

The contribution of NGOs Towards Forest Conservation in Dodoma Municipality, Central Tanzania: A Case of Dodoma Development Association (DODEA) Tree Planting Project

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ABSTRACT

The problem of deforestation is a serious environmental problem in Dodoma region. The objective of Dodoma Development Association (DODEA) is focusing in combating deforestation in the region by encouraging community to plant trees. This paper uses the case study of tree planting project implemented by DODEA to evaluate the contribution of NGOs towards environmental conservation in Mpunguzi ward in Dodoma Municipality. Both primary and secondary data were used. Primary data were collected through structured questionnaire survey administered to 85 households, Focus group discussion, key informants interviews and field observation techniques. The findings revealed that; most of DODEA activities were not successful due to inadequacy of staff. Furthermore, available staffs were not well trained. As a result, few sensitization campaigns were conducted, and few tree planting groups were formulated. Consequently, few households planted trees. In this regard it was recommended that number of staff should be increased and campaigns to sensitize community to plant trees through formulation of tree planting groups should be strengthened.

Keywords: Tree planting, environmental conservation, deforestation

1.0 INTRODUCTION

One of the main reasons of global deforestation is increased reliance of a large proportion of the world population on forests for their different needs such as energy, building poles, settlement expansion, agriculture activities etc (OECD and IEA, 2010). Tanzania, like many other developing countries has been experiencing rapid rates of deforestation (URT, 2014). In its National Forestry Policy, the Government of Tanzania identifies deforestation as one of the main problems facing Tanzania's environment (URT, 1998). The causes of deforestation among government forests, include encroachment and shifting cultivation due to increasing population pressure; wildfires; over exploitation, uncontrolled grazing bush/wild fires, illicit felling of trees due to lack of management, high initial costs of environmentally and socially sound energy technologies and inadequate human and institutional capacities to manage the forest sustainably. All of these factors also hamper efforts for reforestation, which, if remained unchecked will eventually lead to loss of all forest cover (URT, 1998; URT, 2013).

The problem of deforestation is serious in Dodoma region. Despite the fact that Dodoma is a semi arid in nature, it also characterized by pastoralists and small scale farmers who practice shifting cultivation by clearing virgin bushes/shrubs for agricultural activities. These tendencies have aggravated deforestation to devastating scales by causing soil erosion which constantly creates growth of waste lands in the region. In addition the problem of energy fuel deficiency like firewood exacerbates deforestation through tree cutting (NBS, 2003).

There have been some efforts in the past (between 1970s and 1980s) by the government in the collaboration with other external organizations working on environmental conservation established projects such as Hifadhi Ardhi Dodoma (HADO). Among other things the project engaged on soils conservation in Kondoa district and some parts of Dodoma Rural District. However, since the project was designed with minimum involvement of the people in the local areas, it was not sustainable as there were missing links in planning, decision making, and project implementation.

This situation has made the community members to lack the sense of ownership on the issue of land conservation. So its sustainability was limited to a short term

after the end of the project period (as some of the conserved areas were once again reoccupied/ invaded with the people less concerned about the environmental degradation). With such bitter experiences from when the project was established, Dodoma Development Association (DODEA) involved all stakeholders on land conservation through tree planting and soil conservation (DEP report 2005).

In promoting environmental conservation in the region, a number of agencies, institutions and individuals have been involved in raising and planting trees. During 1999-2000, a total of 4.9 million tree seedlings were raised throughout the region, while in 1999 alone a total of 1,504,382 tree seedlings were planted making it the most successful for tree-planting year in the region (NBS, 2003).

Dodoma Development Association (DODEA) is a Non Governmental Organization established in September, 1993 as a social club. Later in December 1996 its constitution was revamped to become a developmental Organization. The objective of DODEA as a tree planting project are (i) To encourage and educate member groups and communities on how to improve their household's surroundings by planting trees to conserve and maintain natural beauty, (ii) To improve and enhance trees planted survival rates in drought prone areas of Dodoma region by application of mycorrhiza (iii) To encourage and enhance the protection of reserved areas from encroachment by agriculture activities, settlements and any other hazardous land uses and (iv) To maintain a sustainable supply of forest products to meet the needs of the people (DEP, 2005). In reducing the deforestation rate in Dodoma, DODEA has introduced tree planting project in some villages mostly affected by deforestation since 2003. However, since its involvement in environmental conservation, it is not known whether the project was successful in meeting its objectives or not. Therefore, this study was carried out to reveal this information, which is important for informed decisions as far as environmental conservation is concerned.

2.0 METHODOLOGY

Dodoma Municipality specifically Mpunguzi Ward was selected based on the criteria that, the ward was directly involved in the implementation of tree planting project and is highly affected by deforestation. Dodoma Municipality is found at the centre of Dodoma region and it is located between Latitudes 6°00' and 6°30' South, Longitudes 35°30' and 36°02' East (Dodoma District Profile, 2005). Based

on the 2012 National Population and Housing Census, the population of Dodoma Municipal is 410,956 people of whom 199,487 are males and 211,469 are females. This large population contributes to the high rates of deforestation in the region.

Both primary and secondary data were collected by this study. Primary data were collected through structured questionnaire survey whereby households were interviewed; focus group discussion, key informants interviews and direct field observation were also conducted. Secondary data were gathered from several sources like books, papers, journals and government reports. Simple random sampling was used to select 85 respondents from the list of households in both villages for questionnaire survey, while purposive sampling was used for selecting respondents for key informants such as local leaders and DODEA staff. Simple random sampling assumes that all population members have an equal chance to be selected for the study, hence reduce biasness in sample selection (Kothari, 2004).

Data were analyzed by use of Statistical Package for Social Science (SPSS) version 16. Descriptive statistics such as frequencies, percentages and mean were generated.

3.0 RESULTS AND DISCUSSION

3.1 Activities Carried Out by DODEA in Tree Planting Project

In order to achieve its objective on environmental conservation, DODEA performed several activities in the region. Some of these activities included training of staff, formulation of tree planting groups and supply of inputs on tree planting.

3.1.1 Training of Staff

The information obtained from DODEA office revealed that the training of staff had been conducted. The training conducted was seen not adequate to effectively reach the objectives of DODEA. The organization had conducted few trainings to staff, trainings were concerned on nurseries management and care to all nurseries. The research findings revealed that the trainings conducted were not effective due to lack of fund. This hindered DODEA to reach its objectives of conducting many trainings as it was planned.

According to Tanzania Forest Conservation Group (TFCG) for project to be successful, there is a need of conducting enough trainings among community groups involved in forest management. By taking into comparison DODEA could not attain its goals as the trainings conducted were very few and therefore not effective opposite to TFCG who conducted mutual learning and trainings several times (FBD, 2002).

3.1.2 Number of Tree Planting Groups

The information obtained from DODEA office showed that there were a total of seven tree planting groups formulated with Matumbulu and Nkhulabi villages with three groups each and Mpunguzi village with one group. Therefore DODEA need to put effort in Mpunguzi village so as to reach the target since their expectation was to have three tree planting groups per each village. FOSA (2000) argued that tree planting groups (which include women) are important for the success and sustainability of any tree planting project.

By referring to FOSA (2000) the NGOs will have to educate people to plant tree seedlings at the beginning of the rainy seasons to maximize their survival rate. This must go hand in hand with the establishment of many groups which will carry out the project. But for the sustainability of the project there is a need of establishing a number of women groups since women are the most vulnerable on environmental problems.

3.2 Strategies Used by DODEA in Tree Planting Project

3.2.1 Establishment of Tree Nurseries

According to the information obtained from DODEA office, their objective was to establish three tree nurseries per each village. However, they have succeeded to establish only four tree nurseries in the ward instead of nine tree nurseries; therefore according to this result it is difficult for DODEA to reach its objective.

According to STT report (STT, 2006), tree planting project should involve the establishment of many tree nurseries in the village in order to raise many seedlings.

3.2.2 Seminars

The study revealed that 53% of the respondents attended seminars while the remained 47% did not attend seminars. This shows more than half of respondents attended seminars (Table 1).

Table 1: Participation in DODEA Seminars

Participation	Frequency	percent
Participated	45	53
Not participated	40	47
Total	85	100

But in assessing the frequency of attending seminars, the majority of respondents (32%) attended once, 17% attended twice, 2% attended three times, and 2% attended several times. Since the majority of respondents (47%) didn't attend the seminar there could be a high possibility of trees planted to die (Table 2). This is because the purpose of the seminar was to educate people on how to improve and enhance tree planted survival rate in drought.

Mika (1995) observed that, NGOs should be involved in assisting the communities to acquire necessary technical and skills by conducting enough seminars so that they can formulate plan and implement environment projects by themselves. Apart from villagers, the other groups involved includes school and women groups who were sensitized through various seminars and campaigns such as tree planting, fire protection and cultural protection.

Table 2: Frequency of Attendance to Seminars

Frequency of attendance	Frequency	Percent
Once	27	32
Twice	14	17
Three times	2	2
Several times	2	2
Total	85	100

3.2.3 Sensitization Campaigns

The information obtained from DODEA office indicates that there were four sensitization campaigns on tree planting from 2004-2008 conducted. The campaigns conducted were few (4 campaigns) (Table 3), compared to their strategic plan of conducting campaigns four times per year with 16 campaigns for the period from 2004-2007.

Table 3: Campaign on Tree Planting Conducted by DODEA Between 2004 - 2008

Month	Week	Date	Place
April	3	19/04/2004	Mpunguzi
May	1	03/05/2005	Matumbulu
July	4	25/07/2006	Nkhulabi
August	1	02/03/2007	Mpunguzi

The findings are similar with that from Hifadhi Ardhi Dodoma (HADO) project, in which few campaigns were conducted, consequently its sustainability was limited to short term after the end of the project period.

3.3 Impacts of DODEA on Tree Planting Program

3.3.1 Number of People who Take Trees from Nurseries

The findings obtained from Village Project Coordinators (VPCs) from three villages indicate that there was average of 50 people who collect trees from nurseries per month per village (Table 4). According to DODEA strategic plan the minimum number of people expected to collect trees seedlings from nurseries were 150 people per month for village. Therefore, all villages were performing below expectation in this aspect.

Table 4: Average Number of People who Collect Tree Seedlings from Nurseries per Month

Village	Average number of people per month	percent
Matumbulu	60	40
Mpunguzi	20	13
Nkhulabi	70	47
Total	150	100

The findings revealed that the response of people is still poor since there were few people who have collected trees seedlings from nurseries. This poor respond let down DODEA to reach its objectives on environmental conservation.

3.3.2 Number of Households with Planted Trees

The interest here was to assess the number of houses with planted trees under the supervision of DODEA tree planting project. This helped in evaluating households respond on environmental conservation through tree planting.

The information from VPCs indicates that there is an average number of 93(33%) house households with planted tree under supervision of DODEA from each village.

Table 5: Number of Households with Planted Trees

Village	Number	Percent
Matumbulu	75	27
Mpunguzi	70	25
Nkhulabi	135	48
Total	280	100

This revealed that there were few households with planted trees as compared to the number of households in the ward which is 3806 households, implying poor responses by households, consequently failure of DODEA to fulfil its objective of environmental conservation in the area.

It has been reported that, in order to promote environmental conservation in the region, a number of agencies, institutions and individuals must be involved in raising and planting trees in their surroundings (NBS, 2003).

3.3.3 Status of Deforestation in Mpunguzi Ward

This paper also sought to find out the status of deforestation before and after the introduction of tree planting project. The information obtained from government official (WEO) and other key informants indicated that, deforestation is still high in Mpunguzi ward and as time goes the problem of deforestation is increasing. It was also noted that activities such as agriculture, charcoal making, firewood collection and cutting trees for construction purposes increases the rate of exploitation of forest resources. Similar findings were also reported by Negash and Kelboro (2014) who argued that, forest resources exploitation to cover biomass fuel demand and other economic activities increases pressure on natural resources hence leading to environmental degradation.

4.0 CONCLUSION AND RECOMMENDATIONS

Most of activities carried by DODEA in the study area were not successful. The research findings revealed that, the project had few staff, of which lacked enough training, a situation caused by limited funds. This resulted into failure of the project in formulating enough and active tree planting groups, and failure to conduct adequate sensitization campaigns. Consequently, low attendance of people to seminars, establishment of few tree nurseries, and little number of households responded on the campaign by planting trees.

In order to ensure environmental is conserved in Mpunguzi ward the study recommends that; there should be enough and qualified staff for the successfulness of implementation of targeted goals. In addition, more campaigns are needed for the success of the project. Furthermore, DODEA should provide enough seminars to people on environmental conservation, including how to improve and enhance survival rate of planted trees. .

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