

Sea turtles in Egypt: sustainable conservation through partnerships and participatory approaches with fishermen

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INTRODUCTION

The fishing community near Alexandria is comprised primarily of the native Alexandrians; an ethnic society with their own language, accent, traditions, meals and personality. They were very keen to keep their culture unchanged and prevented the nearby villagers coming to work, socialize and marry amongst them. However, in the last thirty years many changes occurred with a flood of villagers from the countryside, looking for jobs and a new life in the city of Alexandria.

The fishermen were unable to do anything to protect their culture from the new immigrants and it slowly started to change. One feature that started to slowly disappear was the use of sea turtles for food, a popular meal in the past.

In a previous study by the author, it was found that despite being illegal more than 135 loggerhead and green turtles both loggerhead and green were killed in Alexandria fish market (El Anphoshi) during the period December 1998 to May 1999, the number increased toward the summer season. Most of the turtles were females, catastrophic for the sea turtle population.

PARTNERSHIP AND PARTICIPATION WITH THE FISHERMEN

Building a partnership with the fishermen is of crucial importance to provide a guideline for the planning process, decentralize the decision-making process, provide better communication with the fishermen, and enhance collaborative relationships with other local actors. At the same time helping to increase awareness, and motivating them to contribute in innovative ways that are characteristically of a social and economic nature.

Situation analysis. To ascertain the size of the fishery interaction problem, the reasons for the problem, who is involved, and any conflict of interests. The situation analysis involved three main steps: (1) collection of Secondary Data, including information on the fishermen's lifestyle, their financial status, social life, celebrations, and socio-cultural-economic problems; (2) collection of Primary data which determines the relationship between the fishermen and sea turtles and all the positive and negative influences affecting it; and (3) organize a Public Consultation Meeting including all the stakeholders in the area involved in the problem. The fishermen, the police department, the government, the scientific community, the churches and mosques in the area, NGO's involved in the sea turtle conservation, fishermen's organizations, etc. This aimed to create an interaction between the stakeholders' ideas, thoughts and beliefs regarding sea turtle conservation, giving us good ideas about the problem and the best way to overcome it.

Building trust and common objectives. These include (1) setting common objectives with the fishermen was a very important for a participatory approach, with agreement on the importance of law enforcement and effective sustainable development to improve the well being of communities that depend on coastal resources now and in the future and (2) finding a balance between satisfying competing present-day demands, without compromising the potential for future resource users.

Motivation of the fishermen. Fishermen as well as other individuals have many needs at any given time. Some needs are bioorganic; arising from physiological states of tension such as hunger, thirst and discomfort. Others are psychological; Arising from psychological states of tension such as the need for recognition, esteem, and to belong. A need becomes a motive when it is aroused to a sufficient level of intensity.

Fredrick Herzberg developed a two-factors theory that distinguishes dissatisfiers and satisfiers, the absence of dissatisfiers

is not enough, satisfiers must be actively present in order to motivate. Two implications arise; first, we should avoid dissatisfiers for the fishermen, i.e. belittling their culture and life style, as this might easily de-motivate them. Secondly, to identify the satisfiers or motivators for the fishermen, and then supply them.

A theory by Abraham Maslow states that human needs are arranged in a hierarchy, from the most pressing to the least pressing. In order of importance, they are physiological, safety, social, esteem and self-actualisation needs. People will try to satisfy their most important need first, when a person succeeds in satisfying an important need, that need ceases to be a current motivator and he will try to satisfy the next-most-important need.

Maslow's theory has two implications; firstly, it becomes logical that fishermen with problems satisfying their physical needs will have no interest that sea turtles are listed in the IUCN red list. Therefore to motivate those fishermen to protect the sea turtle, we have to enforce the laws against the exploitation of endangered species. When fishermen know that killing a sea turtle is illegal and the penalty is prison that will negatively impact on their physical, safety, and social needs and their self-esteem, then they will be motivated to co-operate in sea turtle protection. Secondly, the fishermen come from a different socio-economic background to us, so we have to cherish the difference between them and us and realise that what motivates us will not necessarily motivate them and vice versa.

Enforcement of local incentives. Most human behaviour is learned; this involves changes in behaviour arising from the interplay of drives, experience, stimuli, cues, responses and reinforcement. It is very important to go beyond the various influences on the learning process and develop an understanding of how fishermen actually learn.

In every society, different categories of people play different roles in changing behaviour and attitude. We can distinguish four roles people might play: *The initiator*: a person who first suggests the idea. *The influencer*: a person whose views or advice influence the decision. *The decider*: who decides whether, then how and when to change. *The recipient*: receives the perceptions and makes the behavioural change.

There are five different categories among the recipients: *Innovators*: people who are eager to try new ideas and willing to take risks. *Early adopters*: they are careful and successful innovators. *Early majority*: people that tend to deliberate before adopting a new idea. *Late majority*: that adopts ideas after public confidence has grown. *Laggards*: past oriented people who are suspicious to change.

Engaging the local opinion leaders and decision makers in local initiatives is the key to any successful sea turtles conservation effort. It is also important to understand that changing the fishermen socio-cultural-economic views on turtle conservation is related to what extent the opinion leaders are able to handle the educational aspect and assist in implementation by mobilising the fishing community's support and participation

Creating a special interest group (SIG). Active participation by the fishermen in a special interest group (SIG) is an essential precondition to their empowerment, which is the key to sustainability. This Special Interest Group (SIG) is an independent, not-for-profit, membership group organized by the fishermen themselves with an elected officer, to provide opportunity to exchange ideas and to keep themselves informed about current and discrete developments in their field. To develop, improve, and maintain their knowledge of sea turtle conservation issues by focusing on education at all levels.

The activities of a SIG include participation of the fishermen in data collection, like the sex of sea turtles in foraging

habitats, population identification, population size estimation and tagging, also educational activities to sensitise the fishermen about the threats to sea turtles in the foraging habitats, like oil pollution, dynamite and chemical fishing, bottom trawling and other activities which directly or indirectly affect the health and physical integrity of sea grass, reefs, and related coastal ecosystems.

SUMMARY AND CONCLUSION

The social, cultural, traditional and economic potentials of the fishermen in El-Anphoshi area in Alexandria can be utilized in the conservation of the sea turtles. There is a growing interest amongst fishermen living in the area to establish their own conservation groups that will help in solving their local problems. Many fishermen have begun to understand what can be done to resolve the problems, and what tools can be used. A fishermen's Special Interest Group focusing on sea turtle conservation can help local people to better understanding the problem and to plan their own actions to address it.

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