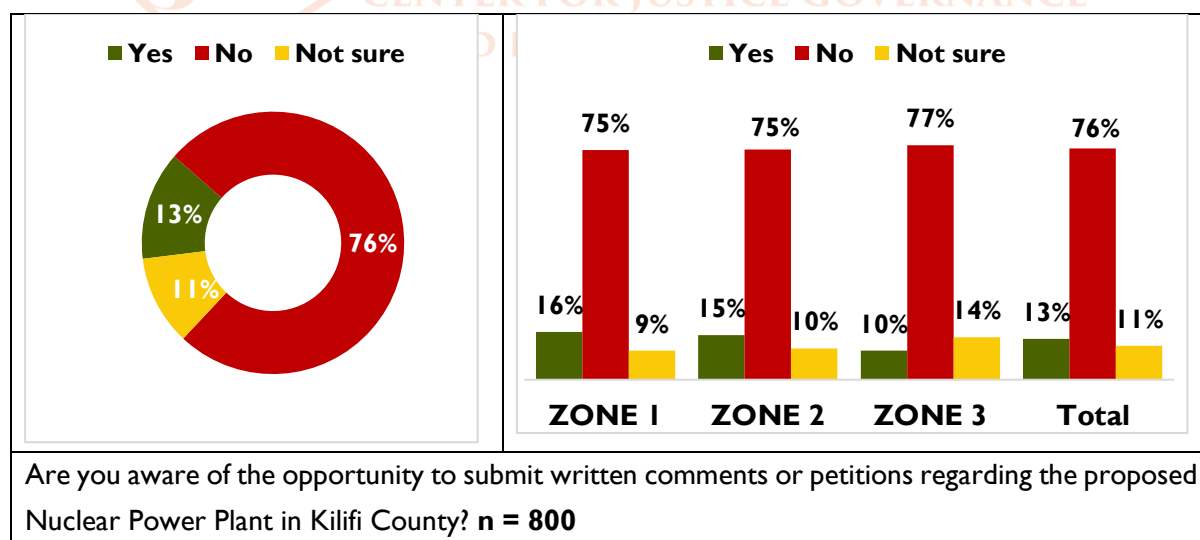


Figure 26: Awareness of the opportunity to submit written comments/petitions regarding the proposed nuclear power plant in Kilifi county

A majority (93%) of surveyed respondents reported that they have never submitted comments or concerns about the Nuclear Power Plant proposal to the relevant authorities, while 7% confirmed they have ever submitted such comments or concerns.

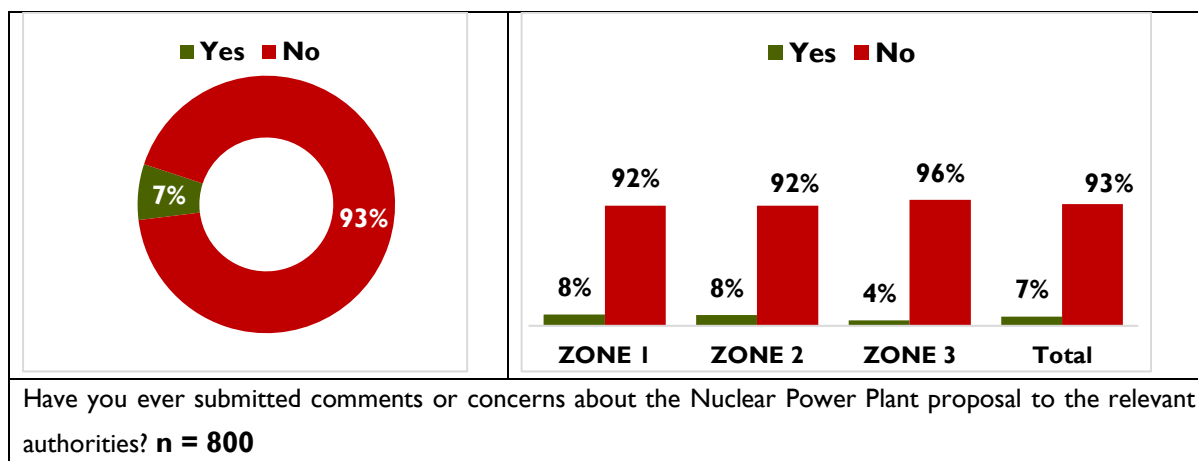


Figure 27: Whether the respondents have submitted comments/concerns about the nuclear power plant to the relevant authorities

From the qualitative findings, it is evident that the people of Kilifi County were not able to submit any concerns as they were not involved in all the stages of the nuclear power plant. This is what one of the experts had to say.

“...People in Uyombo and stakeholders or people from Kilifi have not been involved in the power plant yet to be constructed. They had a shortcut and people got information during burials. People cannot have a full explanation and have not been involved...” KII Respondent

3.4.4. Awareness of participation process in public consultations for the proposed nuclear power plant in Kilifi County

Two-thirds (66%) of the respondents reported that they do not know what to do if they were to participate in future public consultations on the proposed Nuclear Power Plant in Kilifi County, while only 34% of them confirmed that they know how to do so. Lack of such knowledge was highest in Zone 3 at 75%.

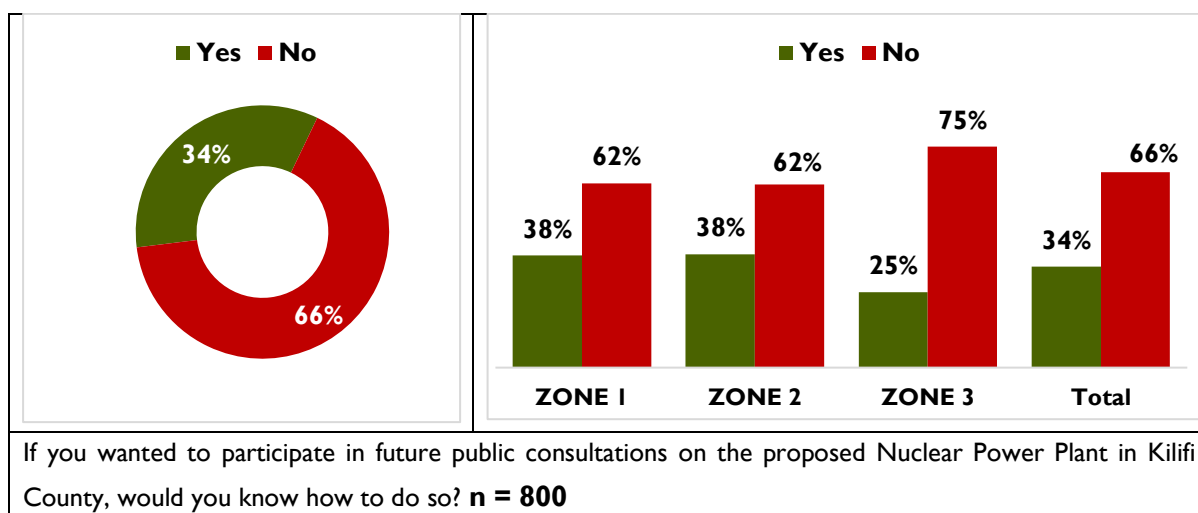


Figure 28: Awareness of participation process in public consultations for the proposed Nuclear Power Plant in Kilifi County

3.4.5. Whether the local communities have enough say in decisions that will affect their environment & health regarding the proposed nuclear power plant in Kilifi County

A majority (58%) of the surveyed respondents feel that their community members do not have enough say in decisions related to the nuclear power plant, while 22% confirmed their community members have enough say.

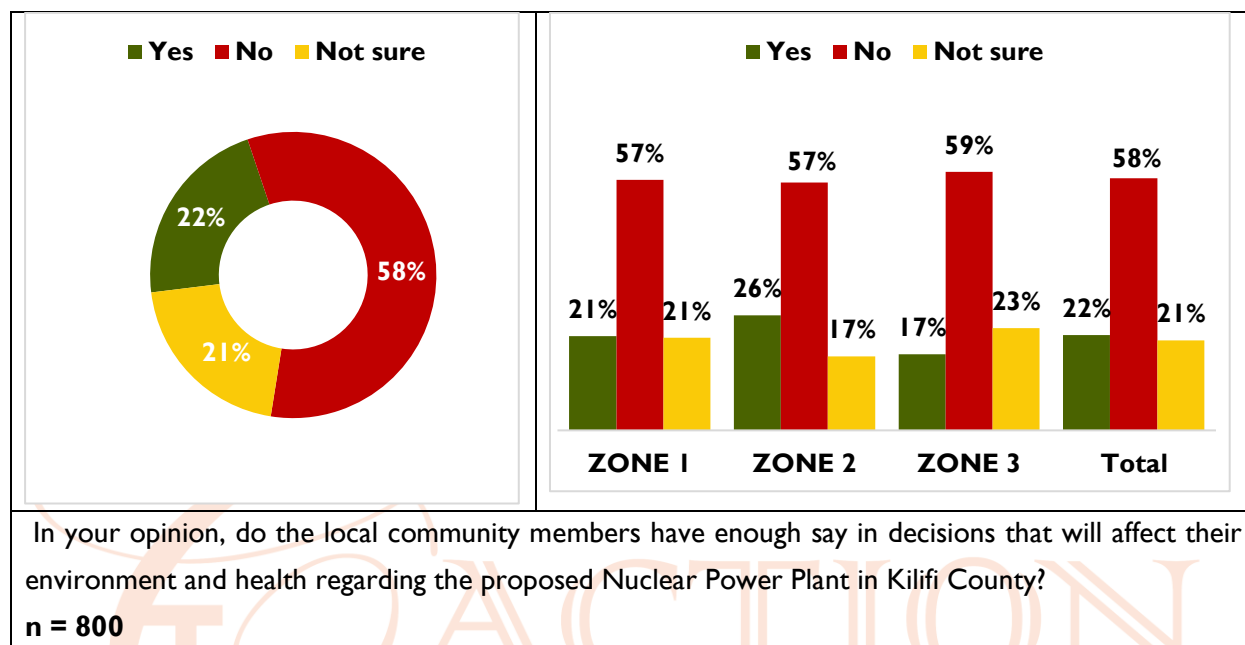


Figure 29: Whether the local communities have enough say in decisions that will affect their environment & health regarding the proposed nuclear power plant in Kilifi County

Regarding transparency and accountability within government agencies, particularly in how they handle public consultations and the approval of large-scale projects like the nuclear power plant, interviewed respondents consistently mentioned that government agencies have failed to engage the public in a transparent and accountable manner. Most respondents felt that the public is not given adequate opportunities to ask questions, voice concerns, or meaningfully participate in decisions that directly affect them

“... The transparency and accountability are very down and I can rate it at 10% because it’s not there at all and a lot is being hidden...” KII respondent

3.4.6. Whether the local community leaders/representatives were consulted about the nuclear power plant in Kilifi County

A majority (55%) of the surveyed respondents indicated that they were not aware if any local community leaders or representatives were consulted about the proposed Nuclear Power Plant in Kilifi County. Only 19% were aware that local community leaders or representatives were consulted about the Nuclear Power Plant.

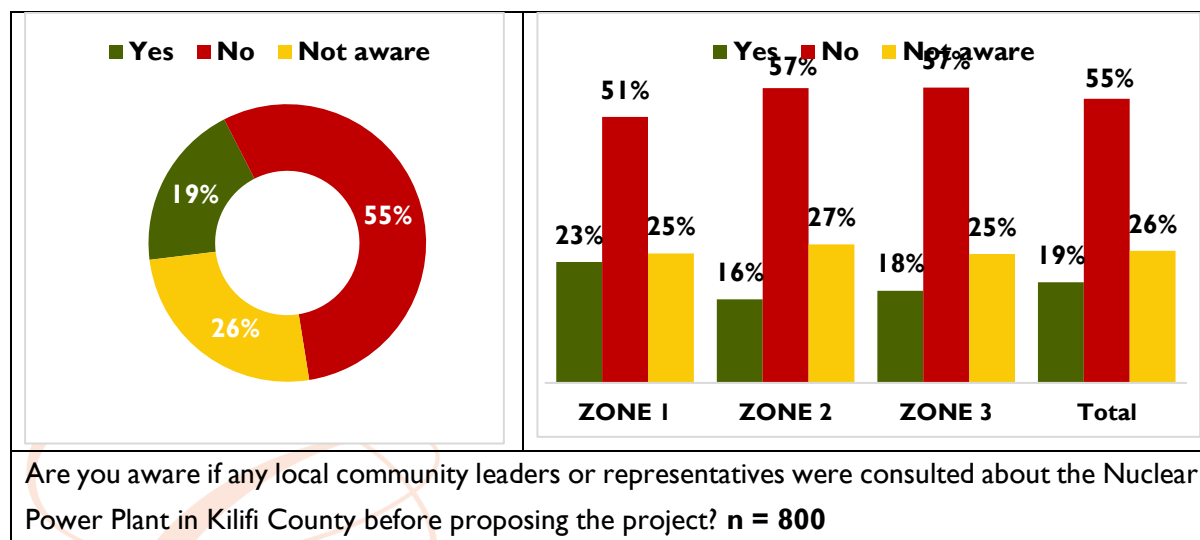


Figure 30: Whether the Local Community Leaders/Representatives were consulted about the nuclear power plant in Kilifi County

During the FGDs, discussants indicated that elected leaders were involved in the matter of the nuclear power plant. The residents believe that the leaders were working together with the NuPEA team to influence them in accepting the project in their area. That is, the leaders were majorly the ones who began to introduce the project to the residents of Kilifi County.

“...during public participation meetings, most people are not involved because they will ask a lot of questions. An example, the public participation by the National Assembly came to Kilifi and there is money they set aside for development, 100 million, and they only involved village elders. And by good or bad luck, we forcefully occupied the meeting and they were dictatorial, but we did not give in...”
KII respondent

“...I do not think so as in Kenya when leaders decide that is it and we have no say...” KII Respondent

A majority (51%) of the surveyed respondents, especially in zone 2, indicated that they would feel more confident in the decision-making process if there were more community engagement and dialogue.

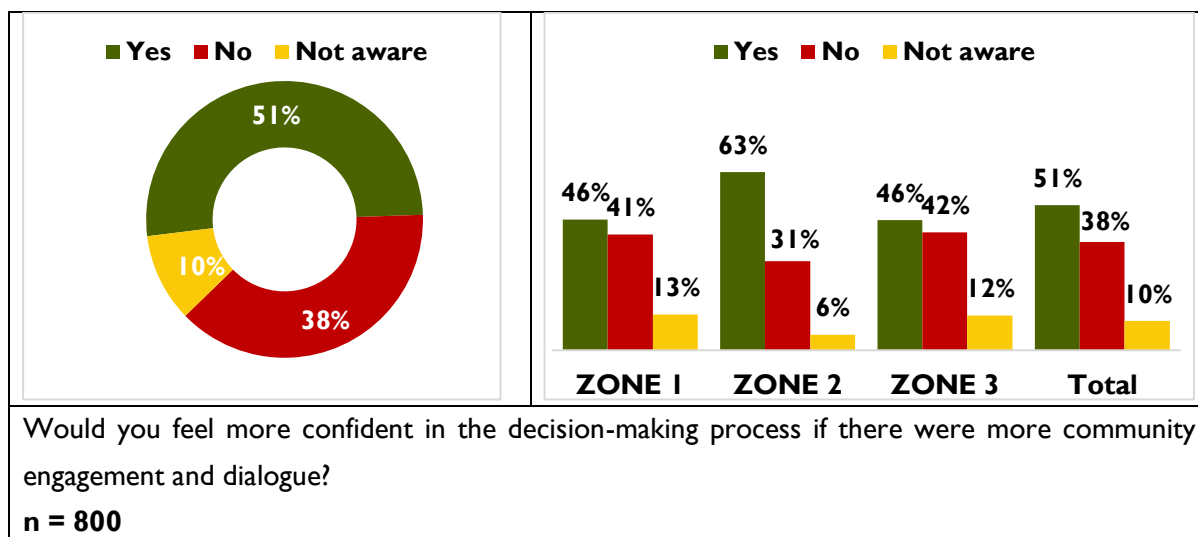


Figure 31: Whether there would be more confidence in the decision-making process if there were more community engagements & dialogue

3.4.7. Whether there are barriers preventing the community members from fully participating in decision making about the nuclear power plant

About one in every three respondents (35%) believe that there are barriers that prevent community members from fully participating in decision-making about the Nuclear Power Plant in Kilifi County, while 48% believe that there are no such barriers.

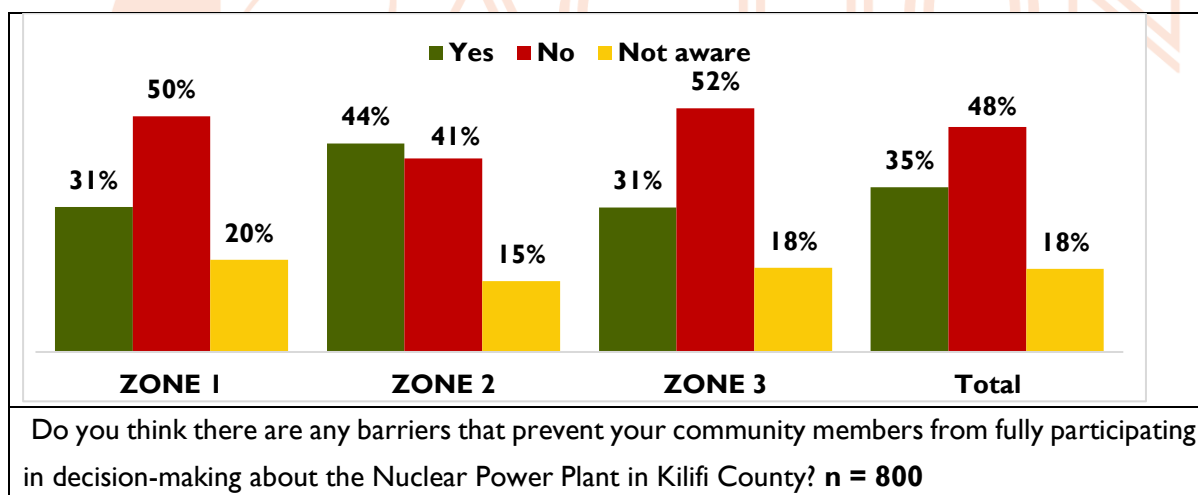


Figure 32: Whether there are barriers preventing the community members from fully participating in decision making about the nuclear power plant in Kilifi County

Some of the major barriers that prevent people from participating in public participation forums about the nuclear power plant include; lack of awareness (63%), lack of transparency (33%), limited communication channels (29%), low literacy levels (27%), exclusion from discussions (14%), Government restrictions (12%), misinformation or conflicting reports (10%), limited internet access (7%), and use of technical language (6%), among others as shown above.

Table 8: Barriers preventing people from participating the decision making about the planned nuclear power plant in Kilifi County

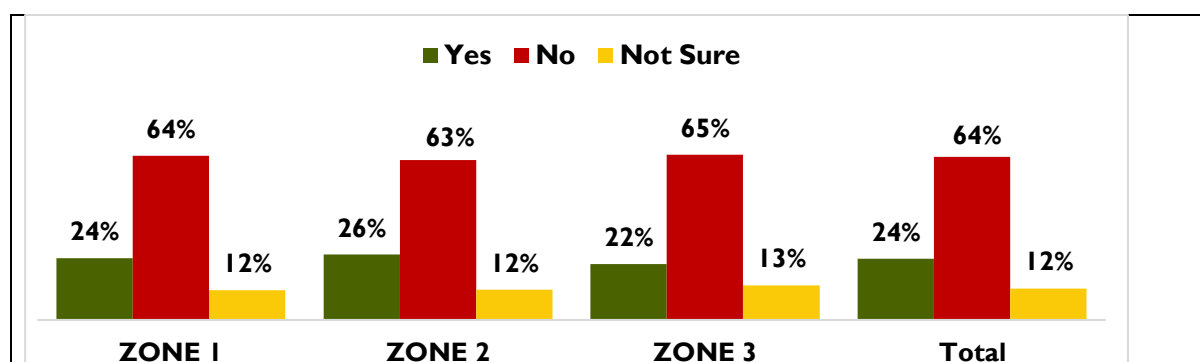
Reason	ZONE 1	ZONE 2	ZONE 3	Total
Lack of awareness	67%	56%	68%	63%
Lack of transparency	44%	29%	26%	33%
Limited communication	34%	37%	13%	29%
Low literacy levels	32%	21%	27%	27%
Exclusion from discussions	15%	17%	10%	14%
Government restrictions	7%	13%	16%	12%
Misinformation	7%	13%	6%	10%
Limited internet access	6%	10%	3%	7%
Use of technical language	3%	10%	5%	6%
Other reasons	1%	4%	1%	2%

If yes, what are the major barriers preventing people in your locality from participating in decision making about the planned nuclear power plant in Kilifi County?

n = 283, Those that feel there are barriers

3.4.8. Awareness of any legal channel through which one can challenge/request more information about the nuclear power plant project

A majority (64%) of the surveyed respondents are not aware of any legal channels through which they can challenge or request more information about the Nuclear Power Plant project. Only 24% are aware of such legal channels.



Are you aware of any legal channels through which you can challenge or request more information about the Nuclear Power Plant project? **n = 800**

Figure 33: Awareness of any legal channel through which one can challenge/request more information about the nuclear power plant project

From the stakeholder perspective, most landowners in Kilifi are old and a significant number of them may not really know the channels to raise their concerns or report the issues or request for more information about the nuclear power plant. However, for the youths who have gone to school, they may know and could be able to identify the channels to go through.

“...In Kilifi, we have a NEMA office. They deal with the environment and not everyone knows that. Some people are educated and others are not. Some do not understand how Kilifi town is. There are still people who do not know...” KII Respondent

3.5. People and Environmental Concerns

3.5.1. Awareness of the SESA process that a nuclear power plant must undergo

A majority (75%) of surveyed respondents indicated they were unaware of the Strategic Environmental and Social Assessment (SESA) process required for the proposed nuclear power plant. Only 14% reported having knowledge of the process, while 12% were uncertain. Notably, lack of awareness was prevalent across all zones, with 75% of respondents from Zone 1, 73% from Zone 2, and 77% from Zone 3 reporting unfamiliarity with the SESA process.

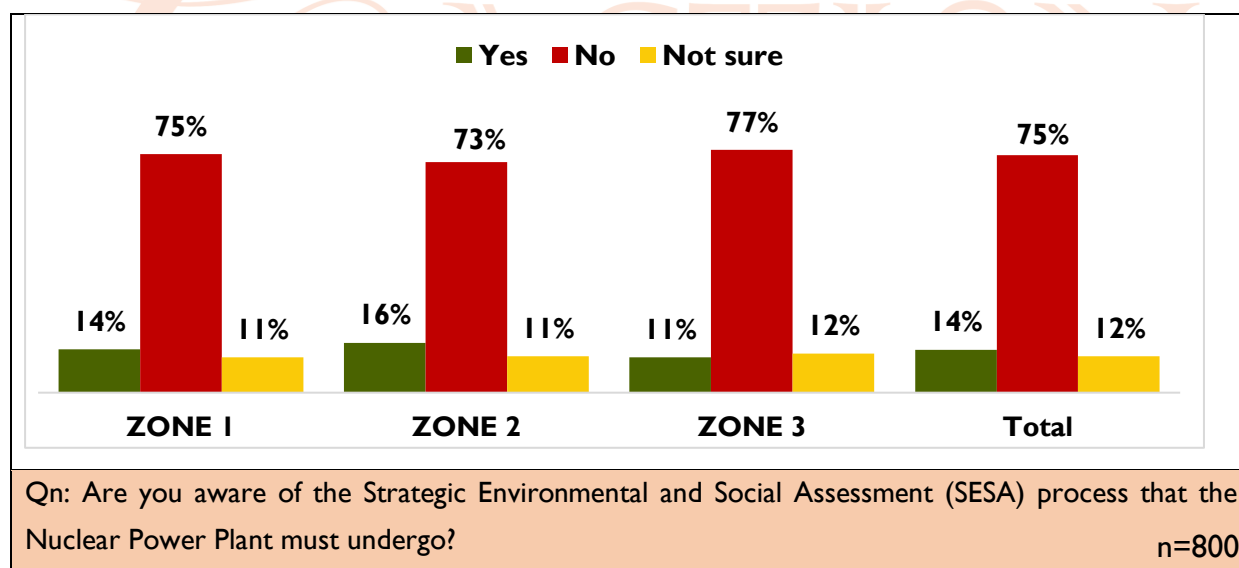


Figure 34: Awareness of the SESA process that a nuclear power plant must undergo

Findings from both Focus Group Discussions (FGDs) and Key Informant Interviews (KIIs) revealed a general lack of awareness about the Strategic Environmental and Social Assessment (SESA) associated with the proposed nuclear power plant in Kilifi County. Nearly all respondents indicated that they had little to no knowledge of how the SESA process was conducted or its implications for the development of the project.

Respondents expressed concern that such a significant project should have undergone a transparent environmental and social assessment process, with meaningful involvement of local communities. They emphasized that proper public engagement is critical, especially in matters that directly affect people's land, livelihoods, and the local environment.

The failure to effectively involve communities in the SESA process, combined with limited information about how approvals were obtained, has contributed to growing mistrust and opposition to the proposed project.

"...I have never heard of that, what exactly is that..." FGD respondent

"...if even people from Uyombo and Matsangoni are not aware, then how do you expect someone in Kilifi to know?" FGD Respondent

"...During my online search I came across that report, but I was not involved in the assessment" FGD Respondent

"...That hasn't been done and we also know that environmental and social impact assessments have to be done in such a big project like this one..." KII Respondent.

When asked about their awareness of channels for reporting environmental concerns or grievances related to the nuclear power plant, 66% stated they were unaware, 24% were aware, and 10% were unsure. Among those unaware, 66% were from Zone 1, 60% from Zone 2, and 71% from Zone 3.

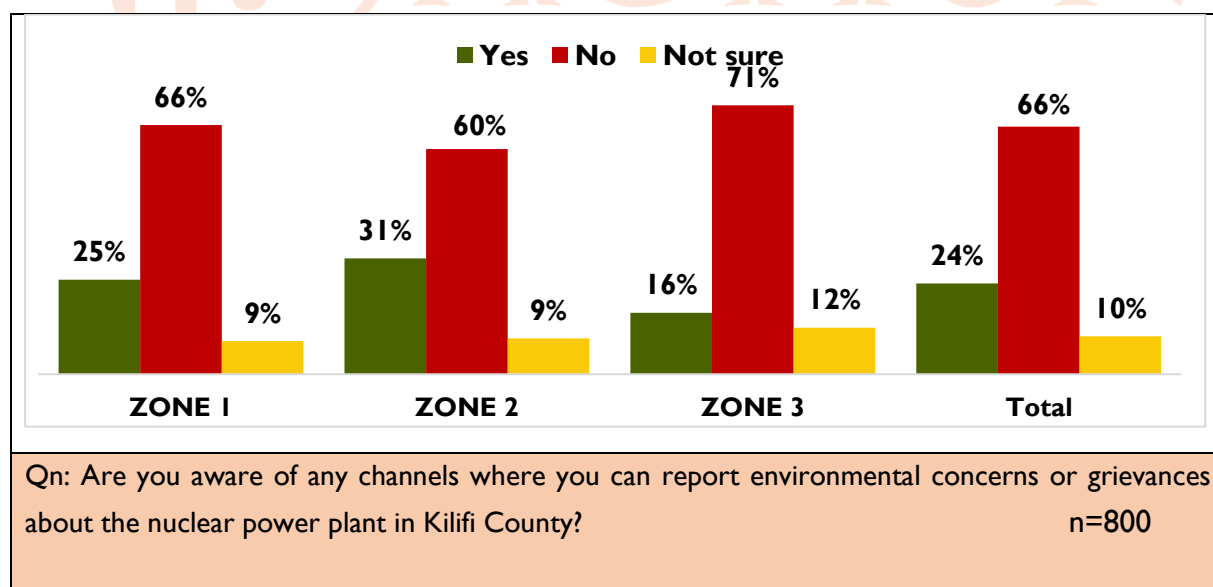


Figure 35: Awareness of channels where one can report environmental concerns/grievances about the nuclear power plant in Kilifi County

The survey also explored respondents' awareness of where to report environmental concerns or grievances related to the proposed nuclear power plant in Kilifi County. Findings revealed that a significant majority (65%) were unaware of the appropriate reporting channels, while only 26%

indicated they had such knowledge. Among those lacking awareness, 66% were from Zone 1, 59% from Zone 2, and 70% from Zone 3, highlighting a widespread information gap across all buffer zones.

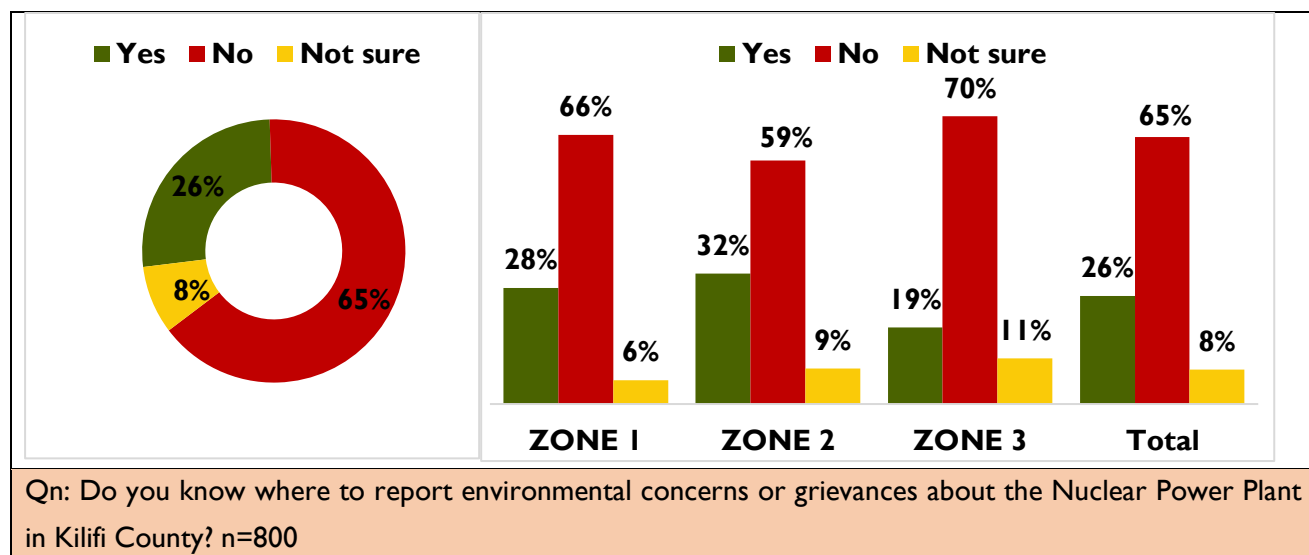


Figure 36: Whether the respondents know where to report environmental concerns/grievances about the nuclear power plant in Kilifi County

A recurring concern in the responses from the affected community members and institutions regarding the proposed nuclear power plant in Kilifi County is the lack of awareness about the official channels for reporting environmental concerns or grievances. Many respondents were not aware or informed about any formal mechanisms or platforms available for reporting their concerns related to the potential environmental impacts of the plant. When questioned on how they would address grievances or voice concerns, most respondents indicated that they would rely on courts and informal channels, such as local political leaders or authorities.

"I think the easiest for them would be the local politicians and the local authorities, whether the chief or the sub-chief." KII respondent

"...we don't know, maybe we will go to the police station to report..." FGD respondent

"...I would have to report to organizations that deal with human rights, we have some here in Kilifi..." FGD respondent.

3.5.2. Whether people know how to measure and monitor the environment for pollution from the nuclear power plant

A majority 72% of interviewed respondents stated they did not understand how to measure and monitor environmental pollution from the Nuclear Power Plant, while 18% reported being aware. Additionally, a majority (65%) of the respondents felt that there was no accessible and effective mechanism to appeal decisions regarding the nuclear power plant, while 20% believed such a mechanism existed.

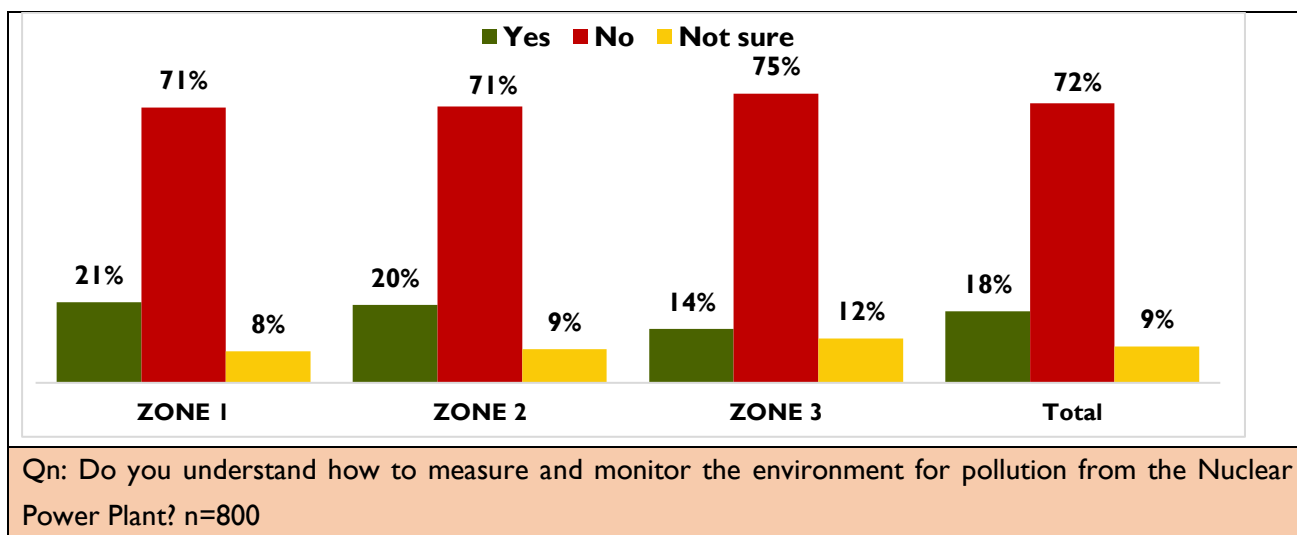


Figure 37: Whether people know how to measure and monitor the environment for pollution from the nuclear power plant.

3.5.3. Whether people are aware of how to respond in case there is a nuclear accident

About eight in every ten (82%) respondents indicated that they did not know how to respond in the event of a nuclear accident. Only 2% were aware of the appropriate actions to take.

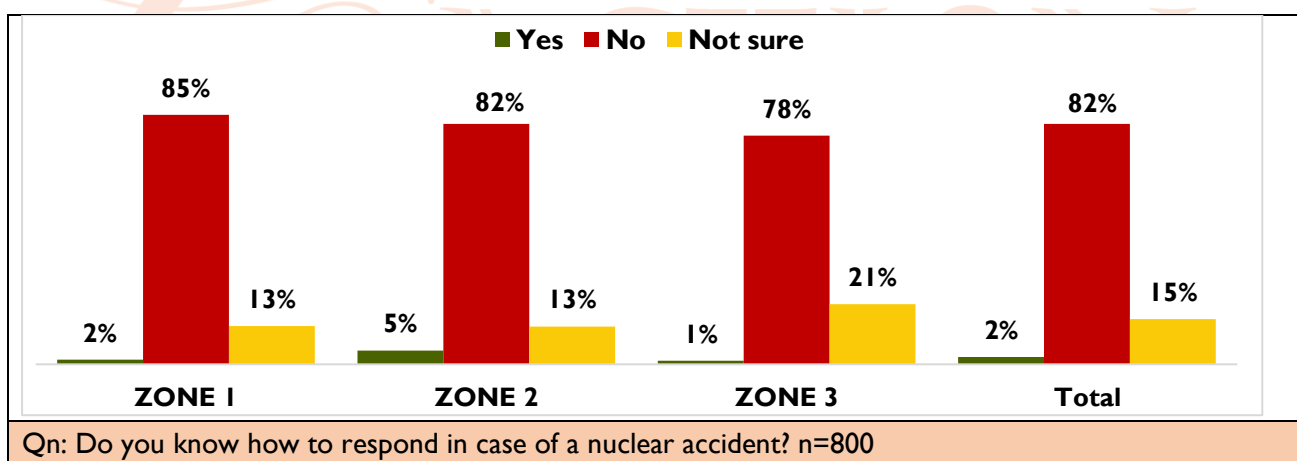


Figure 38: Whether respondents are aware of how to respond in case there is a nuclear accident

FGD discussants expressed that they were completely unaware of how to respond in the event of a nuclear accident. They emphasized the need for the Nuclear Power and Energy Agency (NuPEA) to provide clear and accessible information on emergency preparedness, response protocols, and safety measures.

"...we are praying that this thing does not proceed, we don't know what will happen to us..." FGD respondent

"...we don't know anything, I think even the government does not know how it will respond, because why are they not telling us?" FGD respondent

3.5.4. Awareness of bodies where one can seek justice if the nuclear power plant negatively impacts the environment or the community

A majority of respondents (72%) were unaware of the Environmental and Land Court (ELC) or any other bodies where they could seek justice if the Nuclear Power Plant negatively impacted their environment, while 18% were aware of the court as shown in the chart below. Further, a majority (78%) of the respondents indicated that they have not used any legal process or mechanism to address environmental concerns in their area.

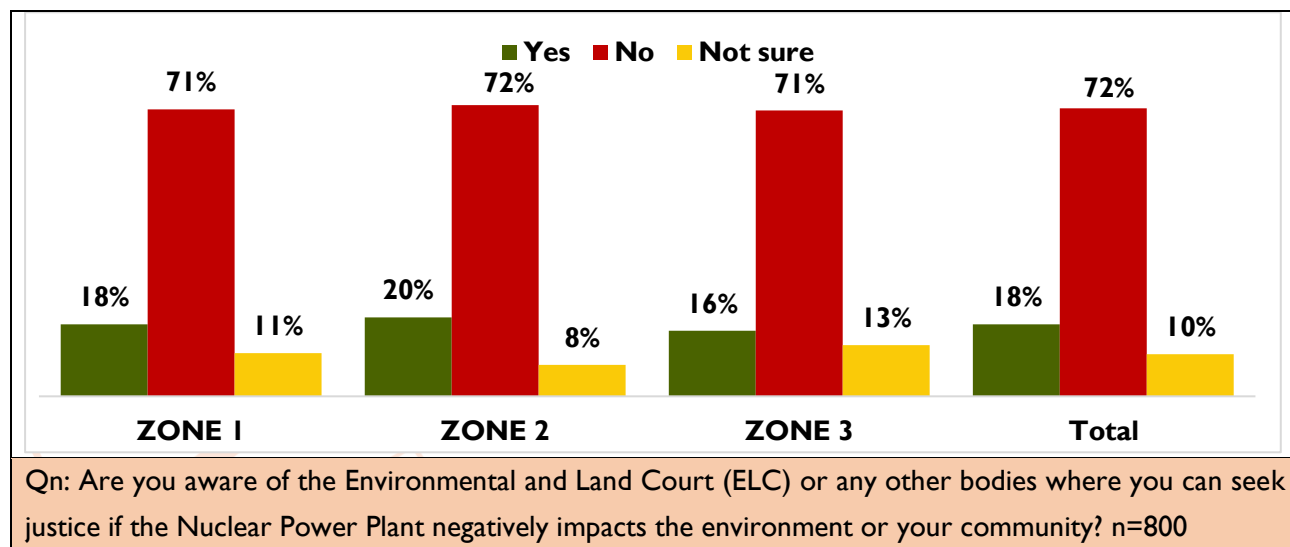


Figure 39: Awareness of bodies where one can seek justice if the nuclear power plant negatively impacts the environment or the community

One of the primary concerns raised by respondents about the proposed nuclear power plant in Kilifi County is the widespread lack of awareness among community members regarding avenues for seeking redress in the event of environmental harm. Many indicated they were unfamiliar with institutions such as the Environment and Land Court (ELC) or any other legal mechanisms available for reporting environmental grievances linked to the project. The lack of knowledge about these redress mechanisms is particularly concerning, as it leaves a majority of the community members without clear channels to address potential environmental harms. Respondents noted that only a small number of individuals, usually those who have taken it upon themselves to conduct independent research, are aware of these bodies. One respondent pointed out that the general public, especially those living in rural or remote areas, remains uninformed about how to seek legal or environmental redress in case the nuclear power plant causes harm to their land or environment.

3.5.5. Whether the government is transparent and accountable in the way it handles public participations and approval of projects

Two thirds (66%) of the surveyed respondents stated that they do not believe the Kenyan government is transparent and accountable in handling public consultations and approving projects like the Nuclear Power Plant. Only 21% felt that the government was transparent and accountable in handling such consultations.

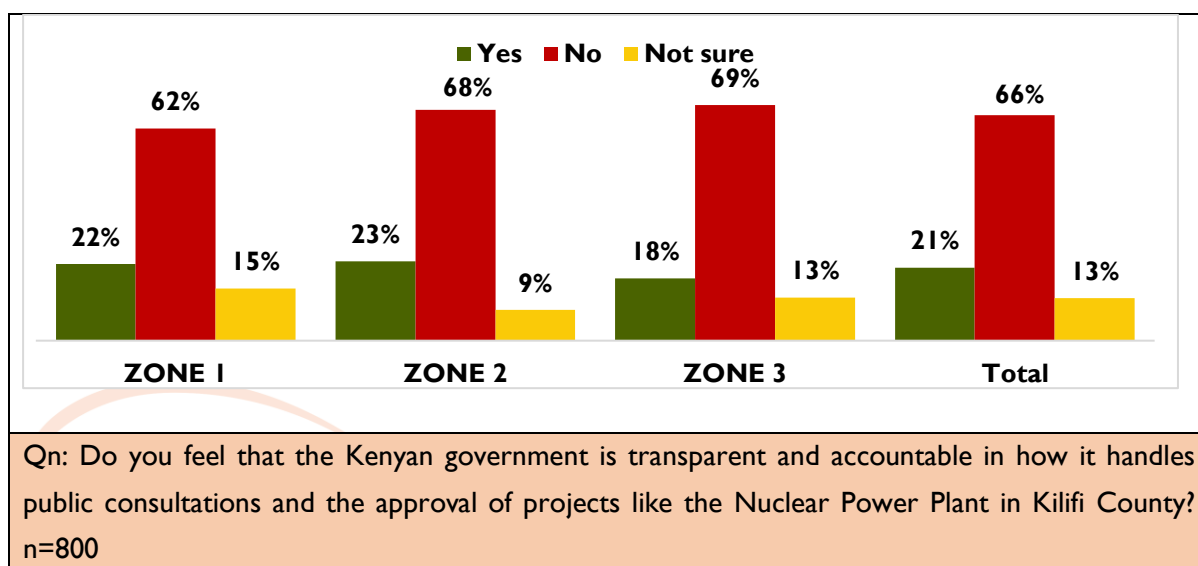


Figure 40: Whether the government of Kenya is transparent and accountable in the way it handles public participations and approval of projects

FGD respondents felt that the Government of Kenya is not transparent or accountable in the way it conducts public participation and project approvals. Many believed that public engagement processes are merely formalities and that community feedback does not influence decision-making. They expressed frustration over the lack of inclusive consultations and felt that key decisions regarding the nuclear plant were made without meaningful community involvement.

“...even if we speak, will they listen? They do what they want...” FGD respondent

“...the government already made up its mind. These public meetings are just for show...” FGD respondent

4. CONCLUSION AND RECOMMENDATIONS

4.1. Conclusion

The assessment of community awareness and involvement regarding the proposed nuclear power plant in Kilifi County reveals significant gaps that need to be addressed before project implementation.

General Awareness and Public Participation: While a majority of respondents (88%) are aware of their constitutional right to access information, only 30% have participated in public forums in the past year, with youths aged 18-26 being the least involved. The primary barriers include inadequate information about forum schedules, perceptions of tokenism, insufficient advance notice, and complex subject matter. Media remains the dominant information source (77%), though focus group discussions highlighted the effectiveness of social media platforms like WhatsApp and Facebook for community updates. To enhance engagement, recommendations from the respondents included utilizing public address systems, conducting civic education campaigns, providing timely notices, and leveraging both traditional and social media channels.

Awareness of the Planned Nuclear Power Plant: Over half of the respondents (54%) are unfamiliar with the proposed nuclear power plant, with awareness particularly low in zones 2 and 3. Mass media serves as the primary information source (42%), yet 91% have not received official communications about the project. Focus group discussions indicate that initial awareness often stemmed from events like local protests or informal channels, leading to anxiety and perceptions of lack of transparency in the planning process. NuPEA's limited dissemination of information has contributed to skepticism.

Perceived Benefits and Concerns: A majority (51%) believe the nuclear power plant will not benefit surrounding communities, citing potential displacement and threats to livelihoods in fishing, tourism, and agriculture. Environmental concerns include risks to marine life, soil degradation, and radiation exposure. Employment prospects are met with skepticism due to anticipated requirements for specialized skills not prevalent locally.

Adequacy of Sensitization Efforts by NuPEA: Community feedback indicates that NuPEA's sensitization efforts have been inadequate, with many residents feeling uninformed about the project's risks and benefits. This information void has fostered reliance on unofficial sources, fueling uncertainty. NuPEA should implement balanced sensitization strategies that address community concerns and promote meaningful participation in decision-making processes.

Awareness of Possible Effects of the Nuclear Power Plant: Community understanding of the potential health and environmental impacts is limited, with only 13% and 12% feeling well-informed about health and environmental effects, respectively. A significant portion (70%) is unaware of buffer zones, and 64% feel unprepared for potential emergencies. Key informants expressed concerns about

marine life, soil degradation, radiation exposure, and ecosystem disruption. The lack of awareness about precautionary measures and emergency responses underscores the need for comprehensive educational initiatives by NuPEA.

Public Participation: A majority (84%) have not been invited to discussions about the nuclear power plant, and among those invited, only 43% attended. Many feel their views are disregarded, and 76% are unaware of avenues to submit written feedback. Barriers to participation include lack of awareness, perceived transparency issues, and limited communication channels.

People and Environmental Concerns: Awareness of the Strategic Environmental and Social Assessment (SESA) process is low, with 75% unaware of its requirements. Two-thirds are uninformed about channels for reporting environmental concerns, and 82% lack knowledge on responding to nuclear emergencies. The absence of accessible grievance mechanisms and limited understanding of legal avenues for redress highlight the need for NuPEA to establish clear, transparent, and accessible processes for community engagement and feedback.

4.2. Recommendations

- a) **Implement inclusive consultation Processes:** NuPEA needs to establish a structured and transparent consultation mechanism to actively involve community members in decision-making. This includes organizing public forums, *barazas*, and town hall meetings where residents can voice their concerns and receive clear, evidence-based responses.
- b) The survey found out that many community members, especially those with lower education levels, lacked access to clear and comprehensible information. To address this, NuPEA should ensure that all communication is presented in simple, easily understandable formats and translated into local languages. This approach will help bridge the information gap and ensure that all community members, regardless of their education level or access to technology, are well-informed and thereby able to make informed decisions about the project.

BIBLIOGRAPHY AND REFERENCES

- a) International Atomic Energy Agency. "Emergency Facilities, Locations and Zones." Pages - GNSSN Home. Accessed March 11, 2025. <https://gnssn.iaea.org/main/ANNuR/Activity%20Documents%20%20Public/Regional%20Workshop%20on%20Emergency%20Preparedness%20and%20Response/L-015%20Emergency%20Facilities,%20Locations%20and%20Zones%20updated.pdf>.
- b) Munyua, Jane. "Public Participation in Kenya: Challenges and Opportunities." *Journal of African Law* 62, no. 3 (2018): 379-398.
- c) Mwangi, Karanja, and Wamuyu, John. "The Role of Civil Society in Enhancing Public Participation in Kenya: A Case of Environmental Advocacy." *African Journal of Environmental Studies* 5, no. 1 (2019): 45-57
- d) Ndubi, Alice. "Access to Information in Kenya: Implementation and Barriers." *Information Development* 36, no. 2 (2020): 211-225.
- e) Obara, Valentine, and Maureen Ongala. "Inside Kilifi village set for Kenya's nuclear power dream." Nation Media. Last modified 2015. <https://nation.africa/kenya/counties/kilifi/inside-kilifi-village-set-for-kenya-nuclear-power-dream-4492384#story>.