Watamu Turtle Watch Nest Protection Programme

Addressing social and environmental problems with payments for ecosystem services in Kenya

The Nest Protection Programme in Watamu Beach, Kenya was established in 1997. The program was created in response to the decimation of the reproductive capacity of the local turtle population, due primarily to turtle egg poaching from the Watamu nesting site. It was estimated that prior to the implementation of the program, 100% of all turtle eggs were harvested annually.

Who Are the Players?

Watamu/Malindi Marine Parks and Reserve (WMMPR), a United Nations Biosphere Reserve, is home to and a nesting ground for numerous endangered and critically endangered species of turtle, including hawksbill and leatherback turtles. The Kenyan government passed legislation (the Wildlife and



Source: http://www.watamuturtles.com

the Fisheries Industry Act) prohibiting the poaching of turtles. However, as is frequently the case with such legislation, the government possessed scant resources for enforcement. As a result, widespread poaching continued. In response, the local community was engaged to assist in a conservation effort to protect the turtles in conjunction with the Kenyan Wildlife Service.

What Are the Payments?

Local members of the community are paid approximately US\$15 for every nest found and guarded that produces successful hatchings. This process is usually monitored by the local community, in conjunction with the Watamu Turtle Watch (WTW). Since the inception of the program, Local Ocean Trust (LOT), a national marine protection trust spawned from WTW, estimates that they have monitored over 346 nests resulting in approximately 34,500 hatchlings. The payments made to the local community have been approximately \$5,000 since the inception of the program.

The Nest Protection Programme helped heighten awareness of other threats to the turtle population as well, thereby prompting additional protective measures. The Bycatch and Release Programme, established in 1998, is a prime example of such a measure, wherein local fishermen are paid to release turtles ensnared as bycatch. There are an estimated 450 turtles released per year, resulting in approximately US\$2000 in compensation to the fishermen.

The payments are structured as follows:

- \$7.50 US per turtle >70cm CCL (curved carapace length) Sub-adult/Adult
- \$4.50 US per turtle <70cm CCL Juvenile

What Are the Results?

Nest Protection Programme Project Manager Steve Trott stated.

"Previous to working here I would have said that payment incentives are unsustainable in the long-term and give the wrong message. However, since working with WTW (since March 2004) I would say that here at least, community participation in bycatch release and nest protection programs and related community education programs has resulted in a positive local attitude towards sea turtles and their protection.

"Also, I feel that direct payment has more conservation value when it comes to protection of endangered/critically endangered species where time is not on our side and law enforcement inadequate.

"...When you look at the amount of funding that goes towards education, awareness and survey components of sea turtle conservation projects in Kenya and Tanzania with no certainty of a positive long-term result it could be argued that direct payment works out cheaper and with immediate results.

"I would even suggest that at the current rate that the world is losing species and habitats that direct payment and compensation may realistically be the only practical option backed up by education programs where possible."

How Does WTW Fund the Project?

Funding for the project has been generated through an "adopt-a-turtle" program. There is a large potential for increasing revenues from ecotourism in the area, but erosion and pollution from development is also encroaching on the turtle populations.

Are There Any Additional Benefits?

LOT has also been able to collect invaluable data through the protection programs enabling the compilation of the "WTW Sea Turtle Bycatch Report" from data collected through the Release Programmes between April 1998 and May 2004. In addition, through these programs, LOT has been able to access and continually build relationships with the local communities. LOT has also helped to set up local conservation groups and establish increased environmental awareness through education programs. It is questionable whether these direct payments can be considered a perverse incentive, since there are already national laws protecting turtles in Kenya. Therefore, the Watamu Turtle Watch Protection Program provides a strong case for the potential successes which can be derived from payments for ecosystem services.

For Additional Information:

- The Watamu Website: www.watamuturtles.com
- http://www.watamuturtles.com/reports/WTW BYCATCH RELEASE REPORT.pdf
- http://homepages.see.leeds.ac.uk/~lecmsr/ejournal/2,29-53.pdf



This report was researched and written by Aimee Barnes, Matthew Ebright, Emily Gaskin and William Strain from the Master of Public Administration in Environmental Science and Policy program of the School for International and Public Affairs at Columbia University.



This publication is made possible by the generous support of the American people through the United States Agency for International Development (USAID), under the terms of the TransLinks Leader with Associates Cooperative Agreement No.EPP-A-00-06-00014-00 to The Wildlife Conservation Society. TransLinks is a partnership of The Wildlife Conservation Society, The Earth Institute, Enterprise Works/VITA, Forest Trends and The Land Tenure Center. The contents of this document are the responsibility of the authors and do not necessarily reflect the views of USAID or the United States government.











Watamu Turtle Watch Nest Protection Programme, Kenya