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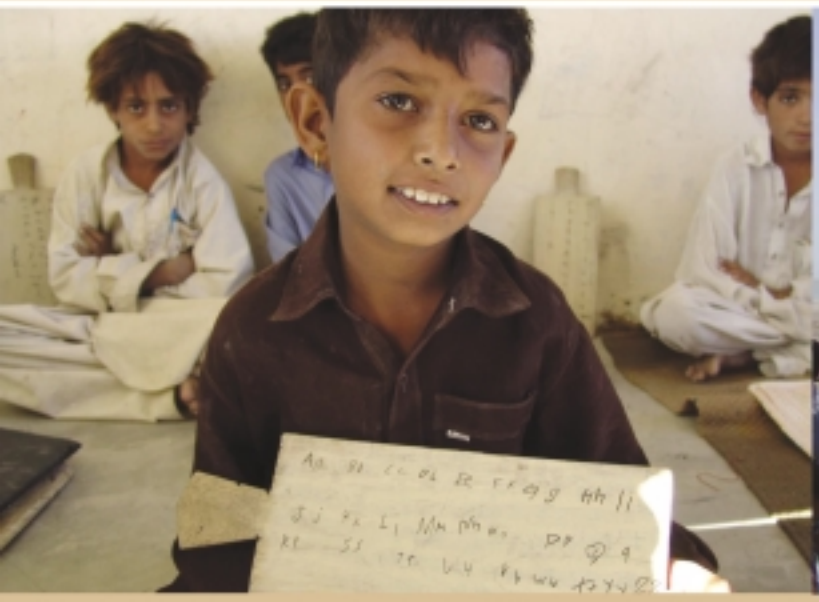

Kalmat Khor

Village Development Plan

2006

ACKNOWLEDGEMENT

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VILLAGE DEVELOPMENT PLAN – KALMAT KHOR

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1. INTRODUCTION

1.1 Background

WWF – Pakistan initiated a project entitled “Tackling Poverty in Pakistan’s Coastal Communities through Sustainable Coastal Livelihood” in March 2003. The aim of the project is to improve sustainable livelihood in four coastal communities, Keti Bunder and Sandspit in Sindh and Sonmiani and Kalmat Khor in Balochistan by achieving sustainable use of the mangrove and fishing ecosystems on which their livelihood depends. A study was conducted with the participation of local community to gain an insight into the current livelihood practices, the major issues impacting livelihood and to create an understanding of social issues etc. Consequently, a Village Development Plan was prepared for conservation of natural resources and their sustainable use and community empowerment.

1.2 Purpose of the Plan

The purpose of the plan is to bring the community of Kalmat Khor at a common vision about the development of their area as to establish the link between poverty and environmental degradation. WWF – Pakistan facilitated the community to develop a strategic plan that reflects the challenges and their solutions with regard to the existing natural resources of the area and that will ensure sustainability of community efforts for natural resource conservation. The main goal behind this plan is to conserve, restore and assure the quality of the natural resource base for future generations. The plan also promotes empowerment of local community to improve the condition of the area. This includes various actions identified by the community for the conservation of natural resources as well as for socio-economic uplift of the communities. It also identifies capacity need of the community for village development.

1.3 Methodology

A PLA (Participatory Learning and Action) exercise was conducted with the communities of Kalmat Khor.

PLA approaches are utilized in rural areas in data gathering to enable local people to assess the problems and find out measures for addressing them. The local people have an active role in their own development and thus by making them aware of the status of their environment and living conditions and involving them in planning help in participatory implementation of the plan.

The community of Kalmat Khor though does not attain a formal education, but their indigenous knowledge in utilizing the environment helped in developing the plan. The participants identified the problems/threats to the natural resources and their livelihood. They determined the causes of the problems and identified the actions to be taken.

Following questions were discussed/addressed during formulation of the Village Development Plan:

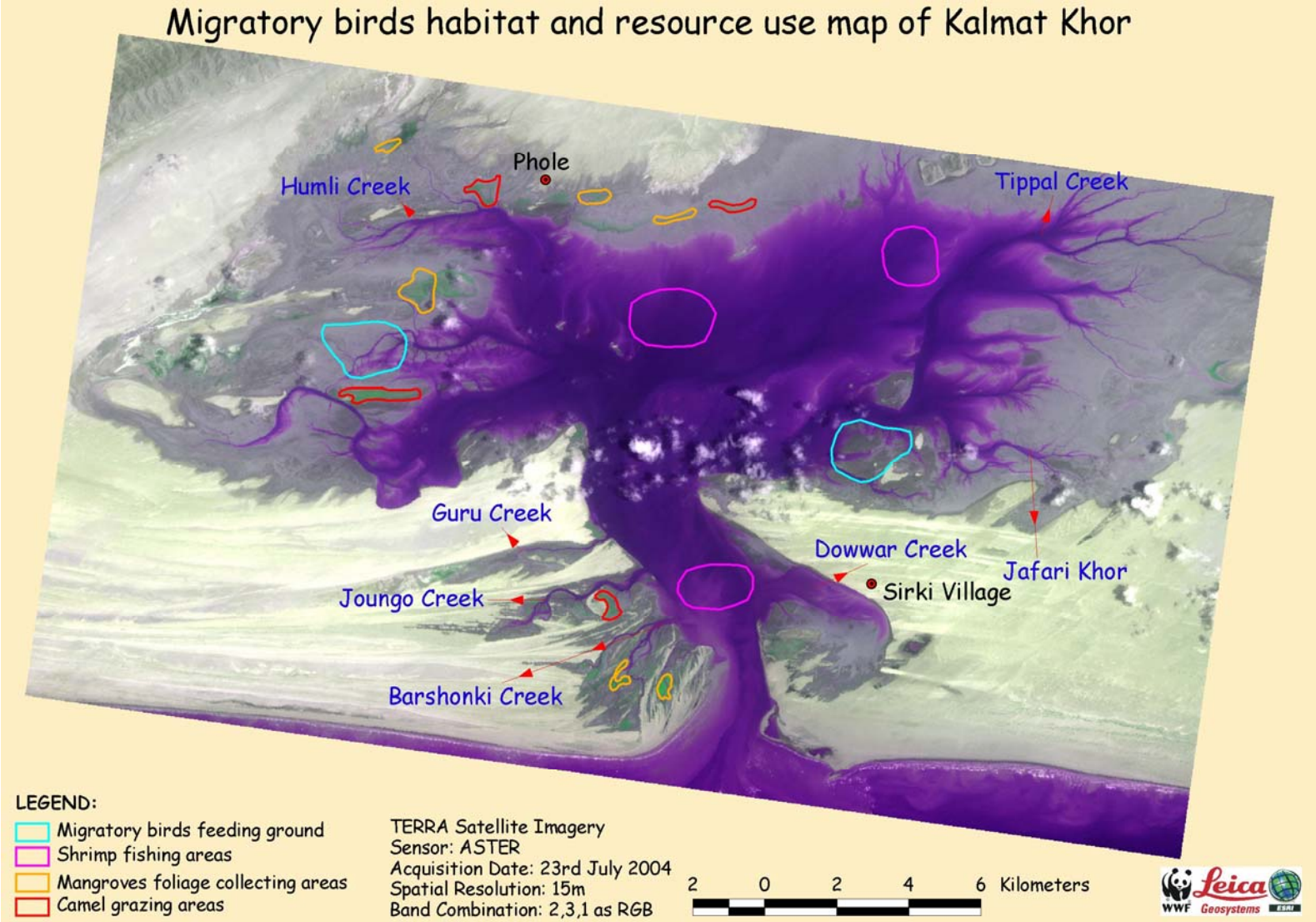
- How the community benefits from various actions?
- What are the main obstacles that will or may be encountered during implementation?
- What are the key people or organizations that can support the action?
- What type of support they can provide?
- How will they be involved?
- How much time is required for any specific action?

It was ensured that all community representatives agree with the plan of action that has been formulated with their input and participation and they would implement it. The plan was finally presented in a consultative workshop with community members.

2. AN OVERVIEW OF THE AREA:

Kalmat lies about 350 km west of Karachi on Makran coast in Balochistan province. The area is located at a distance of about 20 km from Main Coastal Highway. There are four main settlements in the area viz. Kalmat, Chundi, Gursant and Makola. People are living below the poverty line and thus dependence on natural resources mainly fishery has increased. Now there is uncertainty in returns expected from fishing.

The climate is arid subtropical with temperatures remaining moderate throughout the year.


Migratory birds habitat and resource use map of Kalmat Khor
Phole
Humli Creek
Tippal Creek
Guru Creek
Dowwar Creek
Jafari Khor
Sirki Village
Joungo Creek
Barshonki Creek
LEGEND:
Migratory birds feeding ground
Shrimp fishing areas
Mangroves foliage collecting areas
Camel grazing areas
TERRA Satellite Imagery
Sensor: ASTER
Acquisition Date: 23rd July 2004
Spatial Resolution: 15m
Band Combination: 2,3,1 as RGB
2 0 2 4 6 Kilometers
WWF
Leica Geosystems

2.1 Social Setting:

The population of Kalmat area is about 2,000. Majority of them are fishermen and belong to Kalmati and Sanghoor clan/tribes. About 95% of the population is engaged in fishing activities.

The average monthly income of the majority of the household is about Rs. 3,000/month. There are only a few families whose monthly income ranges from Rs. 6,000 to 15,000/month. Not all the fishermen own a boat but most of them work as labour on others' boat.

Education in the area is very low and only about 5% of the population can read and write while almost all of the womenfolk are illiterate. Only a few girls are enrolled in the local Boys' Primary School. Women do not play any significant role in economic and development activities. They are not involved in livelihood activities and are responsible for only household chores.

2.2 Conservation and Development initiatives in the area:

WWF – Pakistan initiated the project on Tackling Poverty through Sustainable Coastal Livelihood in 2003 with support from European Union and WWF – UK. Kalmat Khor is one of the four project sites. WWF – Pakistan is building the capacity of local communities in sustainable management of natural resources, mainly mangroves and fisheries of the area that will improve their livelihood opportunities.

Pakistan Science Foundation in collaboration with WWF – Pakistan is also implementing a project entitled "Establishment of Sustainable Model Agriculture Farm in Basol area, using Wind Energy and Drip Irrigation System".

3. NATURAL RESOURCES AND ACTION PLAN:

Conservation and management of natural resources are treated as an integral part of the Village Development Plan. In the formulation of development plan, full consideration is given to ecological as well as to the economic and social factors. Kalmat Khor area has significant ecological and biodiversity values and a variety of natural resources, which sustain livelihood of the dependent communities. Therefore, it is essential to prevent degradation of these resources and conserve them for the benefit of present as well as future generations.

The important natural resources available in the area include fisheries, wildlife, mangrove forest and seaweed. A brief discussion of various important natural resources of the area and their roles in local economy is mentioned below:

Fisheries: Fishing is the main economic activity of the local population of Kalmat area. Commercially important fish such as seabreams, croakers, pomfrets, catfishes, groupers, mackerels and eels are important fish

resources that are harvested locally. Shellfish like shrimp and lobster are also harvested commercially. Lobster caught from this area has great demand due to its size. Crabs are also caught but it does not have proper market locally. It is supplied to Karachi but does not fetch proper price.

Molluscan fisheries are not exploited, as it has no commercial demand. Small quantities of cephalopods (squids and cuttle fish) are landed as by-catch. The squid and cuttle fish is harvested in many countries commercially but cephalopod fishery does not exist in Pakistan. Presently, there is no local market for the edible mollusks. It is only used locally as bait. This could be an additional livelihood source if this fishery is developed in the country.

Mangroves: The tidal lagoons at Kalmat Khor inhabit mangroves. There are about 2500 ha of mangroves existing in the area. Only one species i.e. *Avicennia marina* exists here. Mangroves are the nursery of shrimps and many other species of fish; hence it is indirectly linked to the livelihood of the local community. Mangroves are also the source of fuel wood and fodder for the local communities and their livestock.

Seaweeds: The seaweeds constitute one of the potential resources of sea that are economically important. The seaweeds are cultivated on commercial scale in many countries. It is used as human food, in extraction of agar, as feed for cattle and poultry, manure/fertilizers and in medicine. Seaweeds grow along the Makran coast, which are not utilized at present. There is need to study the commercially important seaweed available in the area. On the basis of extent of its availability in Kalmat Khor area, an Action Plan may be developed for its commercial utilization.[1]

Birds: The diversity of migratory shorebird is considerable on the mudflats in the area. Other birds, like egret and herons, flamingos, raptors are also observed. Locals hunt birds as a sport and for their meat.

Agriculture: Coastal belt is saline and has brackish water. Agriculture is practiced only after rains. A small amount of agriculture is done along the Basol riverbed.

The Proposed Action Plan for Natural Resources is given in Table 1.

[1] *Husain, S. A. 1992 Tapping Seaweed Resources of Makran coast. Proc. Nat. Conf. On Problems & Resources of Makran Coast and Plan of Action for its Development. Pak Council for Science & Technology, Islamabad.*

TABLE 1

PROPOSED ACTION PLAN FOR NATURAL RESOURCES

S.No.	Resource	Issues/Threats	Causes	Solutions	Responsibility	Duration
1	Fisheries	• Depletion in fish stock • Intrusion of outsider's fishing boats/trawlers in the area that also use harmful nets.	• Intrusion of outsider's fishing boats/trawlers in the area who harvest the fish unsustainably and use harmful nets • Weak enforcement of fisheries law.	• Effective implementation of Fisheries Law. • Lobbying with the government to stop Fishing boats and trawlers from other province and foreign trawlers entering into Balochistan area. • Assessment of fish stock for determining sustainable use level • Develop sustainable fishing practices with local communities and build their capacity for the purpose • Initiate community based watch and ward mechanism	Provincial & Federal Fisheries Departments, District Government, CBO and NGOs	1 – 3 years
2	Mangrove Forest	Deforestation through cutting and browsing by camels	• Use as fuel wood and fodder by the local community • Lack of alternate fuel energy resources.	• Mangrove plantation in the degraded area. • Capacity building of local community for Sustainable management. • Initiate community based watch and ward mechanism • Promote energy efficient/alternate energy	Local Community, WWF – P., Balochistan Forest Department,	Immediate

				sources e.g. fuel efficient stove, wind, solar etc.		
3	Birds	Hunting of birds as a sport and supplementing meat requirement.	▪ Lack of awareness ▪ Weak implementation of wildlife law	▪ Continue awareness programme for conservation of birds ▪ Involve local community in protection	Balochistan Forest Department, Local Community & WWF	1 – 2 years
4	Agriculture	Saline underwater, scarcity of freshwater	• Lack of agricultural extension services • Aridity • Low rain fall	▪ Drought and Salt tolerant crops promoted. ▪ Water harvesting encouraged.	▪ Agricultural Department ▪ Research Institutions	5 years
5	Sea weed	Unexploited resource for livelihood (by locals), No commercial gain	• Lack of awareness about its economic importance	▪ Explore the commercial market and utilisation	▪ NGOs and relevant Government Departments to assist and facilitate ▪ Action Plan for its commercial utilization and market developed	2 – 3 years

4. SOCIAL ISSUES AND THEIR MITIGATION:

4.1 Water Supply:

Lack of fresh water in the area is the major problem. When there is rain, water is collected in depression. Water is mainly supplied through tankers, which is stored in the community tank. The locals have to purchase water supplied through tankers and usually pay Rs. 20 for a gallon of water. The water supply does not commensurate with the community needs.

4.2 Education:

There has been a lack of interest in the community to get education. The children usually accompany their parents in fishing to supplement their income. There is a Government Boys Primary School with provision for admission of girls as well. The status of literacy is deplorable. The community realizes the needs of education for their children but their economic condition is an obstacle in sending their children to school.

4.3 Health and Hygiene:

There is lack of awareness in locals about the issues of health and hygiene. There is also lack of health facility in the area. A Government Dispensary exists only in Gursant village. However, there is always shortage of medicines in this dispensary. There is no lady doctor hence females do not get proper treatment in time. The women are the worst sufferers as they encounter many gynecological problems and there is no maternity facility for women. Babies' births are facilitated by untrained midwives. The patients including pregnant women have to travel to Pasni in emergency for treatment.

Gastroenteritis, diarrhea and skin diseases are common in the area and are mainly due to poor hygienic conditions and drinking of unsafe water.

4.4 Communication:

Although, the Coastal Highway passes at a distance of about 20 km from the area but there is no link road that connects the villages with the main Highway.

4.5 Unemployment:

The community mainly depends on fisheries for livelihood. There is no alternate opportunity for employment in the area. The community is unskilled and lacks skills for alternate jobs. Since, Gwadar is being developed as a port city as a result development of infrastructure has also begun in Pasni, the nearest town. Pasni is not very far from Kalmat Khor hence the locals may get opportunities and employment if their skills in alternate jobs are enhanced.

TABLE 2
PROPOSED ACTION PLAN FOR ADDRESSING SOCIAL ISSUES, AS SUGGESTED BY THE LOCAL COMMUNITY

S. No.	Problems/ Issues	Causes	Solutions	Responsibility	Duration/ Target
1.	Water Supply	▪ No Water supply scheme ▪ Underground water is saline ▪ Expensive and inadequate supply through tankers	▪ Start a water supply scheme for the area ▪ Build water storage tanks or check dams ▪ Install desalination plant ▪ Nadi filter	Federal and Provincial Government, Elected representatives of the Federal & Provincial Assemblies, City District Government and NGOs.	1 – 2 years
2.	Education	▪ Lack of educational facility ▪ Lack of Parents' interest for children's education ▪ Economic condition of community/poverty	▪ Raise awareness on importance of education in community ▪ Enhance Livelihood opportunity of the community ▪ Establish Education facility in the area, boys school upgraded and girls school established	▪ Local CBO and NGOs raise awareness and motivate community for children education. ▪ Education Department and Local Government (Tehsil Nazim) ▪ NGOs working in education sector be approached to provide educational facility for girls and boys	Next 2 years
3.	Health and Hygiene	▪ Lack of awareness in community on health and hygiene issues	▪ Awareness on health and hygiene provided ▪ Medical facility like provision of doctor and lady doctor, ambulance	NGO, CBO initiates awareness campaign. Government of Balochistan or Local District Government addresses the local medical	4 years

		▪ Inadequate medical facility	service and adequate medicine in Gursant Dispensary ▪ Establish dispensary/medical facility in all villages of the area	needs	
4.	Communication	▪ Non-existence of metalled road, linking Coastal Highway	▪ Construct metalled road and public transport be available.	Provincial or District Government, Locals to lobby with the elected representatives of Assemblies and District Government from the area	2 – 4 years
5.	Unemployment	▪ Lack of skills in locals for alternate profession ▪ Opportunities of alternate source of livelihood in the area is not available	▪ Small-scale development initiatives (e.g. backyard poultry, kitchen gardening, bee keeping) ▪ Establishment of vocational training center for women ▪ Support to women for shrimp peeling home industry ▪ Feasibility study for promotion of sea weed utilisation	NGOs to assist in exploring small-scale income generation activities. Provincial Government, City District Government or NGOs to assist in establishing vocational training centre	2 years

5. TRAINING AND CAPACITY BUILDING OF LOCAL COMMUNITIES:

Skill development training is important for the implementation of a development plan. Community based extension workers can bring a desirable change in the local level development sectors like fisheries, livestock, agriculture, health, environment, education and various other social aspects.

The discussions conducted with community representatives and cross section of local people able to contribute valuable information on technical assistance and training needs for continuing conservation and development activities in the area.

The training needs of the communities of Kalmat area have been identified as follows:

5.1 Institutional Development:

Institutional Development of Community is necessary for effective and smooth running of daily business and planning process. The Community Group needs capacity building in organizational management, financial management, office management, project planning, leadership, conflict resolution, communication, advocacy, lobbying, monitoring and evaluation, project management, gender awareness, savings and credit scheme management. WWF – Pakistan and other NGOs can provide training/organize training workshops for community groups in priority areas.

5.2 Natural Resource Management:

Although the community is managing mangrove forest traditionally, yet they need training on technical aspects of mangrove conservation. Further, their skills in protection of marine and coastal environment and its resources and participatory management of fisheries need to be strengthened. WWF – Pakistan may organize training workshops for them or/and organize exposure visit to areas where natural resource management is practiced by the community.

5.3 Gender Sensitisation:

Women have least recognition of their role in natural resource management and village development due to traditional restrictions. Their mobility is restricted due to social constraints. They are primarily responsible for family and household activities. Workshops are to be organised for gender sensitization and awareness of male members of the community so that women are encouraged to play their role in every sphere. Training and skills development in household level activities shall be organized for womenfolk.

The women lack skill and confidence to start any income generating activity. Skill development programme for women needs to be initiated so that they can support their families. They may be provided training in poultry farming, arts and crafts, sewing and embroidery. The women may be encouraged to

introduce saving programme to provide credit assistance to the needy women and to embed saving attitudes among the community.

5.6 Lobbying and advocacy:

Capacity building in the field of lobbying and advocacy is required so that the local community can take their issues to respective departments to secure their rights and address other social services.

5.7 Environmental education

There is a need of environmental education and awareness in the community. Therefore a comprehensive education program should be designed specially for women and youths of the area.

6. CONCLUSION

WWF – Pakistan works on the principle of integrated conservation and development (ICD). The community is the integral part of ICD approach. The ICD simultaneously addresses two purposes i.e. the promotion of socio-economic development and the conservation of nature and natural resources. Through this approach, community will be strengthened and community will start realizing that conservation of coastal or marine ecosystem or natural resources and area development is not solely the responsibility of the government or other agencies but they have equal responsibility.

The community of Kalmat area is therefore, a major stakeholder in the implementation of the WWF – Pakistan's conservation projects in the area. WWF – Pakistan has been working with the local community to improve their livelihoods through implementing participatory and integrated conservation and development activities.

Therefore, this plan has been developed with community participation and aimed at natural resource conservation, lifting the living conditions of the community and improvement in their livelihood. The Community would be coordinating and lobbying with different stakeholders for its implementation.