

## Communication Inputs in the Performances of Nigeria Erosion and Watershed Management Project (NEWMAP) in Akwa Ibom State, Nigeria

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### **Abstract**

*This work examined communication inputs in the performance of the Nigeria Erosion and Watershed Management Project (NEWMAP) in Akwa Ibom State. The objectives of the study were to ascertain the kind of project information shared by various actors in NEWMAP, the tools used for NEWMAP communication; the efficiency of various communication tools to the performances of NEWMAP and to identify barriers to effective communication among actors in NEWMAP. The System Theory and Participatory Communication Theory were used in the study. Kerjice and Morgan's sampling size table with simple random sampling techniques was used in the study. The study revealed that the kind of information shared by NEWMAP actors was strategic and specific. It was found that stakeholders' meetings and computer-mediated communications were the tools of communication used by NEWMAP with 50% of respondents affirming so. Also, 77% of the respondents identified age and feedback mechanisms as barriers to NEWMAP messages. The study recommended that adequate funding should be appropriated for communication in NEWMAP to enhance efficiency and performance mechanism should be reinforced by the project actors to enhance the performances of the project.*

**Keywords:** Communication, communication inputs, NEWMAP, Watershed management and erosion.

### **Introduction**

Communication remains an in-displaceable necessity of corporate and human sustainability.

Machange (2019) identifies communication as an essential process in our day-to-day life, and that the entire world revolves around communication. Research has established that 90% of a project manager's time is spent communicating what is to be done (Sima, 2017). No surprise, then, how much communication is linked to project success. Unexpectedly, it has been found that most donor-funded projects, in Nigeria experience a breakdown in communications (Jaki & Mikula, 2017).

Globally, communication between diverse groups is a major challenge (Rajkumar, 2010). Research has proven that every aspect of human activities involves communication and that humans, regardless of their age or capacity, send and receive communicative messages in different forms. The forms may include law, poetry, mathematics, history, conversation, music, arts, social media, linking humans across time, generations and continents using different media". Lunenberg (2010) agrees that communication has its root in Latin from the word *communis* which means 'common', to underscore the fact that there must be a common understanding of the message between the source and the receiver concerning the message being communicated. Communication involves a source, a receiver and the interlocutors exchanging signals through a channel, which could be verbal, graphical, gestural, or visual in the forms of sketches and photographs. Senam (2020) explains the communication process using S-M-C-R model. It is a social interaction in which the source transmits a message to the receiver who assimilates the message and responds with appropriate feedback to the extent of altering the behaviour of both the source and the receiver. Thus, Daniel (2016) cited in Akinde et al (2018) asserts that it is when feedback has been sent to the source that the communication process is completed.

Based on research reports, several donor-funded projects in Nigeria have failed due to ineffective communication. According to Project Management Institute (2015), poor communication is a major reason for project failure at a rate of 67%. Ineffective communications have negative effects on stakeholders, human resources, the project team, and project management, which, if not checked, lead to the failure of such projects. Also, research conducted in Tanzania by Kikwasi (2012) indicates that lack of communication between parties was the reason for delays in project delivery.

Communication is the element of project management that is often neglected in the project cycle (Hurt, 2018) and such neglect usually leads to poor coordination of project activities, the unsustainability of the projects, de-motivated project team, design errors, slowdown in the entire project implementation and overall failure in the Project (Project Management Institute, 2015). This paper, therefore, seeks to determine the role of communication in Project performance using the Akwa Ibom State NEWMAP as a case study.

### **Objectives of the Study**

1. To find out the kind of project information shared by various actors in NEWMAP.
2. To evaluate the tools used for NEWMAP communication.
3. To examine the efficiency of various communication tools in the performance of NEWMAP.
4. To assess if communication is an indicator of NEWMAP performance.
5. To identify barriers to effective communication among actors in NEWMAP.

### **Research Questions**

1. What kind of information is communicated in NEWMAP?
2. What communication tools are used by NEWMAP in their communication?
3. How efficient are the communication tools used in NEWMAP?
4. Is communication an indicator of NEWMAP performance?
5. What are the barriers to effective communication in NEWMAP?

## **Theoretical Framework**

### **System Theory**

This Theory was developed in the 19th century by Hegel. The theory explains historical development as a dynamic process. Marx and Darwin cited in Chibueze (2020) state that system theory was used by L. Von Bertalanffy, a biologist, as the basis for the field of study known as general system theory' a multidisciplinary field in 1968. System Theory seeks to investigate both the principles common to all complex entities. A system consists of four objectives (Chibueze, 2020). These may be physical or abstract. It may as well be both depending on the nature of the system. Second, a system consists of attributes – the qualities or properties of the system and its objects. Third, a system has an internal relationship among its objects and lastly, a system exists in an environment. Chibueze (2020) said therefore that a system is a set of things that affect one another within an environment and for a larger pattern that is different from any of the parts. A system with an interactive paradigm of organisational analysis features the continual stages of inputs, processing and output – openness/closeness. Characteristics of the system include wholeness and interdependence, correlations, perceiving, cause, a chain of influence, hierarchy, supra-systems and subsystem, self-regulation and control, goal-oriented and interchange with the environment – inputs/output. System theory helps one understand behavioural processes: Environment; Inputs; Transformation; Output; Feedback.

### **Participatory Communication Theory**

This theory was propounded by Paulo Freire in 1970. Its major assumptions are based on its approach to national development. Participatory Communication Theory is a replacement for mobilisation theory (Chibueze, 2020). In Participatory Communication theory, the highest preference is placed on reliance on local knowledge and capability. The theory is not concerned with the transfer of knowledge from outside developing societies. It encourages residents to make their plans and developments. The formal and informal communication network structure of an organisation is the focus of the theory. Chibueze, (2020) noted that the Communication Participatory theory pays special attention to the following aspects of communication in an organisation:

- Channel – patterns of communication.
- Media – tools of communication.
- Information type – styles of communication.
- Results of communication networks – efficiency of communication media.
- Amount and possibility of bottom-up communication – feedback effect.

Participatory Communication theory seeks that project managers should place the highest preference on domestic knowledge, and capability specifically to encourage their indigenous plans and developments.

The System and Participatory Communication Theories are adopted for this study based on their assumptions. While the System Theory seeks to investigate both the principles common to NEWMAP communication channel; media; information type and results, the System theory helps the NEWMAP managers to understand the behavioural process of the environment; inputs; transformation; output and feedback.

### **Review of Related Literature**

According to Senam (2020:3), communication is the transmission of a message from a source to a receiver. A convenient way to describe communication is to answer the questions: Who says what, through what means, through which channel, to whom and to what effect? (Senam, 2020), citing Barran, (2007:4) argued that communication can be reviewed to broaden the communication environment and participants as a process of transmitting ideas, knowledge, belief or attitude from one person to another within a given social system. Therefore, information becomes a process (Senam, 2020).

Communication needs for development in general and developmental sustenance are based on the fact that no human activity can succeed without appropriate and effective communication. Many persons and organisations take communication for granted, thus, regarding it as the simplest act that anyone can engage in. This is the reason many organisations fail in their bid to achieve their development goals (Udoudo, 2021).

Centre, Jackson, Smith & Stanberry (2011), cited in the “Public perception of government information management and “Misinformation” surrounding COVID-19 in Nigeria” noted that the changing physical and social makeup of communities should be a key for project communication. In understanding the composition of the project beneficiaries, experts need to design a communication strategy that would enable the development goals of the project. Strategically designed communication to achieve sustainable development should be considered by the beneficiaries of the project who, in this case, are placed in the position of the audience.

### **Review of Empirical Studies**

Machange (2019) assessed the role of communication in the performance of agricultural donor-funded projects using Research, Community and Organizational Development Associates (RECODA) as case studies. The study found that the types of project information shared by various actors in the RECODA donor-funded agricultural projects were not effective given its leaner structure. The Research found that communication mood in the Research, Community and Organizational Development Associates project were meetings and communication channels; effectiveness and linear relationship with the result; and stakeholders' information satisfaction. The study also showed four communication indicators, namely:

- communication flow;
- communication channels;
- communication management tools;
- Stakeholders' satisfaction with the information provided and the project results. The communication barriers were not highly rated.

Akinwade (2018) examined the communication strategies used by NEWMAP in selected states of Southern Nigeria. Using interviews and FGDs, the study revealed that the NEWMAP's agency had deliberate communication strategies and policies which were adapted and adopted from the national body to participating states, where they carried out mediatory works. The study showed that NEWMAP had also carried out a communication assessment needs to prepare adequately to generate awareness for themselves; and on the dangers of gully erosion and what target communities' members ought to know about it. Findings further revealed that these communication strategies were effectively applied in NEWMAP project communities. The study found that there was a deliberate application of research in their communication activities.

### **The Nigeria Erosion and Watershed Management Project (NEWMAP)**

The Nigeria Erosion and Watershed Management Project, NEWMAP is a multi-sectorial project which is financed by the World Bank, the Global Environment Facility, the Special Climate Change Fund, and the Federal Government of Nigeria. It is an agency concerned with reducing gully erosion and other forms of land degradation in different parts of Nigeria (Akinwade & Okiyi, 2018). The project is focused on gully erosion sites that threaten infrastructure and livelihoods in States in Nigeria namely: Abia, Anambra, Cross River, Ebonyi, Edo, Enugu, Imo, Delta, Gombe, Kano, Kogi, Oyo, Plateau, Sokoto, Nasarawa, Katsina, Akwa Ibom, Bauchi, and Borno. Its development objectives were to reduce vulnerability to soil erosion in targeted sub-catchments; improve erosion management and rehabilitate severe gully erosion; increase incomes for rural households from improved agricultural and forest practices through the use of conservation agriculture, agro-forestry, natural regeneration; and gain efficiency in public administration, public spending through improved knowledge-based, analytical tools, multi-sectorial coordination and stakeholder dialogue.

NEWMAP goals are strategic combinations of civil engineering, vegetative land management and other catchment protection measures, and community-led adaptive livelihood initiatives. The sustainability of these investments is reinforced by strengthening institutions, information services across sectors and support to improved governance, regulatory compliance, environmental monitoring, impact evaluation, catchment land use planning, and strengthening Nigeria's capacity to promote and implement climate-resilient and low-carbon development. The project partners with ministries, departments and agencies, local governments, communities, and civil societies at the federal, state and local levels in its implementation approach.

In Akwa Ibom State, the NEWMAP identified over 1000 developing and existing erosion sites where properties and livelihoods worth millions of Naira were destroyed on the path of active gully erosion sites. Akwa Ibom State NEWMAP had three major Gully Erosion Control Sites namely, St. Luke's Hospital Gully Erosion Site, Anua, Etim Umana Gully Erosion Cites and Ibrahim Babangida Avenue Erosion Flood Control Project, Uyo among others (NEWMAP Newsletter, 2019).

### **Research Methodology**

The research design for this study is a case study and survey. These methods are useful in comparative and opinion studies. Two research instruments were used, namely: the questionnaire and personal interview. The questionnaire was used as an instrument for gathering data for the study. The questionnaire was administered purposively to respondents from select NEWMAP sites within each catchment area. The sample size of the study was 278 derived from using Kerjice and Morgan table (1970), cited in Akarika, Umoren & Ikon, (2021).

**Table for determining sample size from a given population**

<b>Population Size</b>	<b>Sample Size</b>
1000,000 – above	384
500,000	381
100,000	383
50,000	381
10,000	370
5,000	357
3,000	341
2,000	322
1,000	278

**Source: Kerjice and Morgan (1970): Educational and Psychological Measurement.**

The researcher purposively gathered data from the Etim Umana Gully Erosion Site, St. Luke's Hospital Gully Erosion Site, Anua and Ibrahim Babangida Avenue Erosion Flood Control Project to represent the NEWMAP population where Uyo, the Akwa Ibom State capital was divided into three clusters as mentioned above. A simple random sampling technique was used to select respondents to administer copies of the questionnaire. A simple statistical method of data analysis was used with tables and frequency analysis. A proportionate sampling procedure was used to administer copies of the questionnaire to the respondents. All the retrieved 278 copies of the questionnaire administered to respondents were found to be useable for this research.

### **Data Presentation and Analyses**

**Table 1: Gender Distribution of Respondents**

<b>Gender</b>	<b>Etim Umana Catchment</b>	<b>Anua Catchment</b>	<b>IBB Catchment</b>	<b>Total</b>	<b>Percentage %</b>
Male	97	14	84	195	70%
Female	41	1	41	83	30%
<b>Total</b>	<b>138</b>	<b>15</b>	<b>125</b>	<b>278</b>	<b>100</b>

Table 1 revealed the gender distribution of NEWMAP Project affected persons in Akwa Ibom State. Majority of project affected persons were male with 70%.

**Table 2: Information communicated by NEWMAP**

<b>Option</b>	<b>Etim Umana Catchment</b>	<b>Anua Catchment</b>	<b>IBB Catchment</b>	<b>Total</b>	<b>Percentage %</b>
Sketch photograph of erosion site, maps/graphics	25	2	15	42	15
Information on erosion management /population measures and community led adoptive livelihood message	25	2	15	42	15
Regulatory compliance, environmental monitoring, impact evaluation, land use planning	10	3	16	29	10

Management of watershed, community involvements, participatory approach by stakeholders, preventive measures	15	1	14	30	11
All of the above	63	7	65	135	49
Total	138	15	125	278	100

Table 2 captures information content communicated by NEWMAP. The majority of respondents 135 (49%) believed that sketch photographs of erosion sites, maps, graphics, information on erosion management/population measures, community -led adaptive livelihood messages, regulatory compliance, environmental monitoring, impact evaluation, land use planning, management of the watershed, community involvements, participatory approach by stakeholders and preventive measures were dominant kinds of messages from NEWMAP. This implies that the majority of respondents identified communication messages emanating from NEWMAP as strategically planned.

**Table 3: Communication tools used by NEWMAP in their communication with stakeholders**

Tools	Etim Umana Catchment	Anua Catchment	IBB Catchment	Total	Percentage %
Television / Radio	80	7	20	107	38%
Stakeholders meeting / Computer mediated media	48	3	87	138	50%
Newspapers / New Media	10	5	18	33	12%
<b>Total</b>	<b>138</b>	<b>15</b>	<b>125</b>	<b>278</b>	<b>100</b>

Table 3 presents different communication media used in NEWMAP for communication. The tools are primarily for internal and external communication. Table 2 reveals that the major media are stakeholders' meetings and computer-mediated communication, which 50% of the respondents agree with. This means that stakeholders' meetings and computer-mediated communication were the major tools of communication.

**Table 4: Response on the level of effectiveness and efficiency of the communication media used by NEWMAP**

Options	Etim Umana Catchment	Anua Catchment	IBB Catchment	Total	Percentage %
Very Effective	9	2	7	18	7%
Effective	8	1	3	12	4%
Undecided	103	7	95	205	74%
Less effective	10	3	10	23	15%
Not effective	8	2	10	20	-
<b>Total</b>	<b>138</b>	<b>15</b>	<b>125</b>	<b>278</b>	<b>100</b>

Table 4 reveals that the media of communication – stakeholders' meeting/computer mediated communication is effective and efficient. A total of 205 respondents out of 278 respondents from the study population were undecided about the communication tools used by NEWMAP. This represents 74%. This means that the communication media used by NEWMAP was largely simply and sufficient.

**Table 5: Response on the extent to which communication is an indicator of NEWMAP performances.**

Options	Etim Umana Catchment	Anua Catchment	IBB Catchment	Total	Percentage %
A very great extent	91	4	94	189	68%
A great extent	23	5	3	31	11%
Undecided / Neutral	9	1	7	17	6%
A little extent	12	3	17	32	12%
A very little extent	3	2	4	9	3%
<b>Total</b>	<b>138</b>	<b>15</b>	<b>125</b>	<b>278</b>	<b>100</b>



Table 5 presents the extent to which communication is an indicator of NEWMAP's performances in Akwa Ibom State. Table 5 reveals that a total of 189 respondents representing 68% agreed that communication is an indicator of NEWMAP performances to a very great extent. This implies that there is a correlation between communication and performance in NEWMAP.

**Table 6: Level of satisfaction with the communication media used by NEWMAP**

Option	Effective	Average	IBB	Total	Percentage
Very satisfied	90	9	90	189	68
Satisfied	23	2	6	31	11
Neutral	-	-	-	-	-
Less satisfied	21	4	24	49	18
Not satisfied	4	-	5	9	3
<b>Total</b>	<b>138</b>	<b>15</b>	<b>125</b>	<b>278</b>	<b>100</b>

Table 6 revealed the level of satisfaction with the communication media used by NEWMAP. The majority of respondents (68%) were very satisfied with the communication media. This implies that the majority of respondents were satisfied with the media used in communication with persons affected by the project.

**Table 7: Barriers to effective communication in NEWMAP.**

Options	Etim Umana Catchment	Anua Catchment	IBB Catchment	Total	Percentage %
Level of education / computer literacy/poor communication	18	3	7	28	10%
Tools/Level of Exposure	8	2	3	13	5%
Age and lack of feedback mechanism	103	5	105	213	77%
Reception and perception of NEWMAP information	9	5	10	24	8%
<b>Total</b>	<b>138</b>	<b>15</b>	<b>125</b>	<b>278</b>	<b>100</b>

Data gathered and presented in table 7 revealed that 77% of the respondents identified age and lack of feed mechanism as barriers to effective communication. Followed by the level of education, computer literacy and poor communication with 10%. This implies that the age of respondents and education were major barriers to NEWMAP communication.

### **Discussion of Findings**

#### **Research Question One: What kind of information is communicated in NEWMAP?**

Table 2 captures information content communicated by NEWMAP as strategically planned. The finding of this study makes stronger, the assertion that NEWMAP uses strategic communication to deal with the cases of persons affected by the project implementation. This is towards making sure that the public does not perceive NEWMAP as other failed projects. According to a presentation document on “Strategic Communication Approach for NEWMAP Environmental Conservation Vanguard”, communication in the Project is strategic towards the visibility of the projects. Information is the message of communication and is essential to effective communication. It should be concise, clear, and easy to understand and access. These strategies include strategic communication and proper reporting approaches (Lawrence, 2020). Clarity of communication is vital to the effective coordination of a project (Chang and Shen, 2014). Effective communication should use the least amount of words necessary to convey the required information, without sacrificing the other elements of communication (Care Coordination, 2017). A clear message makes use of exact, appropriate and concrete words (Tyagi and Rathi, 2015). Effective communication takes into account the audience's background, education level, mindset and anything else that may impact their ability to understand the conveyed message (Care Coordination, 2017).

#### **Research Question Two: What communication tools are used by NEWMAP in their communication?**

Table 3 revealed the different communication tools employed by NEWMAP. Stakeholders meeting and computer-mediated communications were found to be the preferred tools of communication for the project, affirmed by 50% of respondents. This implies the communication tools used by NEWMAP's were stakeholder meetings and computer-mediated communication. The finding in table 3 agrees with Lawrence (2020) who notes that for any project to succeed, a proper mechanism must be in place. The how, when and what to communicate must be established, otherwise, the overall aim will be defeated. The findings of this study further give credence to participatory communication theory which Chibueze (2020) pays great attention to channels and media of communication. The findings further support the study by Machange (2019) which showed communication indicators to include communication channels and communication management tools.

#### **Research Question Three: How efficient are the communication tools used in NEWMAP?**

From the data in table 4, respondents were undecided on the level of efficiency and effectiveness of the media of communication employed by NEWMAP at 74%. The findings were in agreement with the study by Wahab, AI-Mayahi et al (2017) which sees communication as the heart of implemented projects in the construction industry. It noted that project managers spend 90% of their time communicating with project participants. Therefore, the findings in table 4 agreed that communication is a key indicator to maintaining project parties. These are performed by ways of communicating the progress, as well as keeping them on track to achieve project objectives.

#### **Research Question Four: Is communication an indicator of NEWMAP performance?**

Table 5 revealed the extent to which communication is an indicator of NEWMAP performances.

The majority of respondents - 189 representing 68% agreed that NEWMAP's performance is dependent on communication to a very great extent. Therefore, this study supports the work of Wahab et al (2017) that a lack of proper communication constitutes an obstruction to project performance. The study by Wahab et al (2017) found that communication was ineffective because of ineffective communication. Projects' internal and external performance was dependent on ineffective communication. Wahab et al indicated that unclear structure of project communication, without determining how communication would take place were also some of the barriers to effective project communication.

Table 6 shows that the majority of respondents (68%) were very satisfied with the communication media used by NEWMAP.

#### **Research Question Five: What are the barriers to effective communication in NEWMAP?**

Table 7 revealed that 77% of the respondents identified age and lack of feedback mechanism; education and computer literacy as barriers to NEWMAP communication. This finding agrees with that of Wahab (2017) on this subject matter. The researcher identified that issues of communication barriers are caused by improper communication and incorrect exchange of messages. According to Project Management Institute (2015), poor communication is the reason for project failure at the rate of 67%.

#### **Conclusion**

This study on the Communication Inputs in the Performances of the Nigeria Erosion and Watershed Management Project (NEWMAP) in Akwa Ibom State investigated the kind of project information shared by various actors in NEWMAP; evaluated the tools used for NEWMAP communication; examined the effectiveness of various communication tools of NEWMAP; assess the rationale between communication and performance of NEWMAP as well as identified the barriers of effective communication in the project. Findings from the study concluded that effective communication was an indicator of NEWMAP performances, and as such, all barriers to effective communication should be addressed to eradicate project failure.

#### **Recommendations**

The study then recommends that:

1. Adequate funding should be appropriated for communication in NEWMAP and other donor-funded projects in future. The communications tools and channels would not be efficient without funds and professionals. This will enhance the overall internal and external performance of the project through appropriate communication.
2. A total communication strategy should be adopted by NEWMAP. Total communication means multimedia channels and tools in communication. This may include the use of sign language to discuss with people with disabilities such as the aged, deaf, dumb, short or long-sightedness caused by nature or accident.
3. Communication media appraisal should be performed at intervals by NEWMAP to evaluate its effectiveness.

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