



FACTSHEET

PK

2014

Climate Change Adaptation

Entrepreneurship through Aqua Culture

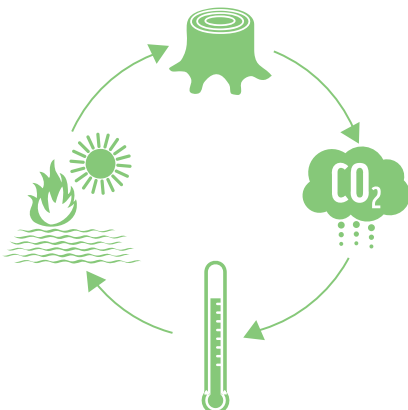


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Donor: European Commission

Duration: January 2011 –
December 2015

Project Title: Building Capacity
on Climate Change Adaptation
in Coastal Areas of Pakistan
(CCAP).



Marine resources in Pakistan are depleting due to multiple factors, particularly over-fishing and destructive fishing practices coupled with climate change. A decline in fish stocks has embittered the lives of fishermen solely dependent on fishing for sustenance and income. The condition of fishermen residing in Kharo Chann and Keti Bunder is no longer different, as pointed out in CCAP's 2011 socioeconomic baseline study 40 per cent of people in Keti Bunder and nearly 50 per cent in Kharo Chann earn PKR 50 per day or even less – well below the national poverty line. This pressing need to reduce poverty through high and sustained fishing effort levels has strained marine resources and diminished marine biodiversity.

In recognition of past WWF-Pakistan studies in the area linking overharvesting to declines in real income, the CCAP project has attempted to provide alternative income generation opportunities to poor fishermen to arrest a trend in depleting fish resources. For example, the CCAP project has established small-scale aquaculture, i.e. mud crab-fattening ponds in Kharo Chann and Keti Bunder, Thatta. Mud crab-fattening refers to a process whereby small-sized crabs (from mangroves or farm stock) are held and fed for a period until they reach adult size and are ready to be sold in the market at a higher price. The intervention aims at improving food security and developing an asset base for poor fishermen. In addition, the CCAP project has provided technical training and market access to the involved fishermen and built their capacity for proper management of ponds.

WWF-Pakistan has a successful past experience of implementing ecosystem based adaptation interventions which have proved beneficial for communities in terms of earning additional income with low cost management.

Objectives:

1. Provide alternative livelihood to poor fishing communities.
2. Build income generation capacity of fishermen.
3. Decrease pressure on depleting fish stocks.
4. Ensure sustainable fishing practices.

Updates and Achievements

The CCAP project has supported the construction of 12 household-based crab fattening ponds, six in Keti Bunder and six in Kharo Chann, and are provided as an alternative means of livelihood for the fisher communities. During implementation, only those fishermen were targeted who owned small fishing boats and were unable to harvest at high levels through deep sea fishing, hence, earning substantially less. This intervention aimed to provide additional income and make fishers resilient to climate change. The total estimated number of beneficiaries in Keti Bunder and Kharo Chann is approximately 48 each. This estimated figure is based on an average household size of 8 members.

A strict procedure was followed to identify beneficiaries for crab-fattening ponds. The basis of selection included: a) remoteness of village; b) average monthly income of beneficiaries; c) locality, where climate change impacts are expected to be high; d) willingness and ability to maintain the intervention; e) social capital such as community based organizations; and, f) participation in past WWF capacity building training workshops.

Beneficiaries were involved in the implementation of the intervention. Moreover, a two-day training session was conducted to enhance skills to efficiently manage crab-fattening ponds and negotiate better prices of their production.

This intervention also focused on reducing the vulnerability of fisher communities by increasing incomes, especially during the non-fishing season (June and July) when fishing is prohibited to allow fish stocks to naturally replenish. On average, each fully grown crab can generate up to PKR 600 as juvenile crabs purchased at the cost of PKR 40-100 result in substantial household profits. This has further helped to reduce the burden of loans that accumulate during the non-fishing season when fishers request loans from local middlemen. During the non-fishing season middlemen exploit such opportunities by forcing fishers to sell their catch at a very low price while reaping substantial margins between low prices and far higher market prices that prevail.

Recommendations:

1. Up/out-scale crab-fattening ponds in other villages in coastal belt of Pakistan.
2. Engage NGOs, civil society organizations and government agencies in utilizing funds to establish such ponds.
3. Develop potential market for sale of crabs.
4. Develop cooperatives to get fishermen rid of the middlemen.
5. Discourage destructive fishing practices in the coastal belt and create a sense of ownership among fishermen.



WWF-Pakistan Climate Change Goal

To enable a nationwide climate change adaptation programme to reduce the consequence of climate change on ecosystems and biodiversity of Pakistan, and to promote sustainable development in the country.



Why we are here:

To stop the degradation of the planet's natural environment and to build a future in which humans live in harmony with nature.

www.wwfpak.org

info@wwf.org.pk

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