

## 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. The Final Report must be sent in **word format** and not PDF format or any other format. 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. Please note that the information may be edited for clarity. 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	
Your name	Abebe Getahun
Project title	Conserving the <i>Labeobarbus</i> spp. flock of Lake Tana through better understanding of their migratory behaviour and participation of the community: the case of Gilgel Abay River
RSG reference	10137-2
Reporting period	July 2011 to December 2011
Amount of grant	£6000
Your email address	<a href="mailto:abebeg@bio.aau.edu.et">abebeg@bio.aau.edu.et</a> and <a href="mailto:abebe12002@yahoo.com">abebe12002@yahoo.com</a>
Date of this report	5 March 2012

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

Objective	Not achieved	Partially achieved	Fully achieved	Comments
Determine the diversity, abundance and maturity stages of the <i>Labeobarbus</i> spp. migrating to Gilgel Abay River and its tributaries			√	We have sampled adequate number of fishes, identified them to species level, and determined their abundance and gonad maturity stages. We are now confident that the <i>Labeobarbus</i> spp. migrate to all major tributaries of Lake Tana, although there may be spatial specificity in some instances.
Identification of threats to the fish and fisheries of Gilgel Abay River and its major tributaries		√		It has been known that illegal fishing, especially using plant products (seeds and leaves of plants) and also commercial chemicals (such as "Malathine"), is a great threat to the migrating <i>Labeobarbus</i> spp. The fishermen are not licensed and also use illegal gear with small mesh sizes (e.g. monofilaments with mesh sizes of 5 cm and lower). Since the socio-economic factors contributing to the threats are complex, it is very difficult to conclusively state that identification of the threats and recommendation of the solutions is fully achieved.
Awareness creation among fishermen, development workers and local officials		√		As planned, we conducted an awareness creation workshop on 30th December 2011. However, awareness creation cannot be fully achieved with one workshop alone or with limited number of people. It should be a prolonged and sustained effort and encompassing all stakeholders.

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

- The sampling process was very difficult, since the timing corresponds with the time of heavy rains in the region (July to September). Some of the sampling sites were remote and difficult to reach especially during rainy season (time of migration of the fishes). However, unreserved cooperation of the local fishermen has helped to solve this problem.

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

- Basic data was obtained on the identity, abundance and gonad maturity of the fish species that use Gilgel Abay River and its tributaries for migration and spawning. In connection to this an MSc student has finalised his thesis based on these investigations.
- A successful awareness creation workshop was conducted on 30th December 2011 and has involved fishermen of the locality as well as development workers and experts of related ministries (Agriculture, Environment, Water Resources) and local administrators.
- Through continued involvement and engagement with the International Union for Conservation of Nature (IUCN) and sharing our findings from our projects with the International scientific community, we are now able to convince IUCN that some of the species should be red listed. As a result, one species of *Labeobarbus* (*L. macrophthalmus*) is now recognised as “Endangered” and four species of *Labeobarbus* (*L. acutirostris*, *L. gorguari*, *L. ossensis* and *L. platydorsus*) are recognised as “Vulnerable”.

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

- The local community was very much involved in this work. All the sampling efforts, under very difficult conditions- during the rainy season, were conducted with the assistance and full involvement of the local fishermen and part-time farmers. In the process, they have come to know more and understand better about these unique group of fishes and the danger looming over their survival.
- Furthermore the workshop has created awareness on the part of fishermen, development workers and local administrators.

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

- Yes indeed, thanks to previous two grants, we have now a complete picture of the species composition of the different major feeder rivers of Lake Tana. We can now confidently state that the *Labeobarbus* spp. of Lake Tana migrate to the major feeder rivers for spawning and they are faced with various problems during their spawning migration. We have identified the major problems around the rivers. We have also adequate information as to the temporal segregation of these species during their migration. However, we are not sure whether or not there is spatial segregation for the different species. This requires tracking the species through tagging or radio-telemetry methods. We hope we will do this when and if we can access relatively larger grants.
- In the near future we plan to popularise the status of the species and the need for their conservation through popular publications, mass media, posters, newsletters, workshops and leaflets prepared in local language(s).

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

- The second MSc thesis will come out soon and there will, hopefully, be a scientific publication in a locally reputable journal.
- By the way, the previous year's findings have been prepared in the form of an article and submitted to *SINET: Ethiopian Journal of Science* for publication and it is now accepted after peer review. The whole article will be posted on our site when published. The project and the awareness workshop of the first year have been published in a newsletter of the College of Natural Sciences, Addis Ababa University (Volume 2, Issue 2, February 2011). The results of the first year's work on Arno-Garno River have also been presented at the fourth annual conference of the Ethiopian Fisheries and Aquatic Sciences Association (EFASA) that took place on 17-18 February 2012 in Addis Ababa, Ethiopia. A proceeding of the conference will also be published soon.

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

- The project actual work started in July 2011 and went up to December 2011. This was also the proposed length of the project.

## 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
Public transport for investigators including MSc student	200	200	-	As planned
Vehicle rental	400	500	+100	Cost of services is increasing every time.
Boat rental	100	150	+50	Long distance to travel to reach sampling sites.
Fuel expense	300	350	+50	Price of fuel is fluctuating
Per diem of principal investigator	500	500	-	Has participated in the anticipated trips and utilised the proposed amount
Per diem of associates and fishermen	3200	3500	+300	Some additions as subsistence expenses increased.
Workshop at Merawi (Public transport)	200	150	-50	The town where the workshop was conducted is not far from where the participants live
Workshop at Merawi (poster preparation)	100	100	-	As planned

Workshop at Merawi (Lunch/Tea/Coffee)	300	300	-	As planned
Workshop at Merawi (per diem for participants)	500	500	-	As planned
Auditorium rent	100	50	-50	Less cost as it is a small town
Resource persons	100	200	+100	Four individuals have participated in the presentation of the awareness workshop
<b>Total</b>	<b>6000</b>	<b>*6500</b>	<b>+500*</b>	

The local rate for 1 £ sterling=27 Ethiopian Birr

\*The excess (additional) expenses were covered by Addis Ababa and Bahir Dar Universities.

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

- Our immediate task would be to popularise the status of the *Labeobarbus* spp. flock through popular publications like leaflets (prepared in local language), mass media, and posters. The awareness creation workshops should also continue and focus on discussing alternative livelihoods, management measures, especially closing season during migration of the fishes, licensing legal fishermen, controlling illegal fishermen, avoiding harmful fishing gears and methods (including chemicals), etc.
- In the long term, we need to establish the pattern of the migration of the different species of *Labeobarbus* through tracking methods (tagging, radio telemetry methods, etc.).

#### 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?

- Yes, the logo of Rufford Small Grants Foundation, together with the logos of the Addis Ababa and Bahir Dar Universities, has been displayed in a poster (picture posted on the web) and properly acknowledged during the awareness creation workshop that took place on 30th December 2012, in Merawi town, Ethiopia. Due acknowledgments were made in all presentations.

#### 11. Any other comments?

- We would like to thank Rufford Small Grants Foundation for the support we received without which we couldn't have done what we have achieved so far. The contribution is having immense impact on the process of saving this unique group of fishes in Lake Tana. We have the utmost confidence that the support will continue in the future so that our efforts will bear fruit and we can save these species for generations to come.