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THE LEVEL OF COMMUNITY PARTICIPATION IN ENVIRONMENTAL IMPACT ASSESSMENT (EIA), A CASE STUDY OF 100 MW GAS POWER PLANT PROJECT

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This paper presents the level of community participation in Environmental Impact Assessment process. One of the important stages of EIA is involvement of stakeholders whom will be supposed to decide what to be done in their areas for their own development and conserving environment. However, most of the development projects tend to ignore the involvement of community participation and brought so many conflicts between the developer and the affected society. In this study quantitative and qualitative data were used to collect the required data. The data were collected through structured questionnaires, observation, interview, focus group and documentary reviews. The study reveals the level of community participation was very low, community was not involved in early stages of the designing project and the information of the meeting was provided late, this allows little time for them to make preparation. The study recommended that there should be early involvement of community, notice of meeting to be announced one week prior to the meeting date and enough time must be given to participants to send comments.

Keywords: Community, Participation and Environmental Impact Assessment.

1. INTRODUCTION

The community participation in any development projects is the key most essential stage during Environmental Impact Assessment (EIA) process, when that conducted properly, it helps to reduce conflicts and accelerate the approval process of EIA to be accepted, however, involvement process tends to be ignored in most of the projects. This study therefore aims at identify the factors affecting the community participation; to study and assess community participation in EIA; and to develop the guidelines for enhancing community participation processes in EIA process.

2. METHODOLOGY

The study was conducted in Dar es Salaam, Tanzania, whereby 107 respondents were selected to participate during the research. The quantitative and qualitative data were collected to describe and explore the process of community participation in the power plant project. The structured questionnaires, observation, interview, focus group meeting and documentary reviews were used to obtain all of the required information. The data collected were analysed by using SPSS tools, i.e tables and charts. The total amounts of 107 respondents were sampled basing on the Cochran Formula to cover 10 percent precision with 95 percent confidence interval (Yamane, 1967).

$$n = Z^2 pq / e^2$$

$$\text{Let } p = 0.5$$

$$q = 1 - p$$

$$q = 0.5$$

$$Z = 1.96 \text{ according to 95\% confidence interval}$$

$$e = 10\% \text{ precision (} e = 0.10)$$

$$\text{So, } n = (1.96)^2 (0.5) (0.5) / (0.1)^2$$

$$= (3.8416) (0.5) (0.5) / 0.01$$

$$= 0.9604/0.01$$

$$= 96.04 = \sim 97$$

The estimated household's sample which was to be drawn was exactly 97 but for avoiding uncompleted questionnaires, 10% of respondents were added, finally total respondents were 107.

3. ANALYSIS AND RESULTS

The study reveals the level of community participation in Environmental Impact Assessment, five categories have been used to evaluate the EIA process and answer the three main research questions. These include respondents participation on EIA process, level of communication, and degree of influence on decision making, satisfaction level of respondents on EIA report and information guidelines. Based on those categories the research results show the following;

- respondents participation on the EIA process was low,
- the level of communication was categorized medium level,
- the degree of influence on participation and decision making was categorized medium level,
- and lastly the satisfaction level of respondents on EIA report was categorized low level.

The results of the respondents participation on the EIA process revealed that all of the respondents participated in the full EIA stage (100%) while 11.2% participated in the earliest stage of scoping and no one participated in monitoring stage. The analysis of the respondents participation on the EIA process were categorized in low level (37.0%). The study revealed that respondents participation on the EIA process was low.

Comparing to this study, Odhiambo (2009) stated that community frequently tends to be ignored during the early part of decision making process, this affects sustainability of the project. The early involvement of community in EIA process leads to better environmental assessment, and thus to the formulation of projects which are more social benefits, fewer environmental costs and greater economic and financial benefits (Hughes, 1998).

Tanzania's first president Mwl. Julius Nyerere (1979) elaborated that “...*If development is to benefit people, then people must participate in considering, planning and implementing their own development plans The duty of our party is to ensure that the leaders and experts implement the plans which have been agreed upon by the people themselves..*”

The level of communication during the EIA process was categorized medium level (3.07). The need and purpose of the project stated clearly was categorized medium level (3.29). Adequate information provided negative and positive was categorized medium level (3.45). The material sufficient during meeting was categorized low level (1.77). Sufficient time provided to send comment was categorized medium level (2.36). The freedom of speech was categorized high level (3.84) and the process enhance dialogue among participants was categorized high level (3.72). General the level of communication was categorized medium level (3.07). The results of level of communication are shown in Table 1.

Table 4: Score of level of communication criteria and indicators

The level of communication	Mean	S.D	Meaning
The need and purpose of project clearly stated	3.29	0.84	Medium
Adequate information provided negative and positive	3.45	0.78	Medium
Freedom of speech	3.84	0.43	High
The material sufficient during meeting	1.77	0.59	Low
Sufficient time provided to send comments	2.36	0.76	Medium

During the focus group discussion in Makuburi ward, lack of visualization materials during EIA process was complained. The using of map and pictures are more important than words explanation especially terminology words which mostly used by EIA experts. One respondent said;

“...when they were explaining about the design of the machines and location, they used some terminology words that we did not understand at all, i think, they should use map, brochures and pictures for more elaboration, would be better for us who have little knowledge on engineering words...”

The situation is compared with what Hughes (1998) stated, illiterate groups are being marginalised from EIA by the use of written media to communicate information. Environmental experts rarely use non written means of communication, even in a low literacy area. The lack of key materials in local language versions is a further barrier to the involvement of community, the vast majority of impact statements are written in the language familiar to the practitioners, who are foreigners to the project area.

The degree of influence on participation and decision making was categorized medium level (3.23). The convenient of the meeting time was categorized medium level (3.03). The accessibility of the meeting venue was categorized medium (2.98). The equal opportunity for everybody to participate was categorized high level. General the degree of influence on participation was categorized medium level (3.23). The results of degree of influence on participation and decision making are shown in Table 2.

Table 2: Score of degree of influence on participation criteria and indicators

The degree of influence on participation	Mean	S.D	Meaning
The time of the meeting were convenient	3.29	0.84	Medium
The accessibility of the meeting venue	2.98	0.97	Medium
The equal opportunity for everyone to participate	3.68	0.61	High

The location and quality of the venue raised highly concerns for participants. In Ubungo ward, for example, the meeting area did not have chairs and no shading, participants had to stand and disturbed by sunlight. Moreover women complained not to be comfortable during meeting because they were mixed-up with men something which real affects their contribution level. Saying that they were feeling shy to talk in-front of men;

“...The venue was unproper, it was very far and another worse thing is, people were supposed to stand within the whole meeting time. We received direct sunlight and no chairs for sitting...”

The satisfaction level of respondents on EIA report was categorized low level (3.80). The satisfaction of the record of decision was categorized low level (3.96). The satisfaction on the information written on the EIA report was categorized low level (3.99). The satisfaction with the frequent of contact between the affected and interested parties was categorized medium level (3.44). Generally, the satisfaction of the respondents about EIA report was categorized low level (3.80). The results of satisfaction level of respondents are shown in Table 3.

Table 3: Score of satisfaction level of respondents criteria and indicators

The satisfaction level of respondents	Mean	S.D	Meaning
The satisfaction of the record of decision	3.96	0.69	Low
The satisfaction with information written in EIA report	3.99	0.70	Low
The satisfaction with the frequent of contact between affected and interested	3.44	0.76	Medium

4. RECOMMENDATION

The study recommended that enough time should be provided for respondents to send comments, relevant materials i.e maps and pictures which are used to visualize the project should be distributed to participants. In order to increase participation level, the meeting places and time of the meeting should be suggested by community.

The information collected from community meeting should have a noticeable impact on the final decisions of the project, meaning that the comments should be used in designing and implement the project. In addition, the rise of awareness to educate community on important of participation should be done by EIA experts before commencement of the meeting.

Based on interviews with participants, most revealed that, the EIA document was not sent to them. only very few community members have seen the summary report, although most of these documents are public available in the internet, libraries, and newsprint but it is the developer’s task to submit copies to the surrounded community atleast for them to read. Sometimes seems to be expensive to send the whole report but developer may use posters and pamphlets to distribute results and relevant information obtained in the report to the concerned communities. This is simple and cheaper and should include non-technical summary that translated into common local language

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which might easily understood by all community members. In addition, developing of the Local Action Plan (LAP) should have a good understanding of the initiatives that are already underway within the community. These could be initiatives that the community itself has undertaken, programs offered by other levels of government or by non-governmental organizations, or programs from neighboring community.

The research recommended that, since the study provided just the hints on guiding the community participation, the full guidelines to improve involvement mechanisms are required to secure meaningful participation and follow up. The guideline to be useful to the developers, planners, implementers and consultants as it tends to guide them on the best way of conducting the effective participation.

5. CONCLUSION

Based on the study objectives and analysis of the findings, it can be concluded that the community needs to be involved at early stage from project designing if required to participate effectively. This definitely allows them to have full influential in a project. In addition, time and venue of the meeting should be according to community suggestions to avoid unnecessary excuses, delays and transport cost for participants to attend the meeting. The information collected from community meeting should have a noticeable impact on the final decisions of the project, which means community should influence the project planning and implementation. This helps to, increases trust towards the project, avoid unnecessary conflicts and leading to project acceptance. These also can be contributed by having a consistent communication and mutual interaction between developer and affected community.

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