

Natural Resource Management

A Case Study of Camel Grazing of Mangroves at Keti Bunder, Thatta



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Introduction:

World Wide Fund for Nature - Pakistan's (WWF – P) Indus for All Programme set out to rehabilitate 7,500 hectares of area with mangroves. Since its inception, this has remained the key conservation initiative for the Programme. While the mangroves hold the bounties of catering to the fishermen's livelihoods, they are doomed to be exploited largely for their wood which is known to burn for longer hours. Mangroves leaves serve as excellent fodder for animals i.e. livestock such as goats, sheep, buffaloes and camels.

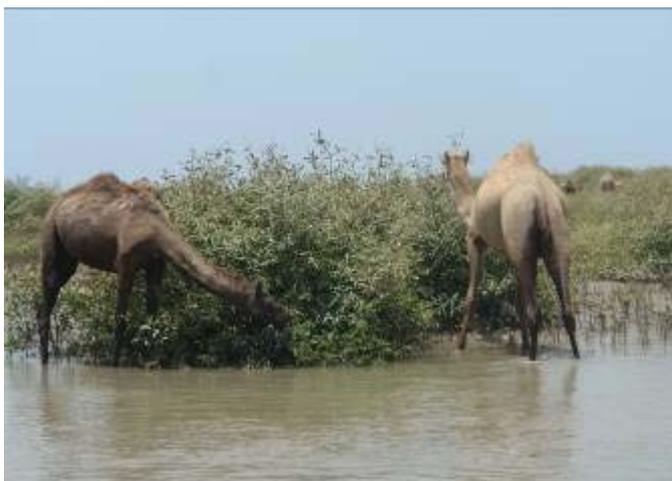
In the light of the above statement, it has been observed that the intensity of mangroves grazing increases in the winter season as the tide action breaks up and the sea becomes calmer. This makes it easier for livestock herders to wander in the mangrove plantation areas of WWF - P, giving rise to conflicts with the communities managing resources from grazing and browsing.

Methodology

Communication is an essential tool for enabling co-management with enhancement of the communities' role in conservation. Formal and informal meetings during frequent visits conducted in the creek area and inland villages allow room for improvement and remain constant source of learning for the communities. WWF - P's field team deputed at Keti Bunder site has encouraged the communities to safeguard the natural resources which protect them from storms, cyclones; and provide them with economic benefits in form of fish, crabs and shrimps.

Moreover, the meetings were not only focused on developing livelihoods or discussions to conserve natural resources but also served to educate and inspire the communities through sharing of case studies and changing the attitudes i.e. to guide for conflict resolution. Since, the communities are largely involved in mangrove plantation activities and are committed towards the conservation of mangrove forests, they take pride in taking ownership of the natural resources. At times, when the plantation areas are invaded by camel herders, the managing communities often react aggressively. In such cases, communication paves a way to solve critical problems such as the 'Camel-Mangrove browsing' issue.

It has been found that once, the camels enter a mangrove planted area or creek, the communities



Camels grazing the mangroves

instantly turn to WWF – P staff stationed at Keti Bunder and follow it up until necessary action is taken. Sometimes, calls are received even in the late hours. These calls also made on weekends as well. If WW - P staff is not available; the community, realizing the significance of the mangroves in vicinity of their households works proactively to solve the issue at hand.

Meetings have been conducted with the camel owner groups who are called "Faqirani Jatt" tribes. Coordination with the district government including Sindh Forest

Department and the Deputy Commissioner is also done with regards to working out a way for the protection of the mangrove forests. The camel grazing issue is also brought to the attention of the influential leader of the camel owners and he has taken immediate steps to stop the grazing in the area.

Subject and Aspect

Keeping in view the plantation activities, the problem of grazing and the management of the plantation sites by the community is one of the gravest issues at hand. It is important to address this issue on priority basis, as the mangrove rehabilitation is one of the core conservation initiatives of the Programme. In this respect, the management or ownership by the community is key concern. Keeping that in mind, documenting this particular case study is very essential.

Case Study

The rehabilitation of the mangrove-degraded areas with the ownership of the local communities provides a streamlined approach to managing the natural resources effectively and coherently. This helps the communities in managing the resources and strengthening ties by filling the gaps and it paves a way forward to meet the objectives of the Programme. The Programme's social mobilization process allowed the communities to realize the importance of conserving the mangrove forests for their livelihoods. 9 CBOs have joined hands with WWF - P in order to conserve these blue forests.

The communities rarely let anything slip by in ensuring the sustainability of the newly planted sites. They are eager to raise nurseries and plant seeds, saplings and propagules (semi-germinated seed) in the selected sites of the plantation. The areas are visited by the Programme Implementation Unit (PIU) team beforehand. The issue of grazing and the probability is addressed in community meetings and a strategy is devised for this purpose.

The locals understand the significance of mangroves and take efforts in order to make the plantation successful. They are also provided with opportunity of alternate livelihood during the off-seasons. Mangrove plantation being an off-season activity takes some load off them. They benefit in terms of income generation and hence, catching of trash fish is discouraged. They are excited, enthusiastic and optimistically approach the PIU staff at Keti Bunder, highlighting their areas of interest for plantation. They are often eager to be bound by a legal document i.e. MoU signed with WWF – P, which portrays their level of sensitization.

The areas are selected by the field staff of WWF - P and flagged for reviewing later. Using the traditional ecological knowledge and experience, community members plant mangrove species of *Avicennia marina*, *Rhizophora mucronata*, *Ceriops tagal* and *Aegiceras corniculatum*. Since 2007, around 5700 hectares of mangroves have been rehabilitated in the 4 creeks of Keti Bunder; a target that has been accomplished through painstaking and often heartbreaking experiences. The commitment and the ownership are remarkably displayed by the communities. The management of such a huge area is done by the community based organizations which manage and guard their respective areas.



Camels grazing the mangroves in creek

However, as the plantation initiatives have borne fruit, the communities are striving harder each day to protect the plantations from browsing and grazing. The community is tempted to chase the camels away, conduct meetings on urgent basis with the camel and livestock owners; and inform the PIU

staff by making calls even during late hours in the night. One of the leading community members was awarded “Syed Asad Ali Shah Conservation Award”.

Sometimes, such meetings are met with friction, as all events are not always pleasant. About 3 months after the mangrove plantation was conducted for the year 2011, the monsoon rains provided excellent rehab for the mangrove plantation sites which had grown into a beautiful green and brown bed stretched out in the mud flats of the creek areas. The winds had changed and it was evident that winter was approaching. Another indicator of the advent of winter is the arrival of camels from the inland area in Keti Bunder. This is an annual practice of the camel owners. The camel owner tribes are integrated and their families and friends are welcomed to bring their camels in the creek areas to feast on the juicy saplings that the community has planted with great effort. In that way, the onslaught on the mangrove plantation site starts.

The journey that camels make from the inland area can be defined in a simple way. There are two ways; firstly, carrying camels through boat and secondly, camels swim from creek to creek. The journey is made through Haji Ismail Jatt village, where the water is shallow and the creeks are not further apart. The camels are surprisingly good swimmers, but only when they don't drink water. It is believed that water upsets the buoyancy of the camel, eventually drowning it. Camel owners ensure this before letting them to swim. Camels travel from creek to creek; from Haji Ismail Jatt village to Khedewari creek from where they reach Kharioon village in Hajamro. Browsing anything that comes along the way, they travel to Phirth Village of Hajamro creek where they cross the widest channel to Tippun village. Tippun is one of the key sites of plantation and home to the conservation award winner Mr. Ayub Dablo.

It was in October when the camels started wreaking havoc in the plantation sites in Tippun and the community decided to take immediate action. On doing so, volunteers from the community led by Conservation award winner Ayub Dablo, started driving the camels away from the plantation sites. It took 3 days to drive the camels out of the plantation sites. However, the community was unaware of the fact that the camel had drunk water driving the camels out of the plantation areas and into the sea. A day later, a dead body of a camel was recovered by the owner, immediately infuriating them. Becoming furious on learning of the loss, the “Faqirani Jatt” set off to the Dablo community for revenge. It was a critical situation and immediate action was required. The PIU staff took the matter into their hands and arranged for a “Jirga”, to be held under influential leaders whom the issue of camel grazing had already been reported.

Jirga was held to avoid violence and both the camel owners and the Dablo community sat down for a compromise. Stories from both sides were heard, and a decision was taken in which it was stated that the loss of the camel would be fulfilled by the Dablo community who should take responsibility of their actions. As far as the camel owners were concerned, it was stated by the PIU team of Keti Bunder that the plantation activities take a lot of hard work and commitment in terms of both finance and time and that should be considered. As per prior notifications issued to government departments, the influential leaders and the camel owners, the plantation sites are protected by the community and the browsing of camels in that particular area should be avoided.



Mangrove saplings planted by WWF - Pakistan

Keeping this in view, the PIU Keti Bunder staff proposed that the CBO of Dablo community pay for the loss. However, the loss incurred by the camels would also be compensated with the recovery of the plantations in the areas affected. This will not only be done in this particular year, but for future plantation years as well. All stakeholders would come under a legal agreement stating that they agree to the terms and conditions proposed by WWF - P's PIU at Keti Bunder. All parties agreed to the terms and conditions, mentioned in the

contract which was signed by the focal members of the Jirga. This agreement remains a landmark in the management of the mangrove plantation sites, as it gives the right to the community for recovery of any loss incurred by browsing of camels or grazing of livestock.

A Way Ahead

It is important to focus on and consider practices of conservation initiatives, locals and government to formulate a framework that is both sustainable and based on models that are being replicated in developing countries i.e. case studies.

Burden on communities should be restricted and cooperation be enhanced through the provision of small grants/projects from other sources/donors to strengthen them. This shall enhance resistance and resilience in communities to tackle such issues.

It is important to involve the camel owner tribes to plant mangroves which would enable a chance for mobilizing and sensitizing them. This is important as the risk is too high and the loss even greater, keeping in view the costs and time incurred in the plantation activities.

Much needed policy approach would enable us to find a way out of the predicament with concurrent mitigation strategies implemented on micro, meso and macro level.

There is a need to engage the Corporate Social Responsibility sector to promote management of these amazing forests rather than doing plantation. Investment in terms of commitment is required on everyone's part including communities, NGOs, INGO's, government departments etc. which could be done through a platform comprising of volunteers who are willing to give time and finances for conservation of the mangroves.

Funding opportunities such as Mangrove For the Future (MFF) and IUCN grant (recent project awarded in December 2011) can be explored and projects can be developed e.g. the community based management zone project awarded to one of the Keti Bunder's CBO is a positive and healthy sign that the issue is serious and communities are willing to cooperate and work for conservation.



Community members planting the mangrove saplings