

ProTECHtion: Digitally powered community protection

Needs Assessment - Report

2024

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1. Introduction

In 2024 and 2025, NCA implements the project *ProTECHtion: Digitally powered community protection*.

For humanitarian actors, communicating with the communities we serve is an essential component of our work. Humanitarian organizations use approaches which aim to support the communities' own solutions instead of placing them as passive victims. NGOs collect information about basic needs (water, shelter, etc.) via surveys, and create groups of community representatives who prioritize risks and create "action plans" to address them. These plans, that can include repairs, education campaigns, etc., are implemented with the support of the NGO.

However, current implementation practices often fail to foster trust and self-empowerment within communities. Research shows that affected communities expect more transparency and direct participation in creating solutions that work for them. As such, work still needs to be done in improving opportunities for direct participation. In that way, this project responds to the need for more effective and sustainable aid solutions that are based on local solidarity and collective agency and are owned by people affected by crisis and violence.

ProTECHtion aims to give a stronger voice to conflict-affected communities about solutions to their challenges. To achieve this objective, NCA will co-design with them a digital "meeting place" for communities to talk safely about needs, priorities, and aspirations. After the design phase, NCA will run a pilot of the tool and collect some lessons learned to see if this was useful and appreciated by the communities.

NCA has identified the island of Pemba, in Tanzania, as the location for this future pilot. NCA implements in Pemba the "Championing Interfaith Approaches for Women and Youth Empowerment for Peaceful Coexistence along the Swahili Coast of Tanzania" project between 2023 and 2026 which will touch around 10.000 persons along the coast of Tanzania.

Based on this needs assessment, NCA has launched a market dialogue process where potential tech companies and other relevant actors were invited to an information session and two subsequent co-design workshops, where the specific needs of affected communities were discussed, and potential solutions were explored together with them and with aid workers using a "user-centred design" approach. This co-design process informed a tender document, and the subsequent open call for proposals for the selection of the most relevant and feasible solution.

2. Methodology and Data Collection

The methods used to conduct this needs assessment had the aim of helping us gain a broad picture of the current condition of community consultation in Pemba by NCA and other aid actors. As such, we included a variety of methods such as semi-structured interviews, a survey with both closed and open-ended questions and, finally, a report on communication dynamics in Pemba based on data available from telecommunications companies.

2.1. AI-fluence report

The marketing company AI-fluence was commissioned to produce an independent report on digital communication in Pemba, based on available data from telecommunication companies, which is used as secondary source material to help triangulate our qualitative survey and interview findings. The report includes information on channels of digital communication, most used types of digital devices, formats of communication and costs.

2.2. Interviews

We conducted six interviews with NGO practitioners of different levels ranging from field officers to country level administrators. These included members of NCA (3) and practitioners of other organisations (3). Interviewees were selected from a list of organisations with which NCA has been collaborating with in Pemba. The in-depth structured interviews took around 40 minutes and were conducted via MS Teams. They included questions on the practitioners' efforts of communication with the communities that they serve, specifically narrowing down to methodologies used, challenges experiences and ideas about potential areas of improvement.

Finally, supplementary conversations were conducted with NCA colleagues and through analysing reports to gain project specific information.

2.3. Survey

345 participants to Swahili Coast Project in Pemba were surveyed. The survey was conducted by 10 enumerators trained on the specificities of this survey by NCA staff. The platform used was KoboToolbox and the survey included 25 questions both closed and open-ended. With the goals of this needs assessment in mind the survey was based on the conceptual framework of the project and was focused on 1. Digital Communication Preferences And 2. Experiences with the Swahili Coast Project and Communication with NCA staff. The questions can allow a comparison to be made after the pilot has been implemented to see how experiences with the project and communication with NCA or digital preferences have changed.

The questions were written in English and translated to Swahili to be used for the survey. The translation was tested during the enumerator training where challenges with wording became apparent and worked through.

The sample was selected through purposive sampling of the Swahili Coast project participants in order to get a representative sample in regard to age, gender and location. This methodology further allowed for the selection of people with disabilities and other religions that might have been harder



to reach if random selection was used. Project officers reached out to relevant beneficiaries and confirmed meeting times with enumerator.

The submitted data was quality controlled and inconsistencies were discussed with NCA Pemba staff to help clarify unclear results. Following the data clearing the data was analysed using KoboToolbox and Excel.

Gender	Frequency	Percent (%)
Male	144	42
Female	201	58

Age	Frequency	Percent (%)
Under 25	86	25
25 – 50	208	60
Over 50	51	15

Completed Level of Education	Frequency	Percent (%)
Primary	112	32
Secondary	178	52
Vocational/College	26	8
Madrassa	7	2
None	21	6

Location	Frequency	Percent (%)
Wete	127	37
Chake Chake	102	30
Micheweni	82	24
Mkoani	34	10

Disability	Frequency	Percent (%)
Yes	45	13
No	300	87

The table above shows the demographic data of the participants. It reflects the sample of the Swahili Coast Project that targets young persons with an emphasis on young women.

The urban center areas of Wete and Chake Chake were highly represented with 127 participants from Wete representing 37% and 102 participants from Chake Chake representing 30% of the sample. 82 participants are from Micheweni representing 24% and 34 from Mkoani representing 10% of the sample.

Significantly, 314 Muslims represented (91%) of the sample and 31 (9%) who identify as Christian. Further, 99% of the participants identified as Swahili with one identifying as Arab. Out of the 345 people surveyed, one did not give their consent.

The sample of the need assessment survey functions as a sample of the Swahili Coast Project which targets mainly women and youth; it does not represent the island of Pemba as a whole. The next section discusses some limitations and constraints related to sampling

2.4 Limitations and Constraints

The formula below was used to calculate the sample size and confidence intervals:

$$ss = \frac{Z^2 \times (p) \times (1-p)}{c^2}$$

corrected for finite population:

$$\text{corrected ss} = \frac{ss}{1 + \frac{ss-1}{pop}}$$

ss = sample size

Z = Z value (1.96 for a 95% confidence level)

p = percentage picking a choice or response (the calculator uses 0.5)

c = confidence interval, expressed as a decimal (e.g. 0.05 = ±5)

pop = your survey's target population

Given a total target population of approximately 2,500 individuals in Pemba, and with a confidence level set at 95%, the survey sample of 345 people provides a notably low margin of error of less than 5%.

However, this margin of error can be higher for some specific population that were less consulted, such as persons with disabilities or other religious groups which makes it challenging to disaggregate results to these groups with any significance. This is not strictly a methodological problem, as these populations are also underrepresented in the overall group targeted by the Swahili Coast Project.

Although an equal number of survey respondents from each of the four main districts was desired, the demographic data reveals challenges in reaching project participants from rural areas. Transport to South Pemba is difficult due to poor road infrastructure and limited vehicle availability. These difficulties faced by enumerators in reaching these areas highlight the broader challenge faced by humanitarian aid workers in including rural populations in their work. Consequently, this needs assessment may have missed some important perspectives. Particular scrutiny will be applied to data from rural populations to ensure any complexities are recognized.

Further, due to time constraints, there was no opportunity to conduct a trial run of the survey questions, which could affect the accuracy of the results. Nevertheless, practitioner interviews and the report by AI-fluence provide significant complementary information, ensuring that the key findings are triangulated.



To ensure consent from our project participants, a description of the project and how the data would be used was included in the survey for enumerators to cover before proceeding to ask for consent. The importance of clearly explaining the project's purpose, data protection, and participants' rights was emphasized and practiced during enumerator training. In addition, by NCA staff coordinating appointments with survey participants beforehand allowed for people to have sufficient time to think about their participation. This addresses ethical challenges such as maintaining confidentiality and respecting participants' privacy.

A smaller sample of participants to the survey were invited to a session where NCA shared the findings of the needs assessment and to the co-creation session with the private tech companies that took place in Pemba, where they could challenge and discuss these results, and convey more details about their experiences, outside of the limits of the survey.

3. Results: Current Channels of Community Participation in Aid interventions

The following sections draw mainly from the survey, interview data and complementary data from NCA staff conversations and reports. First, we explore community participation channels currently used in the project, their costs, and environmental impacts. We categorize participation into direct and indirect methods, drawing insights from practitioner interviews and internal reports. Further, financial and environmental elements are considered such as the costs of monitoring activities. Overall, this section provides an overview of community engagement dynamics, aiming to provide a better understanding the state of communication between NGOs and communities.

3.1. Mapping Community Participation Channels

Interviews with practitioners and internal reports identify that community participation channels differ across the stages of a project's cycle. However, we can observe two general categories of community participation, direct and indirect.

Direct participation includes in person focus groups and field visits occupy a large part the opportunities that project participants have in contributing to project decision-making. Calling, texting through SMS and email were also mentioned but largely for monitoring or information sharing purposes. Indirect consultation includes surveys and anonymous feedback channels which range from complaint mechanisms or phone hotlines.

For the NCA Swahili Coast Project in Pemba, in person meetings and phone calls have been the central methods of communication and consultation opportunities for project participants. NCA Pemba staff note that phone calls are used to communicate project related issues that arise in the implementation process. WhatsApp groups are in place however NCA Pemba staff note that they are used more so by field volunteers and not so much by project beneficiaries. An evaluation survey is underway to assess the implementation process.

Based on interviews with NCA staff and members of other NGOs working with project implementation and monitoring in Pemba and informal calls with NCA staff working in three countries we can conclude that:

1. A big part of the input from rightsholders and other local stakeholders about projects is gathered through informal conversations during the day-to-day work of field staff. However, this input is seldom communicated upwards in a systematic and formal manner, and hence, it is not used for program adaptation, design, and learning.
2. The "formal" monitoring happens only during the visits from country office staff, when feedback sessions are organized, data is systematically collected and reported. Although it depends on the type of project and location, NCA aims to visit each project 2 per year to conduct this type of monitoring

3. Additionally, most projects collect feedback from communities during bigger, more formal studies and surveys such as needs assessments, baseline studies, midline studies and external evaluations. This type of exercise is conducted for one project, every 18 months, depending on the project.

3.1.1. Costs and Environmental Impact

Overall, all interviewees agreed that communicating with the communities they serve requires a significant investment of resources and time. For NCA the average cost of a “monitoring” trip depends on the type of project and its location. However, based on information collected from NCA finance department staff, and triangulated with information from M&E staff from three country offices, we have estimated an average of 5315 USD per trip. If two such monitoring exercises are conducted in a year, the yearly monitoring cost of a project would be around 10.630 USD. For an average country office with 18 projects in implementation, the costs of monitoring would be around 191.340 USD.

The estimated cost of carrying out a more detailed data collection exercise (needs assessments, baseline studies or similar) is 5261 USD. For the same country office with 18 projects, the yearly cost could reach 71.024 USD: taking the costs of monitoring for a project above 14.000 USD per year, and the costs for an average country office to more than 200.000 USD/year. In addition to travel costs, some country offices offer per-diems to participants of focus groups to compensate for their time. In these contexts, the costs of monitoring practices become much larger.

Further, some staff interviewed highlighted that NCA’s implementing partners often have their own costs related to monitoring of the projects. Sometimes these costs can be as high as NCA’s as national partners are often not based in the places where the projects are located. This assessment shows that monitoring practices and their costs can vary greatly depending on the type of project and the location.

Regarding environmental impact, on average, staff can drive 600 km (two ways) during a monitoring trip. This represents 150 CO₂ Kg per monitoring trip. In other countries, local flights are used widely which, for two passengers, can be around 312 CO₂ Kg per monitoring trip. Similarly, to monitoring costs modes of transportation and consequent emissions can vary across country offices and project location. However, including all monitoring trips, and eventual needs assessments and evaluations, a conservative estimation is that this represents over 8 tons of CO₂ for a country office per year, only in transportation (For more information see Annex 1).

Notably costs that have been added to the estimations above concern only NCA. Other aid practitioners interviewed working in Pemba revealed that monitoring practices in their organizations are similar. They referred to the costs and time commitment for organising focus groups and other monitoring practices as considerable and agreed with wanting to make monitoring practices more efficient and cost effective. One aid practitioner spoke about the surprising costs of vehicle use for their operation in Pemba which includes importing a car from the mainland as the availability of quality cars on the island is low. This underscores the role of the local context in influencing costs and emissions.

3.2. Perceptions of Current Communication Channels – By practitioners

The previous section discussed costs related to monitoring trips, which is one significant avenue of direct communication with communities. In addition to costs, existing monitoring practices are perceived as a considerable workload for all interviewed. An average monitoring trip lasting three days of work, plus one day of traveling, for two participants leads to the total amount of workdays spent by country office staff traveling easily reaching 288 days per year. To this workload, it would be important to add the time needed to analyze the data collected and report on it.

Even so, amongst those interviewed, face-to-face communications was commonly identified as the best way of exchanging with project participants as such methodologies allow for a deeper understanding of needs and gives participants the opportunity to challenge certain preconceptions or offer suggestions for challenges experienced by the project.

Depending on the distance from the project location, face-to-face meetings can be challenging to organize on a regular basis for the reasons stated in the previous section and scheduling challenges in addition. Even when they do take place, interviewees described that in person discussions can highlight the voices of certain groups that already hold significant social capital in their communities. One interviewee described how they try to counteract that by holding one-on-one discussions with individuals who do not get to speak in group meetings. Mostly such direct communications take the form of informal conversations which take place with field staff, but such feedback or discussions does not always travel upwards to country office levels. Instead, country staff depend on focus groups when visiting the location of a project.

Although staff express that they try to visit project locations they have not visited in some time, in person have their own set of challenges and office staff interviewed reflect on how scheduling or transportation complications often result to only hearing feedback and having discussions with the same group of people, that are often selected by community leaders. Three interviewees expressly pointed out that community leader selections of project participants can produce biased discussions, however saying no or creating their own focus groups can cause internal conflicts.

Interviewees express different experiences with surveys such as needs assessments. Specifically, one interviewee remarked that, in their experience, household surveys alone cannot capture the reality of the situation as the format rarely allows for discussion beyond surface level needs assessments. Although relevant for some projects, they added, it is not applicable for understanding the 'why'. As such, they are more of a top-down approach rather than allowing a two-way stream of communication between project participants and humanitarian workers.

In summary, while face-to-face communication and monitoring trips are essential for understanding community needs and fostering dialogue, they present significant logistical challenges and workload implications. Surveys, while useful for certain purposes, may not provide the depth of understanding required for effective project implementation.

3.2.1. Improvements

Five out of six practitioners interviewed expressed willingness to learn new skills in order to improve such communication. The main exception was one interviewee who explained that face to face meetings and phone calls remain the best way to communicate with project participants and rather than learning different methodologies more emphasis should be used to improve established practices.

Nonetheless, all interviewees agree that there are ways to make communications with communities they serve more rapid and effective. Specifically, anonymous complaint mechanisms were referenced as an area with potential for improvement. NCA staff interviewed reflected that very few complaints were reaching the country office, this illustrates that few people are using them – rather than there not being any complaints by project participants.

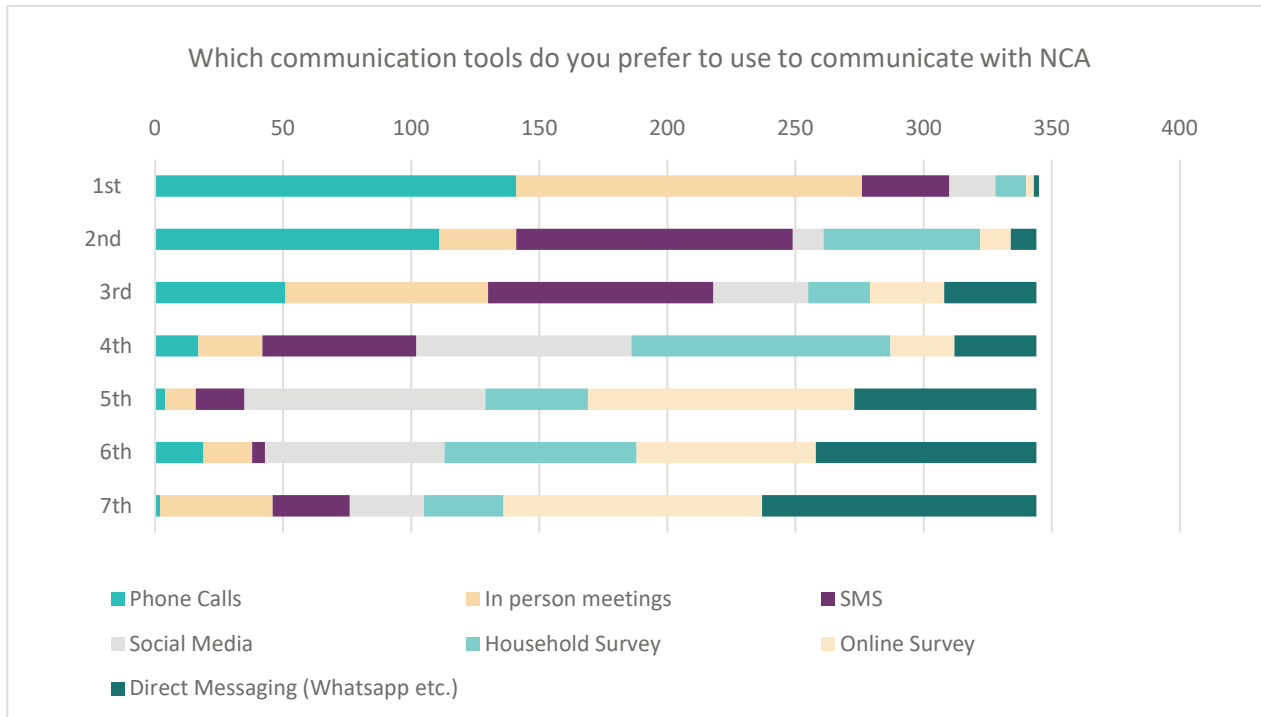
A member of another NGO working in Pemba explained that project participants will call the phone hotline just to check that it exists but will not express any complaints largely due to cultural taboos. Another aid practitioner explained that people sometimes lack the confidence to speak publicly and would be useful to have anonymous expression channels.

Based on their experiences these practitioners reflect that it is significant to adapt communication mechanisms to cultural contexts when complaining is seen in a negative light. For direct feedback therefore, a level of anonymity is desired but also clear and transparent guidelines about how the complaint is processed: If it is a voice call, who answers the phone? If it is a written complaint box, who is responsible for reading such complaints and how often?

Practitioners agreed that training is needed both to humanitarian aid work staff and for project beneficiaries in using such communication tools more effectively.

3.3. Perceptions of Current Communication Channels – By project participants

In order to understand the preferences of current communication tools with NCA we asked project participants surveyed to rank their preferred methods of communicating with NCA staff.

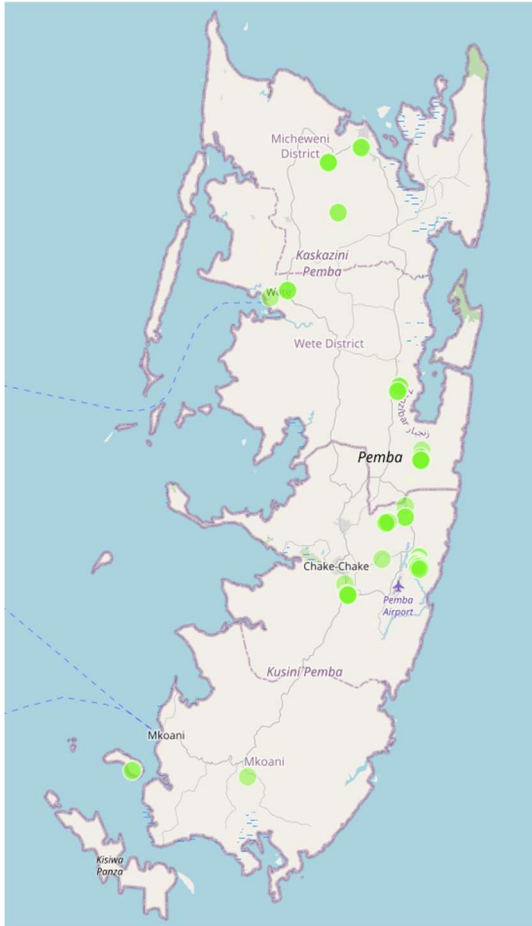


The majority of project participants surveyed ranked phone calls and in person meetings as their most preferred method of communicating with NCA. SMS texting was strongly represented as a second and third category. This demonstrates a strong preference for direct communication with NCA amongst the group surveyed. Social media, appears as the 4th preferred channel of communication.

Notably, household surveys represent 18% of the second choice but it is most selected as a fourth option. With all the results aggregated, household survey is the 5th preferred option. Slightly worse than online survey. In general, the two types of surveys can be understood as the least preferred option in terms of communicating with NCA.

Finally, direct messaging was most often selected as a 5th, 6th or last choice. This is reflected in conversations with NCA staff who reported that although WhatsApp groups have been set up, they are not very active. Later in the survey participants were asked to write their preferred digital tool to communicate with their communities or to find community participation events and economic opportunities. There, WhatsApp is mentioned amongst the top preferred channels (more in section 4.1). WhatsApp was also commonly mentioned amongst the practitioners interviewed as a method used. As such, the low ranking of direct messaging in the survey could reflect on two things: 1. Project participants would rather keep direct messaging that rely on data connectivity amongst their communities or, 2. The category of Direct Messaging was confused with SMS or Social Media platforms.

3.3.1 Challenges



In trying to assess how project participants experience their communication with NCA through the project they were asked the following question: *Was there a time during the last year when you or other people that you know, needed to contact NCA staff and were not able to?*

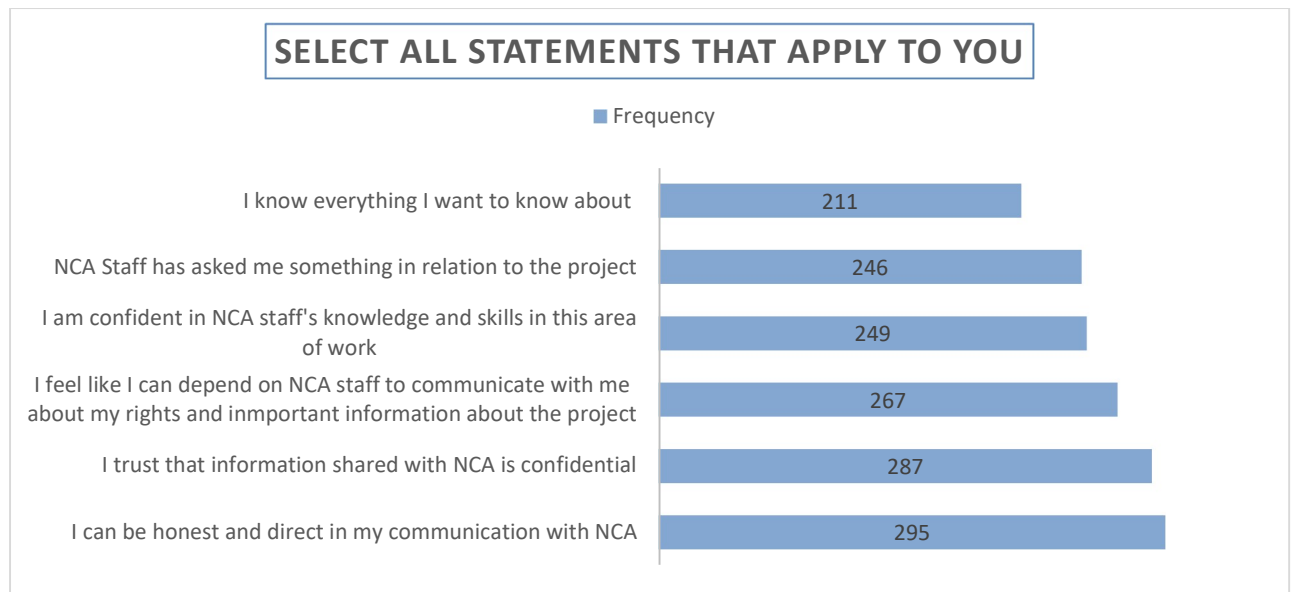
92 of those surveyed answered yes which may shed some light to challenges in the current communication methods used.

By taking a closer look at the location of those respondents, it is possible to see that those who answered yes are located mostly outside of the main urban centres. With one cluster in a village in the Chake Chake administrative area. This fact highlights existing issues with reaching and listening to people residing outside of urban centres.

Those respondents who answered yes, referred to not knowing who to contact in NCA, not having the contact information of those who they wished to contact in NCA or only being able to reach them when they visit (which is not very often).

3.3.2 Perception by targeted communities of the impact of on-going interventions

Survey participants were asked to select statements that they agree with. The aim with this exercise was to get a general understanding of their perceptions on current interventions. The following graph demonstrates the results:



Significantly, the statement that was selected the least was “I know everything I want to know about the project” with 61% of respondents selecting this statement. It’s important to note that this statement appeared as last in the list of statements to select on the survey and can therefore carry some selection bias where participants chose not to select it to show that they are critically assessing the truth of these statements. Even so, it shows that perhaps there are some areas in which communication on the project could be improved.

Overall, it is important to highlight that participants generally feel that they can trust and depend on NCA staff and are confident in NCA staff’s knowledge.

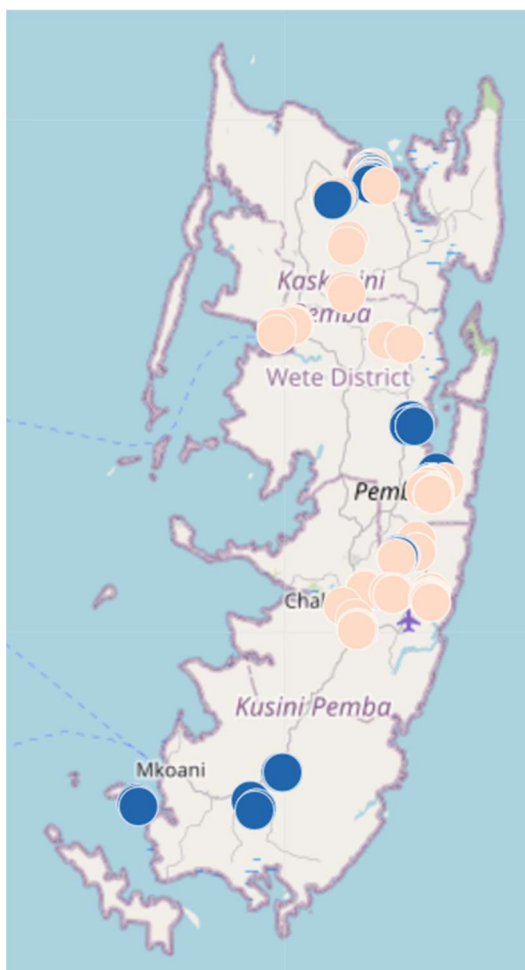
3.4. Marginalised Groups

Both project participants surveyed, and aid practitioners interviewed were asked the open-ended question of which groups are typically not able to communicate their needs or take part in community consultation practices. Children, persons with disabilities and women were the categories most mentioned. Collected data also reveals that people that are not selected by community leaders or people residing outside of the urban centres also appear as marginalised from communication with NCA.

Categories	Frequency
Children	113
Disabilities	87
Women	44

One of the main groups that was referenced by aid practitioners as marginalized from communicating their needs to NCA was women. Interviews with practitioners illustrate that it can be logistically challenging for women to attend in person meetings, even though a gender balance is usually strived for in the participant list. Further, interviewees explained that in their experiences in-person meetings can favour those who with the most social capital which leads to the same people are speaking out. Finally, some survey participants also elaborated that participation of women in different forms of consultation with NGOs might require permissions from household structures and speaking out can be seen as a cultural taboo.

Further, practitioners identified people falling outside of beneficiary lists as another group requiring some attention. Interviews with practitioners in Pemba highlighted that beneficiary lists are often designed by community leaders who may prioritize people with familial connections to them. This leaves population that is already marginalized from their community or has needs that are unknown by their community leaders with few options to communicate their needs to NCA or other organizations. This becomes particularly challenging if these people are also located outside of the urban centres, in harder to reach rural areas.



Taking a closer look at the location of respondents, an urban-rural distinction emerges. When asked 'In the past year, how often have you communicated with NCA staff', 120 survey participants responded that they had communicated 'Enough' (Pink) times and 72 responded 'Never' (Blue). Those who answered 'Enough' are located in the urban centres of Chake and Wete or in the more populous districts. Whereas those who answered 'Never' are located in smaller villager or harder to reach rural areas.

Aid Practitioners offer some explanation, to these survey results: 1) Rural areas are harder to have regular consultations with due to transport, infrastructure challenges. 2) Transport to urban centres for in person meetings presents own challenges 3) There are constraints by partners or stakeholders on who attends in-person community consultations and if the same people are chosen then others are consistently left out and have to rely on communication through other means which presents its own challenges. Notably, some survey participants identified themselves as marginalized due to being located far from where such communication sessions take place and cost of transportation or other costs.



Persons with disabilities were another group referenced by both project participants and aid practitioners. In the survey, disability was mentioned 87 times and 3 out of 6 aid practitioners referred to people with disabilities as marginalised. One aid practitioner emphasised that there is a need for the groups to be participating in community consultation more as they know best what their needs are and how humanitarian organisations can help them. However, people with disabilities are often held at home and not always reachable by aid workers.

Finally, one of the main sectors of populations identified by survey participants as marginalized from communicating their concerns to NCA were children (persons under 18), referenced 113 times with youth, students, under 25 also mentioned frequently. Survey participants emphasised different categories such as children with disabilities, low-income children and children who have school duties. Although this is clearly a significant issue for the project participants surveyed and for aid practitioners interviewed, the Swahili Coast Project does not focus on people under the age of 18 as such it falls outside of the scope of this report.

4. Mapping Digital Use and Capacity in Pemba

Reporting from AI-Influence finds that people in Pemba are increasing their digital use. In addition, we find that most survey respondents (25-50 + over 50) access the internet daily or more than once a week. To understand better the possibilities within digital solutions we mapped out the availability of digital devices, costs, preferences and marginalized groups.

4.1. Availability of Digital Devices

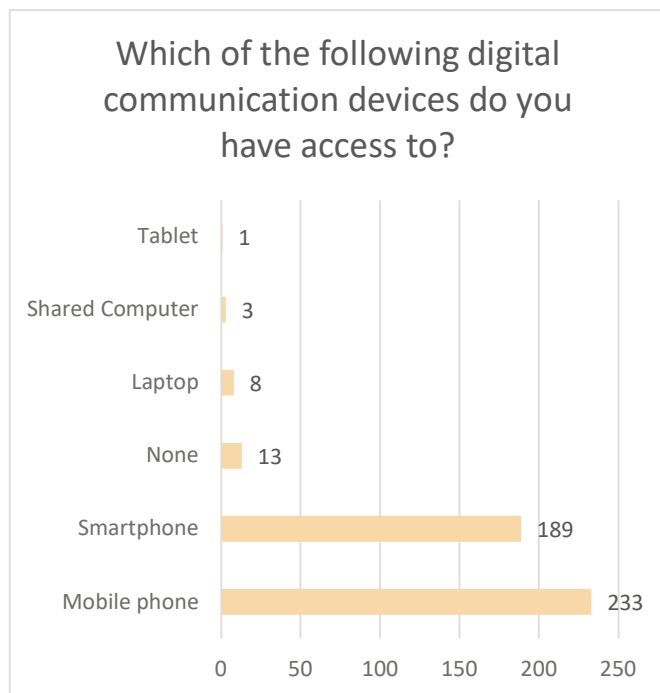
Based on reports the Tanzania Communications Regulatory Authority, the Tanzania National Bureau of Statistics, the Tanzania Demographic and Health Survey, the Administrative Units Population Report, AI-fluence estimates that there 87% of residents of Pemba have access to a mobile phone whereas over 100,000 smartphones are in use.

Survey participants were asked to select the digital communication tools they have access to out of the following options: mobile phone, smartphone, non, laptop, shared computer, tablet. Notably, having access does not mean that they own a private device but rather that they can borrow from a neighbor or a family member.

The following graph demonstrates the frequency that each device was selected. As survey participants were able to select more than one, we observe that 92 people own both a mobile phone and smartphone.

138 survey participants selected mobile phone only, 89 smartphone, 14 none. 92 survey participants selected a combination of mobile phone and smartphone. The remaining selected a combination of mobile phone with laptop, shared computer and/or smartphone.

To clarify why survey respondents were giving these answers we discussed findings with NCA Tanzania staff. From these conversations we note that as data connection coverage and cost of data connection can vary in Pemba for that reason, it is common for residents to keep two phones in which they can exchange the SIM card depending on what they need to use it for. Usually that will be one smartphone and one mobile phone.



Overall, access to a laptop (8 people), shared computer (3 people) or tablet (1 person) was very low. Significantly, access to a mobile phone is more prevalent than a smartphone, which is further supported by official reports on digital access in Tanzania, and Pemba more specifically.

Significantly, reporting from AI-fluence shows that in Tanzania mobile phones are used by 85,62% of the population whereas smartphones by 32.13%. The findings from this NCA survey in Pemba are relatively different showing a smaller gap between mobile phone and smartphone access.

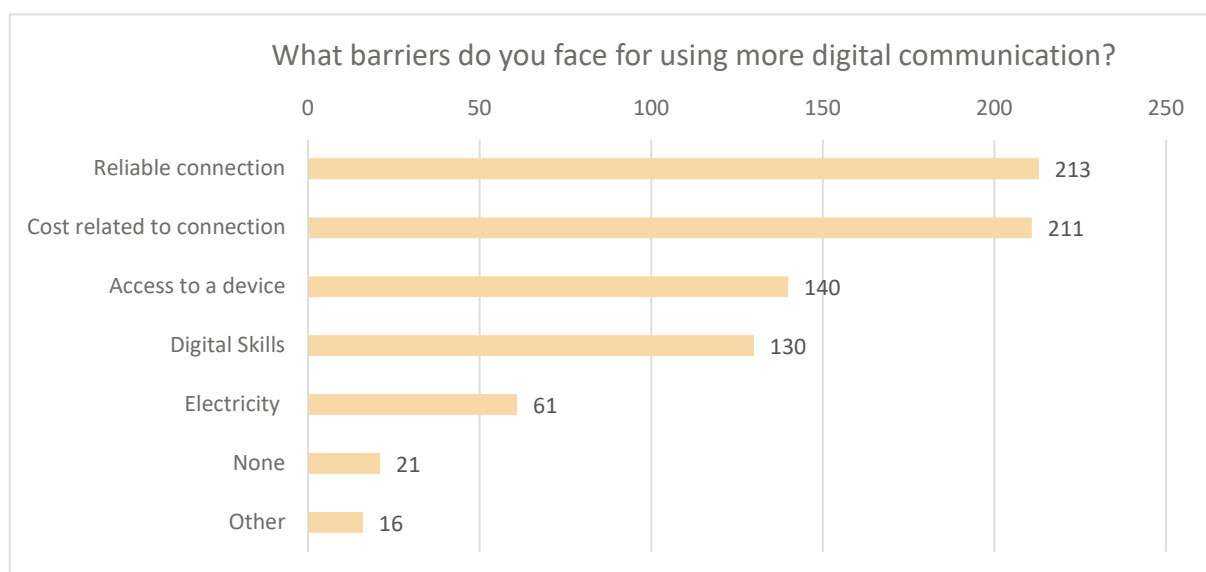
Finally, 13 respondents reported that they do not have access to any devices. Although this number is low, it is discussed further in section 4.4.

Comparing the devices they have access to with how often the same people are accessing the internet we see that most people who report on only owning a mobile phone, access the internet ‘never’ or ‘almost never’ in comparison to those who have access to both a mobile phone and a smartphone who report that they access the internet ‘daily’ or ‘more than once a week’.

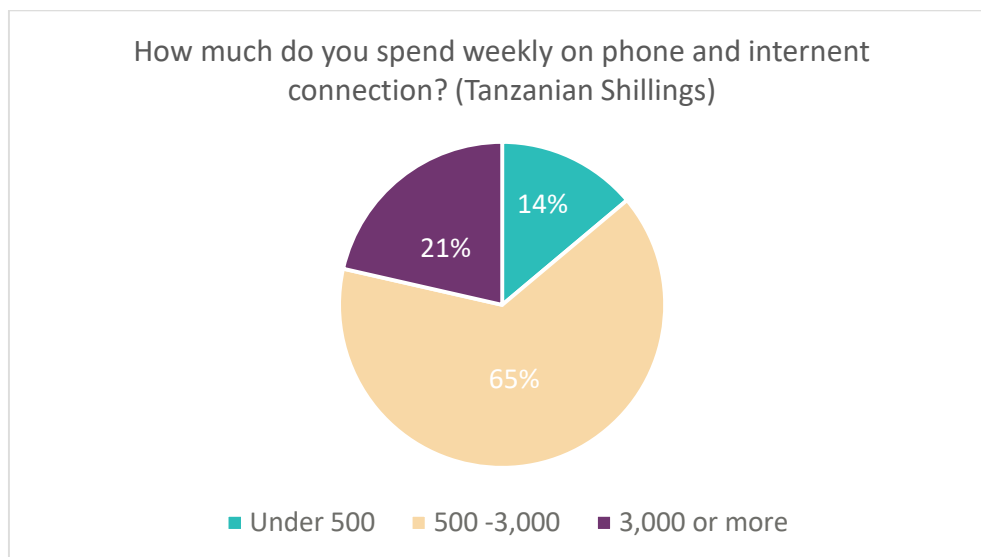
4.2. Cost of Mobile Communication and Connectivity Options

Reporting by AI-fluence shows that on average the cost of a smartphone is around 29\$ which represents 34% of the monthly income for Pemba residents. Based on the survey data presented in the previous section we find that out of the project participants surveyed, most, have access to a mobile phone (68%) versus a smartphone (55%).

When survey participants were asked to select from a list of options, the barriers they face for increased digital use, connectivity issues and issues related to cost were referenced as the main challenge for increasing their digital connection.



Further, in terms of connectivity, AI-fluence reports that the primary telecommunications providers in the region are Airtel, Halotel, Tigo, Vodacom, and TTCL who offer data rates at approximately 9 Tanzanian shillings per megabyte (MB). AI-fluence, based on data sourced from household income surveys conducted in Tanzania that show that households in economically challenged areas typically allocate 63% of their income towards food expenses, leaving 37% for other essentials, including communication service, argue that data connectivity is within reach for most Pemba residents.



We find that the majority of our respondents spend between 500 and 3,000 Tanzanian Shillings on digital connection per week, on average. Upon disaggregating the data for age and gender there are no significant conclusions to be made. Those who spend under 500 Tanzanian shillings per week also reported having access to only a mobile phone or no digital tools. Men represented 64% of those who spend more than 3,000 Tanzanian shillings on their phone and internet connection per week, which is significantly higher than for females, this can reflect social roles and earning capacities while also providing some indication on gender differences in digital access.

Despite the affordability of mobile data, referencing the barriers for increased digital access, cost related to connection was selected by 61% of survey respondents showing that although it may be affordable for Pemba’s general population, for the project participants surveyed, cost plays a significant role in limiting their connection aspirations.

4.3. Preferred Digital Communication Amongst the Target Community

AI-fluence reports that YouTube consumes the most bandwidth (in GBs) at country level with a total of 50.18 million GBs. By their visual heavy nature video streaming services consume more bandwidth than other services. As a result, the second was Facebook with 49.49 million GBs mostly due to video services. Third was the video hosting service TikTok with 33.57 million GBs.

Even though video heavy platforms will naturally consume more data, they do give an indication that video-based formats are where Tanzanian’s spend their time and money online. To identify the

preferred channels and formats of our project participants we asked them a series of open-ended questions to allow survey participants to truly suggest format and channels that they use without being limited to a pre-determined category.

4.3.1. Channels

Project participants surveyed were asked to write their preferred digital tools of communication with their communities. Their answers were then run through a word cloud generator and those with the highest frequency are reported on the table below:

What is your preferred digital tools of communication with your community?	Frequency
Phone Call	163
Mobile Phone	103
SMS	51
WhatsApp	47
Smartphone	47

What stands out in the table above is the dominance of phones, either a call, a phone more broadly or SMS texting. Few answers highlighted social media applications like WhatsApp (47) Instagram (9), Facebook (6) and computer (6) more broadly.

We further tried to map out the digital tools that project participants use to find community participation events and/or economic opportunities in order to see if there are other platforms that fill a different role in their communication preferences.

Which digital tools of communication do you use to find information on economic opportunities and/or community events?	Frequency
Phone Call	119
WhatsApp	99
Facebook	50
Mobile Phone	42
YouTube	37
Social Media	27
Smartphone	19
Instagram	16
SMS	15

In this case, WhatsApp is mentioned amongst the top preferred channels (99) times, with Facebook (50) and YouTube (37) times. As such it appears that social media such channels in which survey participants find community participation events.

As the Affluence report identifies Facebook, YouTube and TikTok as the largest data consumers in Pemba. Cross-referencing this data with our survey information it can be inferred that applications such as TikTok are used for entertainment whereas Facebook and WhatsApp retain a central role in information sharing.

4.3.2. Formats

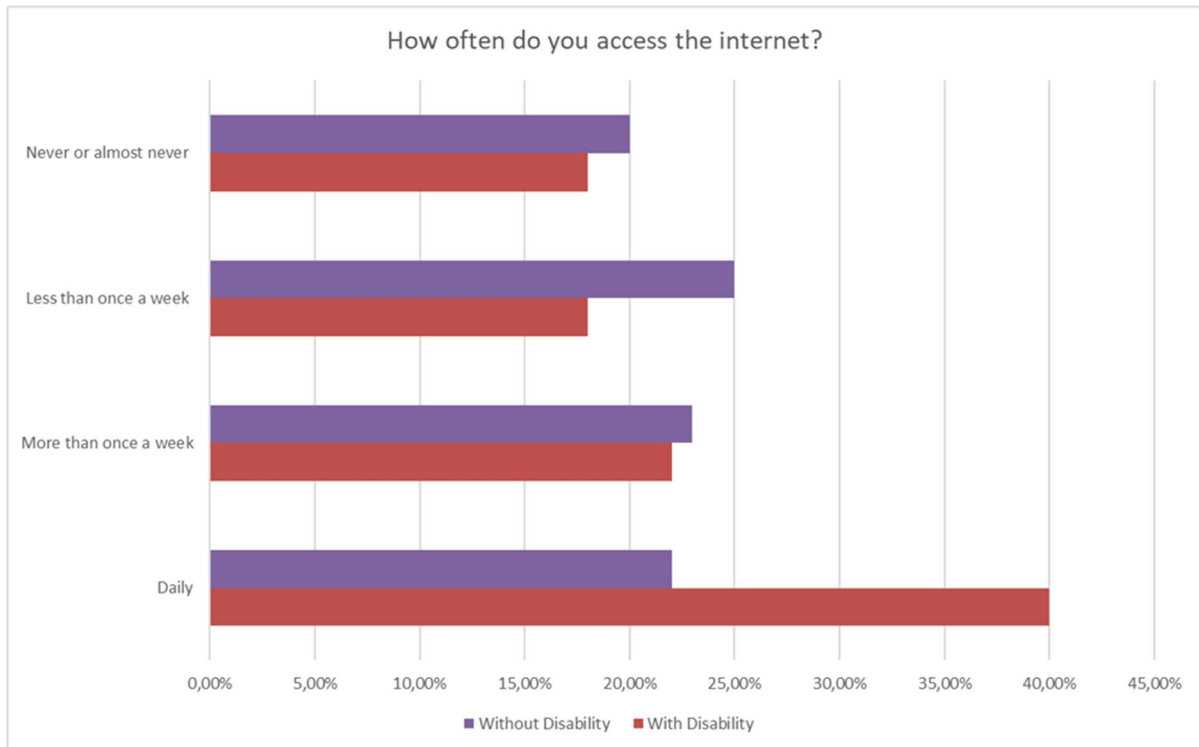
The report by AI-fluence finds that what consumes the most data is video.

Even so, in our survey data in the previous section, traditional calling or voice call occupies the majority of the format used by project participants in their communications.

4.4. Challenges of Digital Access and Marginalised Groups

Reporting by AI-fluence identifies children and people with disabilities as groups marginalised from digital access. Children most often do not have access to digital devices and have limited access to family digital devices. As this project does not include children, this is outside the scope of the needs assessment. However, organisations looking to include children in their digital community consultations should consider their limited access.

Disaggregating the data for age, gender or education in the question of ‘how often do you access the internet’ we did not find any categories represented in the ‘never or almost never’ or ‘daily’ categories. However, out of the 45 project participants surveyed who have a disability, most seem to be accessing the internet daily or more than once a week. This is in contrast with people without a disability who are more evenly distributed. However, as the sample is very small it cannot be considered representative or generalisable. Notably, out of the people with a disability surveyed only three did not have access to a digital device. Although these initial findings point towards positive digital inclusion care should be taken in terms of designing digital tools that are accessible for different disabilities.



Finally, in our needs assessment survey, only 13 people did not have access to a digital device. The total number is too small to make general conclusions however, 10 out of 13 were female. Significantly, all age groups were represented with 3 between 25-50, 2 over 50 and 5 being under 25. Although 10 female survey participants out of the 201 women surveyed represents a small percentage of those surveyed with access to no digital device it does point highlight that females may be less likely to have access to a digital device than males. This reflects findings by AI-fluence reports for Pemba where 71% of women report owning a phone versus 80% of men and does suggest some gender sensitivity necessary when considering digital tools.

5. Conclusion

In conclusion, the needs assessment with the Swahili Coast Project participants in Pemba highlights project participant and aid practitioner preference for traditional communication methods such as in person meetings, phone calls. These preferences highlight the importance of establishing personal connections and understanding nuanced community needs and challenges. Even so, there is recognition among practitioners and project participants of the need for improvement, particularly in ensuring more rapid and effective communication with affected communities. Specifically, this report finds that women, persons with disabilities, and individuals residing in rural or harder-to-reach areas face significant challenges in participating in communication with aid organizations like NCA. Logistical and financial barriers, cultural taboos, and prioritization by community leaders contribute to the marginalization of these groups, emphasizing the need for targeted strategies to ensure their inclusion in communication processes.

This needs assessment further highlights that digital access is prevalent amongst project participants and finds that digital platforms such as WhatsApp and Facebook have a place within communication preferences. Importantly, challenges to digital access persist, particularly among marginalized groups like women, emphasizing the importance of gender-sensitive design in digital tools to ensure equitable access and participation. As this project aims to empower communities affected by violence by providing a digital "meeting place" for direct participation, aligning with the community's preference for direct communication channels is necessary.

Annex 1

To calculate CO2 emissions per passenger we accounted for 0.25 kg CO2/km for a car, divided by the number of passengers. For a flight of less than 500 km, account for 0.26 kg CO2 per passenger per km.

Here are the average UNHAS emission levels per trip and per country:

Office	Kg. CO2/passenger
DRC	167,1534293
Syria	188,9579091
Mali	206,8761121
Somalia	149,6625662
Afghanistan	278,0593986
Burkina Faso	158,2603566
Ethiopia	0
Nigeria	105,9117324
Sudan	559,1319025
South Sudan	107,2815591