

## The Rufford Small Grants Foundation Final Report

---

Congratulations on the completion of your project that was supported by The Rufford Small Grants Foundation.

We ask all grant recipients to complete a Final Report Form that helps us to gauge the success of our grant giving. We understand that projects often do not follow the predicted course but knowledge of your experiences is valuable to us and others who may be undertaking similar work. Please be as honest as you can in answering the questions – remember that negative experiences are just as valuable as positive ones if they help others to learn from them.

Please complete the form in English and be as clear and concise as you can. We will ask for further information if required. If you have any other materials produced by the project, particularly a few relevant photographs please send these to us separately.

Please submit your final report to [jane@rufford.org](mailto:jane@rufford.org).

Thank you for your help.

**Josh Cole, Grants Director**

---

### Grant Recipient Details

<b>Your name</b>	Hayal Desta Yimer
<b>Project title</b>	Integrated land and water use management of Lake Ziway and its catchments: Study from conservation planning perspectives
<b>RSG reference</b>	12732-1
<b>Reporting period</b>	December 2012 – December 2013
<b>Amount of grant</b>	£6,000
<b>Your email address</b>	hayaldesta@gmail.com hayal.desta@eiabc.edu.et
<b>Date of this report</b>	8th January 2014

**1. Please indicate the level of achievement of the project's original objectives and include any relevant comments on factors affecting this.4.**

Objective	Not achieved	Partially achieved	Fully achieved	Comments
To analyse the present land and water use practices on Lake Ziway catchment and project the future scenarios		X		All districts were not surveyed to meet this objective because of spending unexpected more time in some districts. The remaining districts will be surveyed in the first half of 2014.
To detect land use and land cover changes on Lake Ziway catchment		X		Satellite images have been analysed for land use and land cover change detection studies using Remote Sensing and GIS techniques. However, taking up of GPS points needed for ground verification task have not been completed for the whole Lake Ziway watershed areas.
To identify and characterise the present threats on Lake Ziway catchment due to the spatial and temporal land and water use changes		X		All districts were not surveyed to meet this objective because of the large size of the watershed and cropping and rainy seasons. The remaining districts will be surveyed in the first half of 2014.
To detect the intensity of land and water use impacts on the sustainability of Lake Ziway and its biological resources		X		Some stakeholders especially experts from government offices were not approached as they were not in their working stations due to short-term trainings, seminars/workshops, and other reasons. The task will be continued for some time a head.
To analyse the socio-economic benefits that private sectors and local communities derive from Lake Ziway		X		500 household questionnaire survey data were collected but some expected were not collected as conditioned by rain, and farming and cropping seasons; hence, impossibility to interview as planned. The task to contact organisations will continue
To investigate the perceptions of stakeholders from different sectors on the major causes and protection measures		X		Interviews with various stakeholders were conducted; however, there are still some 15-20 stakeholders who should be interviewed.

for Lake Ziway degradations				
-----------------------------	--	--	--	--

**2. Please explain any unforeseen difficulties that arose during the project and how these were tackled (if relevant).**

Some difficulties were encountered during the data collection activities due to the large size of the study area and absence of road networks to fully and easily involve local communities' in the study. This has become the cause to cover some part of the study area on foot and horse drawn carts on extended days beyond the planned ones. During cropping and rainfall seasons as well as on market days, it was difficult to get local community members to make them participate for interviewing. This has requested to spend more additional time and extended the study period to overcome this challenge. Accordingly, data analysis and write-up are delayed. Conducting key informant interviews took longer time than the proposed number of days. This is mainly because many interviews were changing due to some other priorities especially from government offices. For these reasons many activities were extended beyond the planned days.

**3. Briefly describe the three most important outcomes of your project.**

- Increased local awareness and knowledge about the significance of proper farming and soil conservation practices on catchment areas as a benefit for Lake Ziway and their aquatic resources protection.
- Human caused impacts were identified for Lake Ziway degradation.
- Land use and land cover changes were detected on the Lake Ziway catchments, and stakeholders were identified and involved to identify the existing problems and suggest conservation measures for the sustainable utilization of Lake Ziway.

**4. Briefly describe the involvement of local communities and how they have benefitted from the project (if relevant).**

Trained data collectors and public agricultural and natural resources management extension workers as well as students from local community members from secondary schools in districts around the study area were involved in the study. Thus, they developed awareness and knowledge to share through environmental educations on how the local communities sustainably use the lake resources as their livelihood strategies. This will help the local communities to develop knowledge and awareness about aquatic resources protection and conservation issues around the study area.

During focus group discussions and interview surveys local people identified the negative impacts of human activities on the sustainability of Lake Ziway. Youths as members of their local communities were involved in the field work, were trained about data collection and were informed of the current problems and proposed protection measures suggested by elder groups of the local communities. Trained data collectors and public agricultural and natural resources management extension workers have been intensively involved in household data collection, key informant interviews, and focus group discussions as facilitators. They have also played key roles as translators of local languages in their respective districts. I am quite hopeful that this study will help the key stakeholders for effective and sustainable management of other aquatic resources in the rift valley region.

## **5. Are there any plans to continue this work?**

Yes, I plan to continue this work as the work did not fully address the whole parts of the study areas. Hence, I must continue collecting data to finalize the study: interviewing local communities, conduct field observations, and undertake focus group discussion mainly on the northern part of the lake watershed areas. I plan to thoroughly work at the remaining districts in the whole watershed areas before the start of the cropping and rainy seasons. More investigation will be carried out on the dependency/relationship local communities and investment projects have on the Lake Ziway for livelihoods and profit oriented practices.

I have also a plan to continue this work in future through the involvement of stakeholders and local communities including school children and women in conservation activities in other rift valley lakes in the country to really grasp the effects of human actions on freshwater resources as gaps were observed in in this project. I am also planning to involve religious institutions in natural resources conservation activities in the rift valley areas so that a strong reliable study can be developed to highlight and advocate the issue of conservation especially in the rift valley region.

## **6. How do you plan to share the results of your work with others?**

After the completion of the project, I plan to share the results of my work to others through publication of results in scientific journals, and oral or poster presentations in seminars/workshops on professional meetings. Especially, the results will be shared by the Rift Valley Lakes Basin Authority, Ministry of Water, Irrigation and Energy, and other interested groups or individuals who are doing similar researches on the protection of fresh water lakes in developing countries. The results of my work will be prepared as dissertation and will also be shared with other federal and district institutions as lesson for the protection of other similar lakes in the country. The result will also be shared by presentation of project's results in conferences/seminars somewhere in Africa or other countries. The report will be given to each district administrations and sector offices in the Lake Ziway watershed areas. Implementation will include recommendations for Lake Watershed areas and recommendations on lake shorelines in the places of high conservation value for the lake.

After the completion of the study, the final dissertation will be made freely available on Rufford Small Grants website and Addis Ababa University digital library to download by any interested groups.

## **7. Timescale: Over what period was the RSG used? How does this compare to the anticipated or actual length of the project?**

The RSG was used over 1 year from January 2012 to December 2013 as was anticipated and planned. This period was shorter than originally anticipated due to unforeseen causes. Actually, the project was anticipated for 17 months and I have partially managed to fulfil project activities by the due date. The data collection activities were reduced during the cropping and rainy seasons when farmers were totally engaged in their farming practices. The analysis of results will go on until the completion the dissertation.

**8. Budget: Please provide a breakdown of budgeted versus actual expenditure and the reasons for any differences. All figures should be in £ sterling, indicating the local exchange rate used.**

Item	Budgeted Amount	Actual Amount	Difference	Comments
Office supplies such as paper, notebooks, and tonner for data collection and analysis	£346	£346	-	The local exchange rate used was 28 Birr
Transportation costs to the field site and frequent visits within the sites				
• Car rent for nine (9) travel costs to the field site [18 days x 40 £ sterling/day]	£720	£720	-	
• Car rent for frequent visits within the study sites [40 days x 40 £ sterling /day]	£1600	£1600	-	
• Fuel Cost for car and boat [58 days (70km /5Km/ litre)*0.79 £ sterling/ litre]	£641	£641	-	
• Cost Boat rent [30 days x 16 £ sterling /day]	£480	£480	-	
Payment for data collection, guidance, and translations [5.5 £ sterling/day x 300 days]	£1650	£1650	-	
Refreshments for focus group discussion session Refreshments for focus group discussion session [16 focus group discussion* 11 persons per group * 3.20 £sterling per person ]	£563	£563	-	
<b>TOTAL</b>	£6000	£6000	-	

**9. Looking ahead, what do you feel are the important next steps?**

As important next steps, I would like to continue the study further by involving the local communities in the identification of the major causes of Lake Ziway degradation in the northern part of the lake catchment and their suggested solutions for the protection of this resources, and development of a sense of community ownership about the natural resources in their respective districts in general and Lake Ziway in particular. Hence, data collection will be continued on the

uncovered watershed areas in districts. The next important steps should therefore be to extend detailed survey of local communities' views about the conservation values of Lake Ziway for their livelihoods in the northern part of the lake catchment areas.

Finally the Rift Valley Lake Basin Authority and the Ministry of Water, Irrigation and Energy will be recommended to:

- Develop participatory conservation activities in the watershed areas, and to replicate the outcomes of this study in other areas in the country.
- Start implementing strategies to reduce human pressures on lakes by supporting local communities to have looked for and developed other local livelihood means.
- Support water resources conservation programme in the country.
- Enable a better water resources management and strengthen the decision making processes in the watershed areas and strengthen community involvements.

**10. Did you use the RSGF logo in any materials produced in relation to this project? Did the RSGF receive any publicity during the course of your work?**

So far I have not produced any materials out of this project. However, I have publicised the RSGF through various discussions with other graduate students in the Addis Ababa University. Moreover, the RSGF will be acknowledged in all future publications after the completion of this project. It will also be acknowledged in my research dissertation which will finally be available at the Addis Ababa University digital library.

**11. Any other comments?**

This project has successfully involved many stakeholders from the federal and district government offices and local NGOs. Through this project, working together with local communities as effective strategies will be recommended to effectively protect aquatic resources so as to alleviate the human impacts for the sustainable utilisations of them.

In this respect, I am very much grateful to Rufford Small Grants Foundation (RSGF) for the provision of generous financial support to my study in 2013. The grant from the RSGF enabled me to successfully undertake my field work to investigate the human impacts on lakes and their aquatic biological resources as a result of their land and water use practices. In the course of this study many other opportunities have been observed for future plans of considerations for other studies hoping similar cooperation from RSGF in the future.