Measuring Effectiveness of Project Communication Channels in Affected Communities in Nepal

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Abstract

This study is identifying the most appropriate communication medium to communicate with local people by Arun-3 Hydropower Project (AHPP) especially focusing on the project construction phase. Since, the study is focused on the construction period when chances of misunderstanding, miscommunication, and other conflicts between project-affected people and the project, will be high due to higher incidences of social and environmental issues. This study was completed by applying mix method of research where quantitative research was conducted through a survey among local people of Makalu Rural Municipality (MRM) of Sankhuwasabha and a case interview was done with the chairman of the same Rural Municipality. The study has revealed that local radios and public meetings are the most recommended mediums that participants expected to support the project in properly disseminating project-related information to local people. This article suggests that AHPP should disseminate information about project activities mainly through local radios and public meetings. This study also concludes that the project developer is not providing sufficient information about project activities to local people, which is also a source of misunderstanding between the two sides.

Keywords: Stakeholders, Communication, Channels, AHPP, Projects

Background of the Study

Host of infrastructure projects in Nepal have been confronting bitter relations with their stakeholders especially local communities. But such projects are found to not have spent much time to strengthen communication with the stakeholders. Most of the projects are mainly focused on implementation activities engagement with host communities that have the power to make or break a project and hold rights to know about the project activities (Ghimire, 2021). The absence of proper research about the effectiveness of communication tools used by the project developers leads to miscommunication and sometimes conflict with the local communities. If the project manager possesses poor communication skills, the project is more likely to fail not being able to influence individuals and groups outside the project (Lester & and Lester, 2007).

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Similar cases are found in Nepal's largest hydropower project -900 MW Arun-3 Hydropower Project (AHPP) being implemented in the Sankhuwasabha district. This research has been chosen AHPP for a case study to identify the most preferred communication channels that can support effective communication between project and local communities. The study chose Makalu Rural Municipality, which the most affected area from the AHPP, and the study was focus on the construction period keeping in view the higher number of social, environmental, and other issues that may emerge during the time. Projects face the highest numbers of social and environmental problems as well as and different incidents during the construction period. Communication is an important topic in the construction industry (Hoezen, Reymen, & Dewulf, 2006, July). For properly communicating with relevant stakeholders, organizations need to provide information through appropriate means.

Identification of best channels, appropriate platforms, and communication needs of audiences is the principle of communication to make information accessible to targeted audiences (WHO, 2017). The project manager is responsible to use the right mediums to share information with the right audiences (Rodriguez, 2017). In Nepal, there are several cases where the project-affected people protest against the project complaining that the project ignores them by not informing them properly about the project activities. Such hostile relations may lead to disruption of project activities by locals for days, sometimes months (Ghimire, 2021). Numbers of studies show more than half of management problems in projects are caused by poorly looked-after communication (Ruuska, 1996).

This research article identifies the most effective tools to be used by the project developer of AHPP to effectively communicate with affected people in MRM. Notifying local stakeholders of construction activities, getting community liaison staff on the ground quickly, and aiming for rapid response times is necessary for resolving grievances because stakeholder communication during construction phases may affect relationships with stakeholders in later phases also (IFC, 2007).

Arun-3 Hydro Power Project

Located in Sankhuwasabha district of Province 1, the AHPP is a 900-MW Peaking Run of the River (PRoR) project with diurnal peaking capacity (IBN, 2018). the AHPP is being developed by the SJVN-Arun-3 Power Development Company (SAPDC) registered in Nepal. According to 'A Glimpse of Arun-3 Hydropower Project' published by Investment Board Nepal in 2015, a Memorandum of Understanding (MOU) and Project Development Agreement (PDA) in this regard were signed on 2nd February 2008 and 25th November 2014 respectively. A total of 217 km long Transmission Line for the project will cover Sankhuwasabha, Khotang, Bhojpur, Udaypur, Mahottari, Siraha, and Dhanusa districts. The construction works in the project is going in a full swing since May 2018.

Research Objectives

The objective of the research is to identify the most suitable communication channel to communicate with the local project-affected people by Arun-3 Hydropower Project. The study aims at finding out the mediums through which local project-affected stakeholders are getting project-related information. The study would recommend the most effective communication channel for communicating with people living in the project host communities in rural areas.

Research Questions

The research is responding to the following questions:

- 1. What are the most widely used sources to get project information by locals and how is the flow of information from the project to local communities?
- 2. Which communication channels are the best for disseminating the related information to local people?

Theoretical Framework

This study is mainly based on the Media Richness Theory (1984) introduced by Richard L. Daft and Robert H. Lengel, who made four indicators to judge media effectiveness or richness which are speed of feedback, ability to communicate multiple cues, ability to present individually tailored message and capability of the channel to use natural language to convey subtleties. The theory was designed to improve information flow by prescribing a channel selection procedure for managers to make effective use of communication (Daft & Legel, 1986). The theory also states that the richness of a communication channel is determined by its ability to offer rapid feedback, multiple cues, natural language, and personal focus. In line with the richness criteria, face-to-face communication was identified as the richest channel, and the telephone was considered the second-richest channel, while computer reports (e.g., spreadsheets) and memos were considered to be the least rich, or leanest, channels (Daft & Legel, 1986). In addition, the Media Richness Theory has been extended to incorporate electronic media, which are seen to be less rich than the telephone, but richer than written documents (Daft & Lengel, 1987). In Media Richness Theory (MRT) Richard Daft and Robert Lengel (1984) assume that mediums of communication's features influence the effectiveness of communication and suggest that appropriate communication channels be used for proper dissemination of messages to intended groups. The medium or how a message is conveyed is more important than its content because the characteristics of the medium influence the meaning as well as the outcome of the communication (McLuhan & Fiore, 1967).

However, MRT is criticized for not explaining the richness of email communication, leading to the assumption that richness is not a feature of the medium but an evolving property of the interaction between the medium and the members of the organization (Lee, 1994). MRT envisages four indicators to judges media effectiveness or richness which are speed of feedback, ability to communicate multiple cues, ability to present individually tailored messages, and capability of the channel to use natural language to convey subtleties. to incorporate electronic media, which are seen to be less rich than the telephone, but richer than written documents (Daft & Lengel, 1987).

The 'Medium is the Message' as coined by Marshal McLuhan, in his book 'Understanding Media: Extension of Man' (McLuhan M., 1964) should be taken into consideration by the projects or organizations. McLuhan (1964) emphasizes the importance of tools rather than a message to disseminate information among the people. McLuhan developed his notion of "the medium is the message" through his consideration of the effects of technology and different forms of media on human communication and behaviour (Logan, 2008). As McLuhan (1964) states 'Medium is the Message' in his book legendry book 'Guttenberg Galaxy' that communicators should know which mediums are influential among audiences. The access/quality theory postulates that information should possess features such as "relevancy, accuracy, reliability, and timeliness" (Zmud, Lind, & Young, 1990). The accessibility characteristics of mediums are described using attributes such as "convenient, dependable, easy to use, reliable, the technique of use (command language) and experience in using the system" (Culnan, 1984 pg 146). The goal of MRT is to provide managers a means of describing and later explaining communication challenges facing organizations such as the lack of information required to perform the task at an expected level of performance. A medium enhances or distorts the intended message, and the explosion in electronic technology is making media selection an even more critical issue. Each channel of communication- has characteristics that make it appropriate in some situations and not in others. (Lengel & Daft, 1988).

Richard Edward Freeman's Stakeholder Theory (1984) highlights the value of external stakeholders who are affected by the projects or have a capacity to influence the project activities and they should be given high value for the success of the project (Freeman, 1984). Stakeholders are those who are impacted or going to be impacted or who have the power to influence the project activities. Stakeholders are 'any group or individual who can affect or is affected by the achievement of the organization's objectives (Freeman, 1984). However, people living in the project area are the primary stakeholders who can influence the project or be influenced by the project.

In this age of digital convergence, specific media tools acquire new capabilities rapidly so that it is no longer appropriate to refer to a specific digital medium but rather the set of features that medium offers (Dennis, Fuller, & Valacich, 2008). The physical characteristics

of a medium may be fixed, users' perceptions of a medium depend upon their characteristics and experiences, which may change over time. This theory has been applied primarily to media choice research (Dennis, Fuller, & Valacich, 2008). Denis McQuail (2005) in his book 'McQuail's Mass Communication Theory' states that the idea that media use depends on the perceived satisfaction, needs, wishes, or motives of the prospective audience numbers is almost as old as media research itself. Audiences are often formed based on similarities of individual's needs, interests, and tastes. Typical of such 'needs' are those for information, relaxation, companionship, diversion, or 'escape'. Audiences for media and kinds of media contents can often be typified according to such broad motivational types (McQuail, 2005). Brazilian educator Paulo Freire who is a proponent of the Participatory Approach of Communication introducing the Dialogical Method of Communication also emphasized letting the stakeholders get involved in the development process and determine the outcome rather than the pre-established outcome, which is already decided by external actors. Highlighting the necessity of two-way communication between teachers and students in the education process, leaders, and people in revolution Freire (2005) further emphasized in his legendry book 'Pedagogy of the Oppressed' on 'committed involvement' of stakeholders rather than 'pseudo-participation' (Freire, 2005). Another scholar Joep Cornelissen considers stakeholders as crucial forces in an organization's environment, and appropriate strategies are needed for dealing with them (Cornelissen, 2004).

In this way mainly the Media Richness Theory, Medium is the Messages Approach, Stakeholder Theory and Mass Communication Theory are supporting each other to make theoretical based for this research by emphasizing the importance of proper communication with relevant recipients of the message. As per the research questions, the study is identifying the most effective channel to be used by the AHPP to disseminate information about the project activities based on MRT, Stakeholder Theory, and 'Medium is the Message' approaches. These theories have been applied to study the communication of the Arun-3 Project with its local stakeholders. Given the floods of the medium of communication, the local community has an abundance of communication means from traditional mediums to the latest internet-based media. They use the media to satisfy their needs including information need from the developer of the project. The project developer needs to know the proper medium in which local stakeholders can get project-related information effectively. In this research, communication between AHPP and its local stakeholders, is studied to find out the most effective communication channel to be used by the project for communicating about project activities.

Methods and Procedures

The study is focused on exploring the best tools to communicate by development project (a case of AHPP) during the construction period. The research is based on mix method with quantitative (survey) and quantitative (a case interview) tools.

Determination of Research Participants

Under the study a survey was conducted among the residents in the two most affected wards number 3, 5) of MRM which is the most affected among four affected Rural Municipalities from the AHPP. For a case interview, the chairman of MRM (Tej Bahadur Pokharel) was selected as a view of a people representative, which can reflect the sentiments of local people. Pokharel's interview was taken in-person in MRM's Office Num Bazaar, Sankhuwasabha.

A total of 100 participants was selected for the survey. Random sampling was made to select respondents in line with the share of various caste and sex ratios in the designated area's population. After collection of the responses, data were tabulated and analyzed to conclude with the finding in line with the research questions. of the most effective source of information for local people during May 2018-May 2020.

Data Analysis Procedures

The information extracted from the data was presented as heading and sub-heading of data analysis and was discussed through different perspectives. The data analysis was based on the research objectives and questions which lead to the way of finding the research. Similarly, the case interview was formally transcribed in detail by reflecting the intended meaning of responses to questions from the interviewee. Research objectives and questions were the foundation for analyzing the data.

Results

Results are interpreted here with a concentration on topics regarding widely used communication tools in the local area, the flow of information from the project to the local community, communication channels preferred by the locals for receiving information regarding the project.

Sources of getting project information

Local people are found to have used radio, interpersonal communication, public meetings, TV, newspapers, social media as the online news portals as the sources of information about AHPP activities.

Table 1 Sources of Information about Arun-3 Project for Respondents

Medium / Sources	Frequency	Percentage
Social Media	2	2%
Radio	33	33%
Online news portal	4	4%
Interpersonal	27	27%
Public Meetings	23	23%
TV	9	9%
Newspapers	2	2%
Total	100	100%

Source: Field Survey / (Ghimire, 2021)

Table 1 shows how local people are currently getting information regarding the project activities. Radio is the most widely used channel at project affected areas to get project information, followed by interpersonal communication and public meetings respectively. However, TV, online news portals, social media, and newspapers are found less significant sources of information.

Project information is difficult to access

For the overwhelming majority of respondents, getting project-related information from the developer is very difficult.

Table 2 Access to Project Information by Local people

Condition	Frequency	Percentage
Difficult to Get	99	99%
Satisfactory (easy)	1	1%
Total	100	100%

Source: Field Survey / (Ghimire, 2021)

Table 2 shows the status of the access level of local people to get project-related information. Locals are found feeling difficulties to get project information which highlighted the lack of transparency of the project. Messages are not found to have flown smooth way to the affected community which made locals dissatisfied.

Insufficient information flow from the project

Whatever information is provided to local stakeholders by AHPP is not enough. Though the requirement of project-related information about social and environmental issues is high, the project is found to have provided a significantly lower amount of information.

Table 3 Amount of Information Flow from Project to Affected Community

Amount	Frequency	Percentage
Not Sufficient	91	91%
Sufficient	9	9%
Total	100	100%

Source: Field Survey / (Ghimire, 2021)

Table 3 demonstrates the satisfaction level of local people regarding the amount of information being flowed to them from the project. An overwhelming majority of local people are dissatisfied with the amount of project information being provided by the project to them.

The Nepali language most preferred

Though the affected area is dominated by the indigenous Rai community, a significant majority of respondents said they are fine with Nepali language showing less preference for their dialects.

Table 4 Language Preferred by Respondents

Languages	Frequency	Percentage
Nepali	87	12%
Local Dialects	1	1%
Nepali + Local Dialects	12	87%
Total	100	100%

Source: Field Survey / (Ghimire, 2021)

Table 4 shows the preferences of languages as a medium to communicate messages by the project. Though the community is dominated by ethnic nationality or indigenous, the overwhelming majority of locals wanted the project to communicate with them with mainly Nepali language showing less preference in their dialects.

Local radios are dominant

Out of the radio listeners, the overwhelming majority of them preferred to listen to local radios which are found airing project-related information and other local issues with high priority.

Table 5 Type of Radio Used by Respondents

Types	Frequency	Percentage
Local	70	97%
Local + National	2	3%
Total	72	100%

Source: Field Survey / (Ghimire, 2021)

Table 5 shows the preference among radios – local and national radios by stakeholders. A remarkable majority of locals preferred local radios to national radio. Local FM radios such as Shangrila FM, Khadbari FM, Sunakari FM, Arun FM, Sankhuwasabha FM, Naya Abhiyan FM are widely popular. Local radios were preferred because they give high priority to local issues in news and programs.

No significant changes in sources of information over a decade

The pattern of using mediums of sources for information has not changed remarkably over the decade, with interpersonal communication is still the dominant source.

Table 6 Medium Used by Respondents 10 years back

Medium	Frequency	Percentage
Interpersonal	42	42%
Public Meetings	18	18%
Radio	32	32%
Others	8	8%
Total	100	100 %

Source: Field Survey / (Ghimire, 2021)

Table 6 shows the status and pattern of use of different media 10 years back by local by project-affected people. Interpersonal communication (dialogues, conversation) was the dominant source followed by radio, public meetings, and others ten years back. Local

people are found to prefer to share information in person also ten years back as practiced currently.

Radio, public meetings the most recommended mediums

Most of the survey participants and interviewees of case interviews suggested that radios (mainly local radios) and public meetings as a medium to communicate messages by the project to locals to make communication more effective.

Table 7 Suggested Medium to Communicate with Local Community by Project

Medium	Frequency	Percentage
Local Notices	4	4%
Public Meetings	22	22%
TV	2	2%
Radio (local)	45	45%
Local Government	8	8%
Information Desk	13	13%
Social Media	6	6%
Total	100	100%

Source: Field Survey / (Ghimire, 2021)

Table 7 shows which are the medium that local people want the project to use for communicating a project-related message with them. The radios are found to be the most wanted medium as respondents preferred to get information from radios, especially local radios followed by public meetings and information desk of the project. Local people, people preferred local radios as they covered local issues with high importance than national radios. Similarly, public meetings are also highly preferred because people can directly meet project officials to communicate with each other on such occasions. Information through local government, social media, and public notices are found moderately preferred. TV is found the least preferred medium to get project information.

Discussion

The result of this study is discussed here with sub-headline of radio as the most widely used source, the flow of information to local from the project, Nepali the most preferred language, no significant changes in the use of the medium of communication over a decade, radios are the most suggested medium by project host local communities. Mediums to

communicate with stakeholders by projects are crucial for infrastructure projects because the means to deliver a message is equally important as the message itself and the message may not reach receivers or may be misunderstood if appropriate mediums are selected (www.project-management-skills.com, n.d.). The composition of diverse communication channels is necessary to achieve the most efficient results and faster responses from audiences (Sania, Rubtcova, Balashov, & Satinsky, 2017). Informed and meaningful participation cannot be achieved without employing the most effective communication channels keeping in view the cultural environment of the targeted area. The National Reconstruction Authority (NRA) of Nepal government recognizes broadcast, electronic, and print media, mobile, digital and social media, direct, person-to-person, direct community meeting and town halls, collateral (pamphlets and poster), telephone information lines (live and automated), third-party validators and communicators as a medium to communicate with relevant stakeholders (NRA, 2017).

Encyclopaedia.com (2020) also stressed the need to choose an appropriate channel to communicate with the audiences and states that the appropriate choice of communication channel contributes to the success of a message. Appropriate choice of a communication channel leads to productivity increase, positive social effects, and success of message (Encyclopaedia.com, 2020). Appropriate communication mediums are used to fit the message content results in communications efficiency and effectiveness while inappropriate communication mediums lead to communication breakdowns, mistakes, loss of trust and integrity, and inefficiencies (ECT Services, Inc., n.d.).

Not a single media can be appropriate to all recipients of all time (Ghimire, 2021). The effectiveness of media can defer depending on the objectives of the messages and recipients or audience. For effective messaging, communication channels must be chosen to capture the target audiences' attention frequently and precisely" ((https://www.endvawnow.org, 2012 a). Communication is a vital element of a well-managed project. Depending on their academic background and technical capability or availability of medium, some prefer radio, some TV, some social media and online, and some will prefer newspapers. The project should bear in mind the purpose of communication, the receivers of the message, and the type of information to be communicated by determining the best medium for sharing the message (www.project-management-skills.com). Even if our medium is strong and of wider access, that may not fit to disseminate our desired messages to the stakeholders (Abudi, 2013).

Radio, Public Meeting is the Most Widely Used Sources of Information about Project

Though there are several communication mediums available in the project host villages, radio is found to be the most widely used channel to get information about the project. Due to some positive virtues, radio is still popular among rural folks. Message sent on the radio

could reach a large population as many people listen to the radio on their mobile, and the reach of mobile phones is high and increasing even in rural areas (Ganju, Bhatnagar, Hazra, & Khan, 2010).

Among the radios in the studied area, local FM radios such as Shangrila FM, Khadbari FM, Sunakari FM, Arun FM, Sankhuwasabha FM, Naya Abhiyan FM the most popular among the community people, though national radios including Radio Kantipur can listen there. Local community radio can be effective in sensitizing and informing the community about local knowledge, raising local issues, using the local language, and serving the interests of the local community (Ganju, Bhatnagar, Hazra, & Khan, 2010). FM radio is considered an effective communication medium in Nepal, especially in rural areas (GM Media, 2016). GM Media (2016) report found that newspapers are hard to reach remote areas, village folks are not economically sound to buy newspapers daily, and watching TV is difficult in the absence of electricity in such area and concludes FM radio is the only option for the mass communication. Mass media channels, such as radio, community billboards, and posters on public transportation, have broad reach and can increase issue awareness while local radio can be a good channel for disseminating urgent public health information in specific locations (WHO, 2017). The use of radio broadcast programs to secure support for a farm-related project in the Philippines was proven to be effective (ADB, 2011). During this study, people were found getting information about the project activities through public meetings organized by the project developer company. Public meetings are also serving as an effective tool to share the information physically among project-affected communities themselves and the project (Ghimire, 2021). Generally, briefings, community mailings, exhibits, factsheets, newsletters, open houses, presentations, public meetings, focus group meetings, and telephone contacts are used while communicating messages by the project developers to their stakeholders (https://www.orau.gov, n.d.).

Insufficient Flow of Project Information to Locals

An overwhelming majority of local people are found not satisfied with the volume of information disseminated by the project because the project provided insufficient information to them. During the construction period, people need more and more information about social and environmental issues. People want to know the employment and business opportunities in the project during the construction period.

"Amount of project information flowed to local communities is insufficient and we are not satisfied with whatever information provided to us and access to information is also very difficult for us" (Pokharel, 2020). More focused summary reports should be disclosed so that local people can readily digest and understand, rather than the voluminous technical documents that have been prepared by the development projects (IFC, 2006). For functioning communication, information must flow in all directions; upward, sideways,

and downward (Rodriguez, 2017). The project manager must develop a communication plan on whom to communicate when to communicate, what to communicate, where to communicate and why to communicate and through the channel to communicate.

Nepali the Most Preferred Language

Despite the fact, the local communities are dominated by indigenous Rai people who widely speak local dialects, an overwhelming majority of them prefer getting information from the Nepali language. "Though local Rai people prefer speaking their dialects within themselves, they are fine with messages in the Nepali language from the project" (Pokharel, 2020).

No Significant Changes in Use of Communication Medium Over a Decade,

A few decades ago, interpersonal communication was the most widely used source to get new information in the researched area. Over a decade, mediums of communication in that area increased with the availability of TV, Radio, Online, and social media. However, interpersonal communication is also still the second most used source of information regarding project activities. "People are still relying on interpersonal sources. Though the media landscape is changing in our locality, people feel comfortable talking in person" (Pokharel, 2020). Interpersonal discussions are always the most trusted channels for health information for influencing attitudes and behavior (WHO, 2017). Interpersonal communication may be particularly effective in the case of poor and disadvantaged groups living in remote villages where exposure to mass media is limited (Ganju, Bhatnagar, Hazra, & Khan, 2010). Friends and marketplaces are the major sources of communication for the rural poor community (Pandey, Pandey, & Pandey, 2012). Interpersonal communication is still popular at the village level as messages were found to be spread through words of mouth. Encyclopedia of Business recognizes face-to-face communication as the richest communication medium. Despite the development of many mediums of communication with the development of ICT. Face-to-face communication also allows for instant feedback, unlike communication mediums like letters and emails (Fenell, 2017). Face-to-face communication may be necessary for the engagement of citizens in policy debates, mass media channels can be used as lower-cost options to create opportunities for the public to participate in a dialog with scientists (Strekalova, Krienger, Damiani, Kalyanaraman, & Wang, 2018). Personal or face-to-face communication is the best to share project updates and identifies other tools such as telephone, video conferencing, email, and faxes (Sivasankari, 2010). Social Presence Theory of communication assumes that human beings are intuitively tuned towards understanding the physical location of the person with whom they are communicating and that they feel most comfortable during face-to-face communication (Short, Williams, & Christie, 1976).

Radio the Most Recommended Medium

During the study, participants suggested local notices, public meetings, TV, radios, local government, information desk, social mobilizer, social media, electric display to disseminate information regarding project activities as their preferred sources. However, radios are found the most demanded by them especially local radios stations are highly preferred to national radios due to local radios localized contents in news and programs. "Project must use radio as one of the tools to disseminate project information to local project affected people because local radio gives high priority on local issues and cover in details about those issues" (Pokharel, 2020). Similarly, local people are found to prefer public meetings on behalf of the projects to disseminate information to them as the second most preferred channel. Local/community radio provides community members access to required information prioritizing important local issues (Timalsina & Pradhan, 2019). Public meetings also received a high score which shows that in small communities, physical contact is deemed important for dialogue (Johannessen, Flak, & Sæbø, 2012). Local people are interested to get information about local development and concludes that overall radio is an effective medium with great influence in rural areas (GM Media, 2016). The study found that FM radios are the most effective medium of mass communication to disseminate information to rural people (GM Media, 2016).

Conclusions

The purpose of the study is to identify the most effective and suitable means of communication for AHPP-affected people living in MRM during the project construction period. It is concluded that radios, especially local radios, and regular public meetings can be utilized by AHPP to disseminate information effectively to the local people. As Daft & Lengel (1987)) puts information richness depends on medium meaning that all mediums don't provide same strengthen and influence in message. Though several communication channels are available in the area, radio is still a powerful medium for communication in rural areas like MRM. Currently, radios and public meetings, and interpersonal conversations are also major sources to get information about the project in project-affected areas. The study concludes that radio (local radios) and public meetings can serve as the most effective communication channel to share information regarding project activities. However, TV, social media, and public notices are still not preferred sources among the local people. The mismatch between communication mediums appropriate for and preferred by local people, and those used by AHPP is the principal factor that creates misunderstanding between both sides. As McLuhan coined 'Medium is the Message' effectiveness of the message depends on the medium. Keeping in view the preference of local people, the project needs to disseminate information most preferably through local radios and public meetings. The project is found to have not providing sufficient information using the appropriate channel which is substantiated by the responses from the survey participants. As the overwhelming majority of local people said getting information from the project is difficult, it is concluded that the project is not providing the required information to locals. The project should enhance engagements with local preferred by the local people and the Nepali language is the most appropriate language to communicate with the stakeholders. This research concludes that the project should disseminate information through Nepali languages mostly through local radios and public meetings for effective communication between project affected people and the project. The project is necessary to review its communication tools keeping in view the public preferences and appropriateness of the mediums in line with the local context.

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Annex I

A Case Interview

Tej Bahadur Pokharel, Chairman of Makalu Rural Municipality, Sankhuwasabha district, Province 1

Date: Chait 7, 2076 (March 20, 2020)

Interview: In-person

Venue: Makalu Rural Municipality-5, Num Bazaar, Sankhuwasabha

Makalu Rural Municipality is the most affected area of the Arun-3 Hydropower Project. Mr. Tej Bahadur Pokharel is the chairman of this Rural Municipality. During the research, an in-person interview of Mr. Pokharel was taken because he represents the voice of the local people as an elected representative. Excerpts of the interview:

How are you getting information about project activities?

People are still relying on interpersonal sources. The media landscape is changing in our locality because people feel comfortable talking in person.

We are getting project-related information through inter-personal communication among local people. Project organize very limited local engagement programs such as public meetings or discussions. There is no formal channel to get information about the project and its activities going in our locality. Getting project-related information is very hard for even people's representatives. The project is operating in our area, but we are not fully aware of what is going on in the project. There are environmental, social, and economic issues to be taken care of by the project. The project has a responsibility to engage local people regularly by setting up a special engagement mechanism and update the local people. Moreover, the project should be more accountable to the local government. We got the project-related information informally through its local staff. The project is not coordinating with the local government. Sometimes, I call the senior officials of the project in case of an emergency. Sometimes, I also visit to project site to have an onsite inspection without the invitation from the project. Otherwise, we will be fully unaware of the project activities which are happening within our Rural Municipality.

How is the flow of project-related information to local people from the project office?

The amount of project information flowed to local communities is insufficient and we are not satisfied with whatever information provided to us and access to information is also very difficult for us"We are not satisfied with the information being provided by the project because it is not sufficient. They are using national channels such as newspapers, national

TV, and other channels to share project information, but local people are not aware of that. The project is not transparent in terms of sharing information.

For better communication with people in this hilly area, which medium is appropriate for the project?

In my view, the project should give high priority to interpersonal communication and regular public meetings with local people to update the project implementation activities and for greater interaction with the people. The project should listen to the local people and note down their grievances as well as make attempt to settle the grievances. I would say, such public meetings will be instrumental for effective communication with local people. The project should also set up an information center maned with regular staff or public relations staff to share project-related information with local people and collect their concerns and grievances. We are ready to cooperate with the project to share their information through the channel of local government such as ward offices and other government units.

Hence, the project should coordinate with the local government, which is the first point of contact of local people to vent grievances. Project officials are found communicating with local people in Hindi, which is not appropriate. They should communicate with the Nepali language, which can be understood by all local people. For immediate release of information, local FM radio is most appropriate here.

Project must use radio as one of the tools to disseminate project information to local project affected people because local radio gives high priority on local issues and cover in detail those issues. However, the project has been using national media for publicity of project-related information which is not accessible to local people. On the other side, local people should also be vigilant about the project activities, their social and environmental impact.

In your opinion how should communication between the project and local stakeholders strengthen?

Effective communication between the project and the local community can help smooth the implementation of the project and strengthen the relationship between them. The project should be always transparent and be ready to share anything with local people or at least local government. Without proper support from the local stakeholders, no project can be successful. The local government is always ready to support project implementation smoothly. The project should be transparent in sharing project-related activities through a medium that is comfortable for local people. Frequent engagement activities such as interactions, public meetings can help effective communication with local people.

Which language of communication is preferable to locals?

Though local indigenous Rai people prefer speaking their dialects within themselves, most of them are fine with messages in Nepali language from the project.