

Project Update: January 2014

Objectives Achieved:

1. Generate information on status of grouper fishery

Interviews with multiple fishing communities are still being conducted. Interviews have generated information about the origins and history of the fishery, key grouper species targeted, historical and current fishing grounds, and the marketing of groupers.

2. Understand market related mechanisms

Interviews with fishers and middlemen have provided an understanding of the trend in prices, market linkages and the commodity chain through which groupers are marketed from these islands.

The project initially proposed to conduct fishery independent scuba dive at current fishing grounds in order to monitor grouper abundance. Through the course of the study it was determined that current day fishing grounds are in the depth range of 40 m or more, which is out of the range of access of regular scuba diving equipment. A survey of important historical fishing grounds will instead be conducted in depths between 10 and 30 m.

The grouper fishery in the Andaman Islands began 15 years ago, largely as a result of technological and infrastructure development and access to export markets. Prior to the start of the fishery, groupers were considered low value species and were often treated as trash fish. The names used by local fishers for targeted species suggest that they have been derived from trade names – these include *dollar* or red coral trout (*Plectropomus leopardus*) and *tiger* (Brown marbled grouper, *Epinephelus fuscoguttatus*). This project has generated an understanding of how strongly the export market controls the grouper fishery of the Andamans, and this information can be used in further management and conservation interventions.

The peak season for the fishery occurs in January and February, not as a result of better catches, but as a result of prices peaking. Conversations with fishers and exporters indicate that this peak closely corresponds to Chinese New Year, clearly demonstrating the influence of external market pressures on the reef's ecosystems of the Andaman Islands. Trends in prices from fisher's logbooks for the last few years also support this fact. The January-February period is thus important for fisher's livelihoods and regulating the fishery during this time will have to be carefully considered.

Most fishers have noted declines of fish stocks including groupers in the last decade. Some attribute this decline to increasing numbers of fishers on the reefs, while others state that the decline began after the December 2004 tsunami. They also note that the number of boats, and correspondingly fishers, increased after the tsunami as a result of an influx of tsunami aid. This is an important outcome of the study, as it indicates that fish stocks, including groupers, are declining in waters of the Andaman Islands. What is encouraging is that fishers acknowledge this decline, and in turn may be willing to accept some conservation interventions if they ensure their continued livelihoods.

Local communities have been an important part of this project, with close interactions occurring between the project team and fishing communities on a daily basis. They have also willingly shared their catch logbooks, which are extremely useful to this study. A few individuals from the local fishing community have also been hired by the project as field assistants. These individuals while helping with translations and liaising with the fishing communities, are also being sensitised about the significant role that groupers play in marine ecosystems, and the vulnerability to fishing pressure. Towards the end of the project we intend to share the findings of the study with the fishing communities and also engage with them in determining ways to integrate sustainability considerations into their existing fishing practices.

This project, with its effective field work time of 14 months, will have developed a broad understanding of the grouper fishery in the Andaman Islands. It has also developed critical baselines on the socio-economic aspects of the communities engaged in the fishery. These baselines will be used to develop a participatory approach to sustainably using the fishery resources of the region. Through a long-term intervention, we also intend to encourage the local fishermen to monitor their resource use patterns. The team does plan to continue this work by exploring in greater detail the conservation value that different fishing communities in the Andaman Islands place on fish stocks and healthy marine ecosystems.

At the end of the project we plan to share the results with the local fishing communities and middlemen through meetings and awareness campaigns, with the local fisheries department in the form of an informal report and publish some of the findings in peer-reviewed journals. We also plan to create policy briefs to inform policy makers about the vulnerability of grouper populations and the need for the introduction of sustainable guidelines to the grouper fishery in the Andaman Islands.

In December 2013, based on some of the preliminary work between January and May 2013, Sahir Advani presented a paper at an International Conference on Small-Scale Fisheries Governance. The conference was organised by Too Big To Ignore (TBTI) and the Centre for Economic and Social Sciences (CESS) in Hyderabad, India. The RSGF logo was used in the presentation and RSGF was acknowledged in the contributed paper.

