

Available online at http://www.journalcra.com

International Journal of Current Research Vol. 3, Issue, 9, pp.054-059, August, 2011 INTERNATIONAL JOURNAL OF CURRENT RESEARCH

# **RESEARCH ARTICLE**

# COMMUNITY PARTICIPATION IN THE PROJECT CYCLE OF AFFORESTATION PROJECTS IN RIVER NYANDO BASIN, KENYA

## <sup>\*1</sup>James N. Maraga, <sup>2</sup>Jacob K. Kibwage, <sup>3</sup>Boniface O. Oindo and <sup>3</sup>Dennis O. Oyunge

<sup>1</sup>Department of Environmental Education, School of Environmental Studies, Kenyatta University, P.O. Box 43844 – 00100, Nairobi, jmaraga@yahoo.com, Tel: +254–0722 448 253

<sup>2</sup>South Eastern University College (A Constituent College of the University of Nairobi), School of Environment and Natural Resources Management, P. O. Box 170-90200, Kitui, Kenya

<sup>3</sup>School of Environment and Earth Sciences, Maseno University, P. O. Box 333, Maseno, Kenya,

## ARTICLE INFO

#### Article History:

Received 15<sup>th</sup> April, 2011 Received in revised form 29<sup>th</sup> June, 2011 Accepted 28<sup>th</sup> July, 2011 Published online 23<sup>rd</sup> August, 2011

#### Key words:

Community, Participation, Afforestation, Projects, Cycle, Nyando, Basin, Kenya.

# INTRODUCTION

Project approaches to development remain a vital instrument by development agencies to reach and assist poor communities in the developing world. Development interventions in the past have tended to focus on resource and knowledge transfer to beneficiary communities through the 'top-down' approach. In the 'top-down' approach, decisions are made at the top and then passed to lower levels for adoption by the beneficiaries. However, several decades of development funding have demonstrated the failures of the 'top-down' approaches to reach and benefit the rural poor. A possible reason for these failures is attributed to the lack of beneficiary participation in identification, planning, implementation and monitoring and evaluation of development projects (FAO, 1991; Cernea and Ayse, 1997; Blackman, 2003). Shah et al, (2000) cited in APO, (2002) notes that many projects in the past have been designed and implemented in a 'top-down' fashion, with little or no real participation of the supposed 'beneficiaries'. Even when an element of 'participation' is built into projects, it is all too often largely in terms of local investment of labor and not in real decision-making. Beneficiary communities are only informed after plans have been made and that this is done

## ABSTRACT

Critical analysis of community participation in the various stages of the project cycle of afforestation projects (Identification, Planning, Implementation and Monitoring and Evaluation) was done. Data was collected from 150 respondents who were selected from a sample population of 1,928 households using systematic random sampling technique. Data was collected using a standardized questionnaire, Focus Group Discussions (FGDs) and Key Informant Interviews and analysed using quantitative and qualitative techniques. It was concluded that there was low community participation in the project identification, planning and monitoring and evaluation stages of the afforestation projects. High community participation was only observed in the project implementation stage

©Copy Right, IJCR, 2011, Academic Journals. All rights reserved

through formal meetings where the officers justify their plans but modification is not considered. The purpose of this study was to critically analyze community participation in the various stages of the project cycle of afforestation projects in River Nyando basin i.e. project identification, planning, implementation and monitoring and evaluation.

## **MATERIAL AND METHODS**

#### **Study Area**

River Nyando basin is located in Western Kenya. It is situated between Lake Victoria to the West, Tinderet Hills to the East, Nandi escarpment to the North and Mau escarpment to the South. The basin is centered on the equator at  $35^{0}10E$ . Altitude varies from about 1000m above mean sea level (amsl) at Lake Victoria to over 2000m amsl in the uphill regions (Fig.1). The basin extends over an area of 3,600km<sup>2</sup> and supports an estimated population of 800,000 people (Noordin *et al.*, 2000).

### Sample and sampling procedure

The study population consisted of 1,928 households from which the researchers selected a sample of 193 respondents using the 10% procedure (Gay, 1981). However, the

<sup>\*</sup>Corresponding author: jmaraga@yahoo.com

researchers interviewed 150 respondents instead of 193 because some of the respondents resided in the urban areas and were not fully engaged in farming activities and hence would not give valuable data. The researchers used systematic random sampling technique to select the respondents. Thus, one household was randomly selected from among the first five households through the 'lottery technique' (Bless and Higson-Smith, 1995). The next and subsequent households were selected based on the interval established.

freedom of responses. The researchers used interview guides to collect data from 14, purposively, selected key informants. The researchers also conducted two focus group discussions with 30, purposively, selected community members using the following participatory rural appraisal (PRA) tools: Problem analysis, resource use and control and stakeholder analysis. Data collected through the PRA tools were used for triangulation with data collected using the standardized questionnaire. Data analysis for community participation at



Figure 1: Map of Western Kenya showing location of River Nyando Basin

### Data collection and analysis

Data was collected using a standardized questionnaire, key informant interviews and focus group discussions. The questionnaire contained structured and unstructured questions. Structured questions were accompanied by a list of all possible alternatives from which the respondents were able to select the answer that best described the situation. Where it was impossible to exhaust all categories, the study included a category 'other specify' to take care of those responses. In unstructured questions, the respondents were given the different stages of the project cycle was done using scorecard adopted from (Nampila, 2005) (Table 1). Various attributes key to every stage of the project cycle were analyzed and scored on a scale of 1% - 100%. For Instance, a score of less than 50% meant low community participation and a score of more than 50% meant high community participation. Community participation in this regard was taken to mean community consultation, involvement and action (in terms of implementation of project activities) at every stage of the project cycle. 
 Table 1: Scorecard for levels of community participation

No	Community Participation	Score
1	Very high community participation	80% - 100%
2	Generally high community participation	65% - 79%
3	High community participation	50% - 64%
4	Low community participation	21% - 49%
5	Very low community participation	10% - 20%
6	Non-existent community participation	1% - 9%

Adopted from: Nampila (2005)

## **RESULTS AND DISCUSSION**

In order to get information about local communities' participation in various stages of the project cycle of the afforestation projects, the respondents were requested to answer a number of questions on the different stages of the project cycle.

#### **Project Identification Stage**

Survey results indicated that 99.3% of the respondents did not participate in the development of the projects' proposals. And when they were asked whether they accessed the project proposals, again 99.3% of the respondents said no. A good number of respondents, 42%, indicated that the projects did not carry out community needs assessment before starting to implement activities. Apart from needs assessment, the respondents were further asked to indicate whether they were aware about who selected the projects' sites. This question was aimed at finding out if community members were given the opportunity to share their ideas with project management about which areas deserved priority intervention. According to the results, 46.7% of the respondents indicated that projects' management were responsible for site selection. Majority, 54.7%, of the respondents reported they were not aware of any meeting where the projects' management discussed issues related to site selection with the community. In order to get more information on selection of project sites, the respondents were asked to indicate whether they knew the criteria that the projects might have used in the selection of the project sites. Majority, 74%, of the respondents indicated that they did not know the criteria used but somehow thought that the projects may have chosen the sites because of the rampant problem of soil erosion, to which 84% of the respondents still claimed had not been solved.

The findings above point to low community participation in the project identification stage because proposal development, needs assessment and project site selection all constitute essential components of the project identification stage. The findings of this study are in agreement with findings of other researchers on community participation in the project identification stage. For instance, Wanyama (2003) carrying out a study of community based organizations (CBOs) for sustainable development in Western Kenya, observed that 51.3% of the respondents did not participate in the development of the CBOs project proposals. Similarly, during an evaluation of 21 afforestation and agroforestry projects in Africa, Kerkhof (1990) observed that several of them e.g. Agroforestry Nyabisindu Project, Rwanda; Rural Afforestation Project, Zimbabwe; Village Afforestation Project, Tanzania and Turkana Rural Development Project, Kenya had failed because of lack of community participation in the project idnetification stage. Jansens and Wildemeersch (2002), writing a paper on social learning, active citizenship and policy making in urban forest planning in Ireland, observes that lack of community participation in project identification, through lack of prioritizing community needs, leads to improper targeting of project interventions in community forest management, consequently leading to nonachievement of the urban forestry project objectives. On their part, Nair and Krishnakumar (2004) observed that because of active community participation in the project identification stage, Chevalakkonam water supply project in India was successful. Thus, 100% of the beneficiaries had participated at project identification stage of the water project. Nair and Krishnakumar (2004) observed that all other related water projects failed because the beneficiaries never, actively, participated in any stage of the projects, particularly, project identification. Waafas and Philleo (1992), during an anlytical review of women environmental projects in India, also observed that those projects which were successful had active community participation in identification of the projects. Although the current study does not say that the afforestation projects in River Nyando had failed, it argues that the projects had failed to effectively involve local community members in project identification.

### **Project Planning Stage**

The survey results indicated that community participation in the project planning stage was also low just like in the project identification stage. For instance, when the respondents were asked to indicate whether they participated in any project planning meeting, 44% of the respondents did not know, in the first place, whether there was any project planning meeting done. In relation to community's knowledge of the projects' life spans, 86% of the respondents indicated they did not know the projects' lifespan. Again, although the current study does not say that the afforestation projects in River Nyando had failed, it argues that the projects had failed to involve local community members in project planning.

The study findings on community participation in the planning stage of the project cycle agree with findings of other researchers. Many authors observe that rarely do projects involve communities in project planning. For instance, Kerkhof (1990) observed that because of lack of community participation in planning of project activities, some afforestation projects e.g. Nyabisindu Agroforestry Project, Rwanda; Rural Afforestation Project, Zimbabwe; Village Afforestation Project, Tanzania and Turkana Rural Development Project, Kenya failed to realize their objectives. Kerkhof (1990) observed that there was no clear line of responsibilities for implementation of project activities in terms of how the communities were to be involved. Dhubhain et al, (2008) also observed that lack of community participation in project planning in Flanders, Ireland, led to a drag in project implementation in forest management in Newmarket and consequently Newmarket lagged behind the other areas in forest management. Sowers et.al, (1994) observed that USAID was forced to shift from 'top-down' to 'bottom-up' approach in technical service delivery in Nepal. In 'bottom-up' approach, farmers participated in planning of natural resource conservation activities. USAID experience in Nepal had shown, earlier, that lack of community participation in planning of natural resource conservation activities had led to poor achievement of objectives and impact. In contrast to

Dhubhain *et.al*, (2008), and on a positive note, Nair and Krishnakumar (2004) observed that Pezhumkamukal water supply project in India was successful because 100% of the beneficiaries participated in planning of the project's activities. Sikka and Sharda (2002), writing on land and water care through participatory watershed management in India and Mural *et.al*, (2003), writing on joint forest management projects in India, both, observed that because of lack of community participation in project planning the projects were not successful. However, Sikka and Sharda (2002) and Mural *et.al*, (2003) failed to provide data to support their arguments about the extent and/or levels of community participation in the project planning stage but only gave general statements about the lack of it in project planning and how this contributed to the failure of the projects.

### **Project Implementation Stage**

In order to find out whether the local community members were implementing projects activities, the researchers sought to find out whether beneficiaries had established tree nurseries, woodlots and/or had been trained on project implementation and management aspects. Consequently, the researchers asked the respondents to indicate whether they had established tree nurseries to which 50% of the respondents said no while 50% said yes. Majority, 87.3% of the respondents reported that the projects supported them by giving them materials for establishing tree nurseries and tree seedlings for establishing woodlots. During project implementation, local level project management committees at project sites are very important for the day to day management of project activities. The committees, not only help translate project jargon to the beneficiaries but also, help in management of resources. The researchers, consequently, sought to find out whether the projects had established local level project management committees to which 85.3% of the respondents said yes. And when the respondents were asked to indicate whether community members had been trained on afforestation activities and other project management aspects, 95.3% of the respondents said yes. However, majority of the respondents indicated that the training was biased to tree nursery establishment and that issues such as group dynamics and leadership were not effectively addressed. It is also expected that in project implementation, various stakeholders come together and share ideas about the implementation of project activities. This is, usually, done in stakeholder forums where each stakeholder contributes ideas about the role they could play in the implementation of intended activities. The coming together of various stakeholders ensures that efforts are focused, duplication of effort is minimized and collaboration and partnership are encouraged for sustainability of development initiatives. Consequently, the researchers sought to establish whether the issue of stakeholder forums was addressed by the projects. According to 51.3% of the respondents, the projects never held stakeholder forum meetings with 40.7% of the respondents reporting that the level of collaboration between the projects was poor.

The above findings indicate that there was a fairly high level of community participation in the project implementation stage unlike in project identification and project planning stages. Studies done elsewhere also indicate that community participation in the project implementation stage tends to be higher than in the other stages. For instance, Wanyama (2003), carrying out a study community based organizations (CBOs) in Western Kenya, observed that 94.6% of the respondents participated in project implementation. According to Wanyama (2003), community participation was high in project implementation stage because project benefits were, at least, probable or real unlike in the other stages. In this study, 87.3%, of the respondents reported that the projects provided them with materials for afforestation activities e.g. tree nursery and woodlot establishment. Maraga et al. (2010), carrying out a study on the factors determining community participation in afforestation projects in River Nyando Basin observed that there was a strong positive relationship between community participation and the benefits farmers obtained from the afforestation projects. But in contrast to the current study and those of Wanyama (2003) and Matanga (2000), Kumar's (2007) findings from evaluation of 60 water user groups in 15 watersheds in the Coimbatore District, India, found out that community participation rate fell from 55% in project planning stage to 44% during the project implementation stage and finally to 27% during project maintenance stages. The explanation for Kumar's (2007) findings could be that water projects not only need high capital outlay for implementation but also for maintenance of facilities. On capacity building, Matanga (2000) observed that 74% of the respondents participated in trainings organized by NGOs. The current study also observed that majority 95.3% of the respondents participated in trainings. Therefore, Matanga's (2000) findings agree with the findings of the current study. However, the current study found out that capacity building was skewed towards tree planting, care and management as indicated by 64.7% of the respondents. Capacity building on leadership skills and group dynamics scored poorly at 2.7%. On the formation of local level committees, Manikutty (1998), in his paper on community participation in five water and sanitation projects in India, noted that water projects in Kerala state had constituted democratic and strong committees and hence, the reason why they were successful. However, in the current study, it was observed that committee elections were irregularly held hence, creating room for possible discord. Thus, while a number of other researchers such as Chokkalingam et al, (2006), Pandey (2007), Shah et.al., (2000) cited in APO, (2002), Bastidas (2004), Jansens and Wildemeersch (2002), Mweene (2006), Sowers et al, (1994), Westaneys and Woodley (1998) and Adeola et al, (2001) have also discussed the importance of community participation in project implementation and why lack of it in this stage of the project cycle has contributed to failure of projects, the authors have failed to provide data to support their arguments. And although this study did not focus on the success or failure of the afforestation projects in River Nyando basin, it has endeavored to provide data on community participation in the project implementation stage on which future studies may build.

#### **Project Monitoring and Evaluation Stage**

In order to get information about the role of local communities in monitoring and evaluation of the afforestation projects, the researchers started off by asking the respondents to indicate whether they participated in the monitoring and evaluation of project activities. Majority, 52%, of the respondents indicated that they never participated in the monitoring and evaluation of the activities of the afforestation projects. When they were asked to give reasons for their non-participation, 28% of the respondents indicated that they were not aware when monitoring and evaluation was carried out. About 18% indicated that they never participated in monitoring and evaluation because they had never been invited to take part. Still on the issue of monitoring and evaluation, the researchers asked the respondents to indicate who they thought was responsible for the development of project monitoring and evaluation tools. Thus, 40% of the respondents indicated that the projects were responsible for the design of the project monitoring and evaluation tools. In order to still find out whether the respondents were involved in monitoring and evaluation, the researchers asked the respondents to indicate whether they had, at any given time, had access to the project monitoring and evaluation reports. Overall, only 2.7% of the respondents across the three projects had accessed the project monitoring and evaluation reports. The above findings reflect low community participation in the project monitoring and evaluation stage. Studies done elsewhere, also indicate poor community participation in this stage of the project cycle. Unfortunately, almost all the studies have not provided facts in terms of figures to show how poor community participation was manifest in this stage but have only given broad general statements. For instance, Kerkhof (1990) observed that lack of community participation in monitoring and evaluation led to failure of afforestation and agroforestry projects in Africa. Kerkhof (1990) observed this in relation to an evaluation of 21 afforestation and agroforestry projects in Africa. Unfortunately, Kerkhof (1990) did not provide practical data to back up these claims. Sikka and Sharda (2002) and Kumar (2007), too, mentioned the importance of monitoring and evaluation and how lack of it has contributed to failure of projects; but like Kerkhof (1990), they also did not provide statistics to support their assertions. Nair and Krishnakumar (2004) attempted to show that some water projects in India had succeeded because of community participation in the monitoring and evaluation stage but they also did not give statistics to support their arguments.

#### Conclusion

The results presented and discussed in the preceding section have provided data on the nature of community participation in the different stages of the project cycle. Based on the community participation scorecard (Nampila, 2005), it was concluded that there was low community participation in three stages of the project cycle (Identification, planning and monitoring and evaluation). High community participation was only observed in the project implementation stage. A study carried earlier in River Nyando Basin as presented in the preceding sections indicated that there was a strong positive relationship between community participation and the benefits farmers obtained from the afforestation projects.

#### Acknowledgement

We are grateful to African Forest Research Network/Africa Academy of Sciences (AFORNET/AAS) for providing a research grant to carry out this study. We are also grateful to Maseno University for effectively administering the research grant.

### REFERENCES

- Adeola A.O., Bada S.O., Popoola L and Adebisi A. (2001) Farmers' Participation in Social Forestry in the Semi-Arid Zones of Nigeria. Journal of Environmental Extension. JXT Vol. 2 (1) 2001: 71-80.
- Asian Productivity Organization (APO) (2002) Participatory Project Cycle Management (PPCM): A Planning Method for Community Development.
- Bastidas S.P. (2004) Community Participation in Water and Sanitation within the Latin American Context: IRC – International Water and Sanitation Centre, Colombia.
- Blackman R. (2003) *Project Cycle Management*. Tearfund. Teddington, England.
- Bless C. and Higson-Smith C. (1995) Fundamentals of Social Research Methods: An African Perspective: 2<sup>nd</sup> Edition. Kenwyn.
- Cernea M. M. and Ayse K. (1997) Social Assessment for Better Development: Case Studies in Runia and Central Asia. Washington DC. The International Bank for Reconstruction and Development. The World Bank.
- Chokkalingam U., Zaishi Z. and Chieng W. (2006) *Learning Lessons from China's Forest Rehabilitation*. CIFOR, Jakarta, Indonesia.
- Dhubhain A.N., Flechard M., Moloney R., O'Connor D., and Crowley T. (2008) Social Impacts of Forestry: A Case Study Approach. Socio-Economic Aspects No. 3 COFORD.
- FAO (1991) Plan of Action for People's Participation in Rural Development: Twenty-Sixth Session, FAO Conference. Rome, 9-28 November, 1991.
- Gay L.R. (1981) Educational Research: Competencies for analysis and application. Charles E. Mairill Publishing Company A. Bell and Howell Company. Collumbus. Toronto, London: Cited in Mugenda, O.M. and A.G Mugenda (2003) Research Methods: Quantitative and Qualitative Approaches. African Centre for Technology Studies (ACTS) Nairobi, Kenya. ILO Publications. International Labor Office, Geneva, Switzerland.
- Jansens C. and Wildemeersch D. (2002) Social Learning, Active Citizenship and Policy Making: The Case of Urban Forest Planning in Flanders. Draft Paper – ETGACE Seminar – Brussels, 16<sup>th</sup> March, 2002.
- Kerkhof P. (1990) Agroforestry in Africa: A Survey of Project Experience: G. Foley and Barnard G. (eds). Panos Institute. London. UK.
- Kumar D.S. (2007) Why Does Community Participation Fail After State Withdraws? Understanding Watershed Management in Tamil Nadu, India. Poly Brief No. 21-07, June 2007. SANDEE-South Asian Network for Development and Environmental Economics. Kathmandu, Nepal.
- Manikutty S. (1998) Community Participation: Lessons from Experience in Five Water and Sanitation Projects in India. Development Policy Review Vol. 16/ (1998), 373-404.
  Overseas Development Institute, 1998. Blackwell Publishers, 108 Crowley Road, Oxford OX 4JF, UK; 350 Main Street, Malden, MA 0214, USA.
- Maraga, J. N., Jacob K. Kibwage and Boniface O. Oindo (2010). Factors determining community participation in afforestation projects in River Nyando basin, Kenya. African Journal of Environmental Science and Technology Vol. 4(12), pp. 853- 859, December 2010

Available online at http://www.academicjournals. org/AJEST ISSN 1991-637X ©2010 Academic Journals.

- Matanga F. K. (2000) Non-Governmental Organizations, the State and the Politics of Rural Development in Kenya with Particular Reference to Western Province. (Unpublished Doctor of Philosophy Degree Thesis; Rhodes University; November, 2000).
- Mural K.S., Jaganatha R., Sudha P., Sengeetha G., Murthy I.K. and Ravindranath N.H. (2003) Evaluation Studies of Joint Forest Management in India: Social and Institutional Implications. International Journal of Environment and Sustainable Development. Vol. 2, No.1/2003.
- Mweene C. (2006) An Assessment of Community Participation and Empowerment through nongovernmental Organization's Development Work among
- Nair N.D.G and Khrishnakumar P. (2004) Public Participation and Sustainability of Community Assets in Kerala: Selected Case Studies. Discussion Paper No. 60. Kerala Research Programme on Local Level Development. Centre for Development Studies, Prasanth Nagar, Ulloor, Thiruvananthanpuram.
- Nampila T. (2005) Assessing Community Participation–The Huidare Informal Settlement. (Unpublished M.Phil. Thesis: University of Stellenbosch, South Africa.
- Noordin Q. and Bashir J. (2000) Management of Catchment Areas in Sustainable Environment of Lake Waters and Poverty Alleviation: Cited in: Sustainable Environmental Management for Poverty Alleviation in the Lake Victoria Basin; Workshop Proceedings (eds.) Akunda, E., Mango, C., Achieng, P. Maseno University.

- Pandey N. (2007) Community Participation in Forest Conservation. National Journal of Agriculture and Rural Development. March – April 2007.
- Sikka A.K. and Sharda V.N. (2002) Land and Water Care through Participatory Watershed Management in India: An Overview. 12<sup>th</sup> ISCO Conference, Beijing, 2002.
- Sowers F., Litsinger J.A., English R., Prabasi S. and Shrestha A. (1994). Sustainable Agriculture and the Environment: Nepal Case Study. USAID Working Papers No. 219, March 1994.
  the Rural Poor. The Case of World Vision's Intervention in the Gwembe Valley, Zambia. (Unpublished M.Phil. Thesis, Department of Geography,
  - Norwegian University of Science and Technology (NTNU), Trondheim, Norway.
- Waafas O. A. and Philleo W. (1992) Women and the Environment: An Analytical Review of Success Stories. UNEP and World Wide Network Inc. Washington. DC.
- Wanyama F. O. (2003) Local Organizations for Sustainable Development: The Political Environment of Community-Based Organizations in Western Kenya. (Unpublished Doctor of Philosophy Degree Thesis: Maseno University; 2003).
- Westaneys C. and Woodley E. (1998) Afforestation and Social Forestry in Northern Nigeria: A Success Story in Desertification/Land Degradation Control. United Nations Environmental Development Programme (UNEP). Nairobi.

\*\*\*\*\*\*