

Mainstreaming Biodiversity Conservation into Production Systems

in the

Juniper Forest Ecosystems

**Mid-Term Review
October-November 2009**

Mainstreaming Biodiversity Conservation into Production Systems in the Juniper Forest Ecosystems

1. Introduction

The Project

The project titled '*Mainstreaming Biodiversity Conservation into Production Systems in the Juniper Forest Ecosystems*' (The project) introduces and tests a community-based approach to biodiversity conservation in the Juniper forests of Ziarat district in Balochistan. The complementary GEF-supported biodiversity project has the potential to help government to reform and strengthen the ways in which nature conservation, natural resource management; resource-based livelihoods and rural development are organized and supported across the country.

Juniper forests in Ziarat are spread over a steep, rugged terrain reaching up to 3,350m, in an arid climate with 250-320mm rainfall and high summer and low winter temperatures. The largely sandy loam soils are shallow, fragile and highly calcareous. The Juniper ecosystem forms the basis of much of the socio-economic activity. The juniper trees fulfil most of the energy needs (almost all before the supply of gas to Ziarat valley) and the construction material (wood and bark). Goat and sheep grazing has been the dominant human activity for centuries, with summer pastures lying in or near the Juniper forests and winter pastures in the rangelands at lower altitudes. Nomadic tribes also migrate seasonally through the region adding stress to the already over-burdened rangelands. Juniper forests are also the important watersheds protecting the soil and water resources. For centuries extensive use has been made of the *karez*, a system of water management that uses gently sloping tunnels and channels to distribute water from shallow upland aquifers, for domestic use and for irrigation. In the past two decades, coinciding with the availability of electricity to drive deep tube-wells, there has been a marked increase in ground-water irrigation to support production of a variety of deciduous fruits. Excessive extraction and wastage of water has resulted in the ground water-table falling at 1-3 metres per year, and has increased surface salinity of soils and exacerbated desertification processes. The highly unsustainable rate of water extraction from the aquifer has also destroyed the *karez* system as the ground water table has fallen. Juniper berries and many a plants in the ground flora have medicinal values; these are however used only locally. Ziarat is a prime health resort and a summer station attracting a large number of tourists and recreation seekers.

All forest land is declared state land and the tribes who had been managing the land previously have now no legal right on the land and the resources in the forest except those specifically granted. The extreme drought from 2001 to 2005 and the earthquake in 2008 have severely depleted the ecosystem services. Low rainfall, rising water withdrawals primarily for orchards and agricultural activities and the declining effectiveness of Juniper forests to protect the watersheds are other factors contributing to the decline of the ecosystem

functions. Anthropogenic activities have also adversely impacted and continue to impact the ecosystem biodiversity, soil and water. The Juniper forest ecosystem has been unsustainably affected by energy production, livestock grazing, fruit orchards, hunting and construction.

The project was started with an overall goal of improving the condition of the Juniper forest ecosystem in order to conserve biodiversity and increase the ecosystem's contribution to sustainable development including i) Improving the health of the ecosystem's components, notably the hydrological cycle, the quality of soil, and the diversity of plants; ii) sustaining the extent and improving the health of the Juniper trees; and iii) increasing the population of globally important plant, animal and bird species.

The project focuses on reducing the negative impacts of production activities in the livestock grazing and energy production sub-sectors, while exploring opportunities for biodiversity benefits from sustainable tourism, controlled hunting and watershed and ecosystem services. The project aims at achieving the objectives through i) the development of community-led solutions to natural resource management challenges in selected areas; ii) supporting communities and local and provincial governments to replicate the solutions across the entire Juniper area and iii) building local and provincial capacity to sustain the project successes in Juniper areas and to disseminate findings broadly.

The GEF funded project, aims to assist local communities to cease ecologically harmful practices, develop livelihoods and lifestyles that are ecologically sustainable, and practice natural resource conservation. The focus is on the conservation of Juniper forests and the associated biodiversity in Ziarat district of Balochistan through control on collection of Juniper wood and bark (for fuel wood and construction) and overgrazing of natural vegetation; and to develop agricultural and pastoral practices and other income-generating activities that contribute to ecosystem conservation. The increase in agricultural activities in Ziarat and adjoining valleys is considered to have been at the cost of the globally important Juniper forests, a unique ecosystem with respect to topography, climate and geology.

The project document was prepared in 1998-2000, using the Project Development Facility of UNDP and the Global Environment Facility. The implementation however started in early 2007. The project provided the selection of 4-6 valleys (four were selected, entry into fifth is being made) in Ziarat district. Funding was provided for a 4- year Medium-sized Project, with grants by the GEF and UNDP.

The project supervision and implementation arrangements (by IUCN) were put in place and project operations were started in April 2007. Because of delay in the start of implementation LFA was revised at the Inception Workshop held in May/June 2007 to suit the changed conditions. The project works were undertaken in four valleys viz., Koshki-Zizri valley, Main Ziarat valley, Main Chautair valley and Batay Thair-Nishpa valley. Entry has also been made in the fifth valley---Manna on the directions of the Project

Steering Committee.

Mid-Term Project Evaluation

Mid-Term Evaluation mission was organized in October 2009 as a comprehensive independent review and assessment of project performance. This mission report reviews and evaluates the project concept and design; the arrangements made for project management, administration and financing; and progress and achievements over the first two years of project implementation. The report makes recommendations for strengthening the remaining period of project implementation and draws a number of preliminary lessons to guide future conservation efforts.

The Terms of Reference for the MTR are given in **Annex 1**. The mid-term project evaluation is a UNDP requirement for all GEF full-size and medium-size projects and is intended to provide an independent and objective assessment of the project and its implementation: to identify potential project design and implementation problems; assess progress towards the achievement of planned objectives, including the generation of global environmental benefits; identify and document lessons learned (including lessons that might improve design and implementation of other UNDP projects including GEF co-financed projects); and to make recommendations regarding specific actions that might be taken to improve project implementation and the sustainability of impacts, including recommendations about replication and exit strategies.

The MTR is also expected to serve as a means of validating or filling the gaps in the initial assessment of relevance, effectiveness and efficiency obtained from regular project monitoring. The mid-term evaluation thus provides an opportunity to assess early signs of ultimate project success or failure and prompt necessary adjustments in project design and management. UNDP also views the mid-term evaluation as an important opportunity to provide donors, government and project partners with an independent assessment of the status, relevance and performance of the project with reference to the Project.

For the '*Mainstreaming Biodiversity Conservation into Production Systems in the Juniper Forest Ecosystems*' project, the Mid-Term Evaluation involved review and assessment of project design documents and progress reports, administration arrangements, budget financing and expenditure, and activities on the ground. The evaluation team visited the project office in Ziarat, the four valleys where the project has made interventions, UNDP offices in Islamabad; and IUCN and government offices in Quetta. The overall itinerary achieved and organizations and individuals consulted by the mission are detailed in **Annex 2** and **3** respectively.

The evaluation mission was short but provided good opportunities for intensive consultations and observation of field results. At the outset of the mission, the consultants

were briefed in Islamabad by UNDP Pakistan, and met in Quetta with the organization implementing the project, the IUCN, resource persons who had conducted the baseline studies and with members of the Project Management Committee. The mission was accompanied by the Project Manager. This provided the mission with valuable opportunities for both consultation and providing feedback on the evaluation. This report has been prepared after the field visit, a presentation shall be made at Quetta to members of the Project Steering Committee, to report on the evaluation mission and findings, and outline the draft recommendations from the MTR for the project.

2. Project Concept and Design

Project Concept

The concept behind the project '*Mainstreaming Biodiversity Conservation into Production Systems in the Juniper Forest Ecosystems*' is to test and demonstrate a novel approach to conserve the Juniper forest ecosystems, by motivating local people to participate fully with government support in a local conservation initiative; and to gain direct and indirect benefits from the improved ecological functions in the area. Four valleys selected out of the vast tract supporting the juniper forests are the best examples of the ecosystem, are contiguous and within easy reach of the project. The project is seen as an opportunity to extend the concept of community-based conservation in comparable Juniper ecosystems by building government-community working partnerships and developing the capacities in government organizations and in communities --- to replicate and disseminate project results.

Community-based conservation is not a new concept in Pakistan having been tested in different ecological zones of Pakistan. Such initiatives have however been supported by the direct benefits to the community in the form of revenues e.g., trophy hunting. The project under review provides support through enabling interventions made to improve the livelihood opportunities and the lifestyle of the local people.

Project Design

The project design centres on delivering two major outcomes:

- Outcome 1: Economically, ecologically and socially sustainable utilization of juniper forest ecosystem operationalised at 4-6 selected small valleys
- Outcome 2: Mechanisms for replicating and disseminating the sustainable utilization regimes across the entire Juniper forest ecosystems of Balochistan evolved

Outcome 1: Economically, ecologically and socially sustainable utilization of juniper forest ecosystem operationalised at 4-6 selected small valleys

Instead of achieving six (6) outputs as provided in the original project, the Inception

Workshop decided to achieve eight (8) outputs as follows:

- Output 1.1: Organizational structure in villages in selected valleys
- Output 1.2: Social and needs assessment of selected valleys, including gender assessment
- Output 1.3: Measures to mainstream biodiversity into livestock sector developed and implemented
- Output 1.4: Measures to mainstream biodiversity into energy sector developed and implemented
- Output 1.5: Measures to mainstream biodiversity into hunting, watershed management, construction and/or tourism sectors identified, developed and initiated
- Output 1.6: Measures to combat die off developed and implemented
- Output 1.7: Linkages established with private sector in select sectors
- Output 1.8: Highlight the significance of Juniper Forest Ecosystem at local, regional and global level

Outcome 2: Mechanisms for replicating and disseminating the sustainable utilization regimes across the entire Juniper forest ecosystems of Balochistan evolved

The following four outputs are to be delivered:

- Output 2.1: Community and government jointly recommended approach and lessons from each selected valley under outcome 1 (may include guidelines, model agreements, policy recommendations, or community-oriented training programmes) for replication
- Output 2.2: Capacity for up-scaling, replication and dissemination strengthened, notably in government departments
- Output 2.3: Successful approaches from Outcome 1 replicated across all Juniper forest ecosystems in Balochistan
- Output 2.4: Successful approaches from Outcome 1, where appropriate, disseminated across Pakistan and countries with similar threats and ecosystems

The MTR considers that it would have helped implementation if the project design had been tighter, with clearer specification of the scope and shape of each project outcome and how activities should be selectively focused. The project is a four-year Medium-sized GEF project with a total budget of just \$1.26 million and, as noted above, a variety of issues to address. There is a need to limit the level of ambition of the project – and the expectations of stakeholders – and focus efficiently on priority tasks, but this is not readily apparent from the project document or plan. The impression gained during the MTR is that the project may be over-ambitious (e.g., Outputs 1.3, 1.4, 1.5, and 2.3), trying to do too much and runs the risk of spreading its efforts too thinly to achieve useful impact in key areas.

The project has very wisely revised the Logical Framework Analysis at the start of the project. This has greatly helped streamlining the project activities. Many of the log frame objectives and indicator

statements are however insufficiently SMART to serve as the key summary plan for the manager to implement the project. The targets even though set in the wake of baseline (Assessment studies) are too specific and would be difficult to achieve e.g. [change in land use reduced to 15% as against 18%, deforestation rate is reduced to 5% as against 7%, rate of ground water depletion reduced to 12% as against 15%]. *The precise assessment based on “(primary) data collected through interviews, personal observations, focus group discussions and meetings with data sources” is also questionable.*

It would be helpful if the overall Project Objective was more strategically focused: instead of the imprecise aim ‘to make production activities in the Juniper forest ecosystem’, the objective of this project should be an effective collaborative conservation management system in Juniper forest ecosystems in Balochistan, with the Indicator being community and local government institutional arrangements in place for the Juniper forest ecosystem in valleys where interventions have been made.

The Component outputs are however clear and address the issues being faced in the Juniper forest ecosystems.

3. Project Management, Administration and Implementation

Project formulation

UNDP Pakistan used the GEF Project Development Facility to formulate the current project, 1998-2000, which was eventually approved in 2007 as the project titled “*Mainstreaming Biodiversity Conservation into Production Systems in the Juniper Forest Ecosystems*” – a four year Medium-sized GEF Project with UNDP as the GEF Implementing Agency, the Forest & Wildlife Department of the Government of Balochistan as Executing Agency and IUCN as the project implementing agency.

Project implementation

A project office and management team was established at Ziarat in April 2007, and procured vehicles and field equipment to operate in four valleys. Full project operations started in April 2007 and thus by the time of the Mid-term Evaluation the project had been running for about 2 1/2 years.

The team responsible for implementation of the project comprises the Project Manager, 5 technical staff (two Community Development officers, one Social Organizer, one Admin. and Finance Assistant and one M&E officer) and five support staff. The project team has good working relationship with the Balochistan Forest & Wildlife Department, Irrigation Department and other related organizations.

During the evaluation mission the MTR observed that the project has a skilled, dedicated project team and manager who have established good office and field facilities for project operations.

Project supervision arrangements

The IUCN office Quetta administers the project and the project team. The project team works in close collaboration with the Balochistan Forest & Wildlife Department (BFWD). The Project Steering Committee (PSC) and Project Implementation Committee (PIC) are both located at Quetta, the former under the chairmanship of the Additional Chief Secretary Planning & Development Department and the latter under the chairmanship of the Secretary Forests and Wildlife. The Committees' meetings are regularly held and appropriate guidance is given at appropriate levels.

The composition of the committees shows that there is no representation of the Environment, Agriculture and Irrigation Departments who could be considered the main stakeholders in the context of livelihood enhancement and environmental concerns. Whereas district government representative has been included in the PSC, there is no representation of public representatives (district government) in PIC. The project recommends that [1] *the composition of the committees may be revised to give representation to the important stakeholders. The project now plans to discuss it in the forthcoming PSC meeting.*

The mission further observed that the project lacked inputs from Rural Development Programmes and feels that a link should be established. While considering the multi-faceted interventions required, the MTR recommend that [2] *a clear distinction should be maintained between the management of the project, and the development and support of an overall system and programmes for natural resource management, conservation and rural development.* It is important to maximize the effectiveness of the project as a short, intensive mechanism for bringing about change to the long term system.

The Project Implementation Committee should be used by the project as an important forum and mechanism for reaching out to engage other agencies and programmes in the broader initiative to strengthen biodiversity conservation, natural resource management and sustainable development. The PIC provides the project with a direct channel for engaging and drawing-in the Department of Environment for example, and thus can be used to promote and facilitate increased locally-based environment related activities. It is recommended that [3] *the PIC members should be encouraged and enabled by the project to develop their outreach and programmatic role.*

Project duration and extension

The project was designed as a four year initiative to run from 2000 to 2004. The project however started in early 2007. To address the changing scenario, the LFA (Logical Framework Analysis) was revised and the project followed the dictates.

Keeping in view the pace of work and the opinion of communities it would be feasible to extend the project for another two years period or a new phase may be built based on lessons learned and success stories of the current phase. The successful initiatives may be up-scaled both horizontally and vertically. Once the communities have been geared up and willing to

conserve the Juniper forest ecosystems, and realizing the fact that other communities in the area desire to follow suit, it is worth its while that *the project duration may be extended or a follow up phase be started* : recommendation [4]. **The Exit Strategy has been formulated after discussions with the Project, and highlights their point of view.**

One of the consequences of the delayed start-up and implementation is to reduce the relevance of the project and inhibit linkages between the project and broader programmes being pursued by the government and / or UNDP or other donor agencies. Programmes that were active during the project's formulation had been completed or had progressed onto other aspects by the time the project was underway. For example, a number of conservation projects in Pakistan are concerned with similar issues of community engagement, capacity of local government services, resource-based livelihoods and connections with rural development. During design, the projects were seen as complementary to one another, but in practice it has proved difficult to synchronize agendas and gain any synergy between them. However *efforts should be made to synchronize agendas and gain any synergy between other initiatives in the country to gain from their experiences*: recommendation [5]. **The Project has already taken some initiatives on this as already explained and plan to step up their efforts.**

Project finances and budgeting

The four year project budget is \$1.260 million cash contributions from mainly two sources viz., GEF (US \$975,000), UNDP track funds (US \$228,000) and Cash Cofinancing – UNDP managed (US \$57,000). Component wise allocation and the expenditure as on October 1, 2009 is summarized in **Table 1** below:

Table 1. Statement of Budget allocated and Expenditure (in US\$) as on October 1, 2009

Project Period: April 2007 - March 2011

ID	DESCRIPTION - BUDGET LINE	Total Budget	Expenditure To Date	Budget Balance
A	Personnel Costs	250,317	119,092	131,225
B	Operational Costs	122,631	57,126	65,505
C	Equipment & Furniture	49,900	43,294	6,606

D	Duty Travel	55,493	26,053	29,440
	TOTAL OPERATIONAL COST	478,342	245,565	232,777
E	ACTIVITY			
Output	Outcome 1: Economically, ecologically and socially sustainable utilization of Juniper forest ecosystem operationalised at 4 – 6 selected small valleys.			
1.1	Organizational structure in villages in selected valleys	59,440	44,360	15,080
1.2	Social and needs assessment of selected valleys, including gender assessment	92,101	70,494	21,607
1.3	Measures to mainstream biodiversity into livestock sector developed and implemented	60,982	48,242	12,740
1.4	Measures to mainstream biodiversity into energy sector developed and implemented	51,707	8,616	43,091
1.5	Measures to mainstream biodiversity into hunting, watershed management, construction and/or tourism sector identified, developed and implemented	126,770	86,241	40,529
1.6	Measures to combat die-off developed and implemented	39,412	27,187	12,225
1.7	Linkages established with private sector in select sectors	8,954	3,583	5,371
1.8	Highlight the significance of Juniper Forest Ecosystem at local, regional and global level:	45,946	36,718	9,228
	Sub-total Outcome 1	485,312	325,441	159,871
	Outcome 2: Mechanism for replicating and disseminating the sustainable utilization regimes across the entire Juniper forest ecosystem of Balochistan evolved.			
2.1	Jointly recommended approaches and lessons from selected valleys for replication identified.	4,577	-	4,577
2.2	Capacity for up-scaling, replication and dissemination strengthened, notably in government departments.	18,908	1,788	17,120
2.3	Successful approaches from Outcome 1 available for replication across all Juniper forest ecosystems in Balochistan	10,050	5,221	4,829
2.4	Where appropriate, successful approaches from Outcome 1 disseminated across Pakistan and countries with similar threats and ecosystems	8,496	945	7,551
2.5	Management Outputs: Internal Reviews and Work Planning	68,901	51,956	16,945
	Sub-total Outcome 2	188,932	59,910	129,022
0	Earthquake Rehabilitation	78,000	78,000	-
	Sub-total (Activity)	674,245	463,352	210,892

F	Management Fee	107,414	68,991	38,423
	GRAND TOTAL	1,260,000	777,909	482,092

All cash budget contributions pass through a single dedicated project account, so that the funds from all sources are treated as equal. This greatly facilitates efficient budget planning, monitoring and reporting, and straightforward procedures for disbursement of funds to the project office for all project Components.

The budget is allocated to the two major project Components (Outcome 1 and 2) as indicated in **Table 1** above with major share for Outcome 1 which is mainly related to biodiversity conservation, community organization, and awareness raising. Allocation for Output 2 is about 40% of that allocated for Outcome 2 (replicating and disseminating the sustainable utilization regimes) which is reasonable. MTR feels that the allocation has been judiciously made for the activities. Allocation by Outputs however seems to be skewed; major allocation being made to Output 1.5 (measures to mainstream biodiversity into hunting, watershed management, construction and/or tourism sector identified, developed and implemented) as against Output 1.4 (measures to mainstream biodiversity into energy sector developed and implemented) which directly deals with the Juniper trees even though the expenditure shown against this Output has been only about 17% of that allocated. MTR feels that the allocation for this Output needs to be enhanced and simultaneously the progress needs to be made against this Output.

The allocation made against operational costs is almost 40% of the total project cost which is way on the higher side. This proportion should be at perhaps 15-20% maximum, as the real purpose of the project is not to run the project but to achieve the substantive results. It is more important to properly plan and budget for each substantive Output. **The Project claims** As per GEF and UNDP guidelines, some of the direct costs, duty travel, are also included in operations, hence making it quite high. If these are subtracted, the operational costs comes below 15%.

Also, these allocations are under contractual agreement between GEF-UNDP and IUCN, hence cannot be revised at this stage. Given this, MTR may comment on budget utilization but budget composition may not be questioned. We suggest to remove this from the report”.

The Mission believes that “This is a suggestion that may be considered at the time of formulation of future projects. The comment does not question the progress of work on the project”.

The MTR considers that the project's efforts to enable the local communities to live in the project areas in a sustainable manner, while conserving the Juniper forest ecosystem are more likely to succeed if sufficient funds are made available both for conservation and development. The project will be successful only if it manages to attract significant other funding into the project areas for the development of community welfare, livelihoods and

government services (notably education, health and infrastructure). The MTR considers that recommendation [6] *for the remainder of the project, a greater proportion of the energies of the project management and partner agencies should be devoted to attracting the essential development services into the project areas; using the project to create an integrated conservation and development programme. **The Project agreed to pursue it more vigorously.***

The expenditure made against Component Outcomes is also skewed. Whereas 67% expenditure has been made against Outcome 1, only 32% expenditure has been made against Outcome 2. **The Project hopes to improve the expense situation now after making some progress under Outcome 1.** There is no expenditure against Outputs 2.1 and hardly any progress has been made against Outputs 2.2 and 2.5. Almost 75% expenditure has been made against Output 2.4 (Management Outputs: Internal Reviews and Work Planning) whereas major inputs are still to be undertaken against this Output.

4. Implementation Progress and Achievements

In the 2 1/2 years of full operation, the project manager and staff have successfully organized and implemented a substantial number of activities. Following is a summary of the project activities reported under each Component Outcome/output for the 2 1/2 years to date as supplied by the Project.

Outcome 1: Economically, ecologically and socially sustainable utilization of juniper forest ecosystem operationalised at 4-6 selected small valleys

Output 1.1: Organizational structure in villages in selected valleys

- Selection of five valleys for implementation of project activities
- Valley level workshops in the selected valleys
- Formation and operationalisation of 28 Community Conservation Organizations
- Formation and operationalisation of 10 Women Community Conservation Organizations
- Capacity building of Community Conservation Organization members in:
 - Community Management Skill Training 34 office bearers of CCOs
 - Technical skills imparted to 5 members
 - Community Livestock Extension workers 12 members
 - Cutting and tailoring 49 members from 8 WCCOs
 - Handicrafts 40 members from 8 WCCOs
 - Training of 152 WCCO in post harvest products
- Booklet on Islam and Environment (conservation) published.

Output 1.2: Social and needs assessment of selected valleys, including gender assessment

- Survey for thematic sectors of project completed and the (baseline study) report finalized.
- Need assessment workshop of CCO conducted.

- For addressing the CCOs felt needs 19 schemes have been implemented in water supply (2), water channels (13) and reservoirs lining (4). **This aspect is a part of “addressing community felt needs” but can be shown here as well.**
- Medicinal plant survey for both fall (2007) and spring (2008) season conducted and report completed.
- A study for valuation of goods and services is in progress.
- For establishment of medicinal plant centre a building is being renovated.

Output 1.3: Measures to mainstream biodiversity into livestock sector developed and implemented

- Five grazing management trainings conducted wherein 78 CCO members participated.
- For protection of livestock against contagious diseases 19,000 animals vaccinated.
- Treated 19,000 animals for ecto and endo parasites.
- Under livestock production 164 animals put to lamb/kid fattening rations.
- Three stock water ponds constructed for provision of drinking water to the livestock.
- A community range reserve established in Koshki Valley.
- Seed of fodder crops distributed among CCO members for cultivation.
- 230 sets of poultry pullets distributed among the WCCO members.
- Two training sessions on modern pruning practices for orchards conducted wherein 35 CCO members participated.

Output 1.4: Measures to mainstream biodiversity into energy sector developed and implemented

- Distributed 250 fuel efficient stoves among CCO and WCCO members on 20% cost sharing basis.
- Survey in the project valleys for the feasibility of installation of wind and solar energy appliances

Output 1.5: Measures to mainstream biodiversity into hunting, watershed management, construction and/or tourism sectors identified, developed and initiated

- First phase of wildlife survey conducted, the second phase would be completed in October, 2009.
- Under the watershed management a total of 8 schemes implemented with the following detail:
 - Construction of 2 water ponds (mini dams) completed, 2 in progress
 - Construction of 2,500 rft. flood protection gabion walls and flood protection embankments in 5 CCOs completed and 300 rft. in one CCO in progress
 - 19 schemes have been implemented in water supply (2), water channels (13) and reservoirs lining (4).
 - Medicinal plant survey for both fall (2007) and spring (2008) season conducted and report completed

- Construction of water harvesting structures
 - Training of 26 CCO members in watershed management
- Renovation of tourist huts is in progress.

Output 1.6: Measures to combat die off developed and implemented

- Assessment survey report finalized by expert on assessment of Mistletoe and dieback problems.
- Maintenance of 50,000 seedlings nursery.
- Conducted training of 25 CCO members in propagation and cultivation of medicinal plants.
- Balochistan Forest and Wildlife Department facilitated in management and protection of Juniper forests.

Output 1.7: Linkages established with private sector in select sectors

- Linkages established with the Agribusiness Pakistan in livestock and agriculture sectors.
- Linkages established with UNDP's Mass Awareness for Water Conservation project, who have facilitated the project in capacity building of CCO members in water sector. They are also planning to extend the cooperation in installation of high efficiency system in project CCOs

Output 1.8: Highlight the significance of Juniper Forest Ecosystem at local, regional and global levels

- Posters of Juniper printed and disseminated.
- Printing of project brochures is in progress.
- "Ziarat Fact Booklet" compiled and would be published soon.

Outcome 2: Mechanisms for replicating and disseminating the sustainable utilization regimes across the entire Juniper forest ecosystems of Balochistan evolved

Output 2.1: Community and government jointly recommended approach and lessons from each selected valley under outcome 1

- For strengthening capacities of government line department staff, NGO and CSO members in biodiversity conservation a 3 day training session was organised.

Output 2.2: Capacity for up-scaling, replication and dissemination strengthened, notably in government departments

Output 2.3: Successful approaches from outcome 1 available for replication across all the Juniper forest ecosystems in Balochistan

- Project is facilitating the preparation of Integrated District Development Vision (IDDV) for Ziarat. In this regards consultative meetings have been organised in Ziarat and Sinjawi.

Output 2.4: Where appropriate, successful approaches from outcome 1 disseminated across Pakistan and countries with similar threats and ecosystems

Earthquake Rehabilitation Initiatives

UNDP had allocated additional US\$ 78,000 for assisting the affected communities after severe earthquake in 2008. Through this initiative, 8 rehabilitation schemes related to water resources and flood protection are in progress.

5. Conclusion and Recommendations

Based on the record of activities undertaken and the assessment of progress against Outcome Indicators/ Output objectives, the MTR draws the following conclusions and recommendations for each Outcome.

Outcome 1: *Economically, ecologically and socially sustainable utilization of juniper forest ecosystem operationalised at 4-6 selected small valleys*

Because of limited funding available four valleys were selected in the first place. On the directions of the PSC however entry has been made in the fifth valley as well. This is however too early to gauge the overall progress on this Outcome. Reasonable progress has however been made on Component Outputs as detailed below:

Output 1.1: Organizational structure in villages in selected valleys

With the establishment of CCOs and WCCOs, the project has made good progress. This however needs to be strengthened further by registering them for future sustainability. Over the next two years the project should bring into effective operation the institutions that will help manage these community organizations such as the Provincial and District government offices that will support the establishment and operation of community organizations in the valleys as the principal mechanism for conservation integrated with rural development. The formation of Women CCOs is a commendable effort in an area where women are rather forbidden to take part in outdoor activities. The effectiveness of these organizations towards the conservation of natural resources however remains to be seen.

Output 1.2: Social and needs assessment of selected valleys, including gender assessment

Needs assessments have been made at the time of formulation of community organizations and in response to these needs interventions have been made. The community members in their meeting showed satisfaction on the response of the project.

Gender assessment though mentioned has however not been achieved.

There has been a delay in the formulation of Valley level Conservation Plans. This can hamper the sustainability of the interventions made. MTR recommends that [7] *the Valley level Conservation Plans may be formulated and operationalised on priority basis.*

The support being provided to the BFWD in renovating the Medicinal Plants Centre must be followed through by a chain of operations to utilize, collect and market the medicinal plants: recommendation [8]. **The Project rejoinder** “A detail plan for operationalising the Medicinal Plants Centre has already been discussed with the Balochistan Forest and Wildlife Department during the Project Implementation Committee meeting held on 11 Sep 2009. Capacity building of departmental staff and local communities in sustainable harvesting, collection and marketing aspect of medicinal plants has also been included in the plan. It would be implemented as soon as the Centre is ready”. **The Mission suggests to get a lead on this sector inputs made under MACP**

Output 1.3: Measures to mainstream biodiversity into livestock sector developed and implemented

Whereas capacity building efforts have been made on the part of the project, the range resources and the livestock use has not so far been determined nor has the grazing system been studied. It is recommended that [9] *range resources may be assessed and grazing management system be adopted at the earliest.* **The project plans to undertake this activity in the near future.**

Output 1.4: Measures to mainstream biodiversity into energy sector developed and implemented

The output needs to focus on the reduction of fuel wood (energy) use in the area and thus the dependency on the Juniper forests. Because of the provision of piped gas to Ziarat this pressure has largely been reduced. But non-provision in other project valleys demands that alternate energy measures be adopted in earnest. Provision of fuel efficient stoves may be a good measure but this fall much short of the requirement as under the circumstances, it seems, that there may not have been any commendable reduction in the use of Juniper wood as fuel wood. Use of Solar panels for drawing water from dug wells may save the diesel but not the fuel wood. *To address this issue other interventions will have to be considered; provision of LPG and stoves on subsidized rates could be one alternative: recommendation [10].* **The Project rejoinder** “Project has already distributed about 350 stoves, while 150 more are being made. More stoves would be distributed among CCO members in the coming months. The follow up survey has indicated a very positive and encouraging response from the CCO members. Hence, there is hope that these would be replicated by the communities by themselves. The project is also working on introduction of solar lanterns and solar water heaters.

Use of LPG cylinders was introduced in 1996-97 but failed miserably due to non-availability of refilling facility in the vicinity

The Mission's viewpoint “More than distributing stoves it is important to train the communities and motivate them to construct the stoves themselves.

Please try patronizing LPG cylinders. Technology is now in much more advanced stage”.

Output 1.5: Measures to mainstream biodiversity into hunting, watershed management, construction and/or tourism sectors identified, developed and initiated

Hunting: The project has reported that the first stage of wildlife survey has been completed but no report was provided to the MTR. The parameters of the survey are also not known. It is recommended that [11] *the wildlife surveys may be completed at the earliest and the reports may be made be made available. The surveys should also include the wildlife species hunted (even though illegally), their population, hunting pressure, status of legislation and the production potential.*

The MTR mission was impressed particularly with both the quantity and quality of the groundwork constructions for water management in the landscape and for domestic and agricultural use. The funds had been used to sub-contract local community members to undertake the construction works, with supervision and quality assurance by the project, delivered largely in the form of on-the-job training. Thus, besides the renovation and development of a water management system, there were additional benefits in the form of local employment, income generation and skills acquisition; increased cost-effectiveness; and enhanced local ownership and pride in the development works.

The range of activities and results that has been achieved is commendable, but the lack of clear and precise objectives may have led to the project doing too much itself, in rather an *ad hoc* or piecemeal manner, and to have not focused on developing the system that will sustain future initiatives. For example, the project has supported a considerable amount of construction work for water management. However, there is no system established for sustaining these efforts, making it doubtful whether such development works are replicable or affordable in future without another aid project; and whether the community will be inclined or able to maintain and extend the development works once the current project has ended. The Project Viewpoint “Since all activities are being undertaken in close collaboration with line departments and communities, the project interventions have greater chance of sustainability.

CCOs themselves have identified their needs and after prioritisation, are undertaking activities through cost sharing. In some cases they have contributed more than their determined share and in some cases they have undertaken extra work through their own resources.

The mega project by the Government of Pakistan is also a gesture of government's commitment for Juniper conservation, ensuring sustainability of the efforts”.

Whereas eco-tourism plans have been formulated, the requirement is to implement these.

Output 1.6: Measures to combat die off developed and implemented

Whereas survey report has been made available no effort seems to have been made to take measures to control die off of Juniper. The report states that the hotspots for the Juniper Mistletoe are Chasnak, Sasnamana and Saleh Sakubi areas, the area that have not been selected by the project for interventions. Dieback even though is not considered a disease but its incidence is rather alarming. The survey report suggests that there has been a reduction in the incidence of the disease also seems to be on the lower side. It is recommended that **[12]** *based on the available data measures may be adopted to address the disease and die back issues at least in the project valleys.* **The Project viewpoint** “The project was mandated to assess the status of die-back and Mistletoe infestation and the Balochistan Forest and Wildlife Department will take the remedial measures”.

A plant nursery has been established but its objective has not been made clear.

Output 1.7: Linkages established with private sector in select sectors

Whereas linkages were to be established with private sector in ecotourism, energy, water, agriculture and livestock sectors, linkage has only been established with Agribusiness Pakistan in agriculture and livestock sector and even in this case parameters of coordination have not been made known. It is recommended that **[13]** *efforts be made in earnest to develop linkages with the private sector in all sectors of study, MoUs signed and ToRs established, and operationalised.*

Output 1.8: Highlight the significance of Juniper Forest Ecosystem at local, regional and global levels

The project is in the process of producing and has distributed some good quality printed material relevant to biological diversity, environmental impact of human actions, and nature conservation specific to Juniper forest ecosystems. The common difficulty with awareness-raising as a project activity is that the end-point is not specified. It is not clear when the significance of Juniper forest ecosystems to the target audiences has been highlighted sufficiently. It is recommended that **[14]** *the project should not aim to highlight the significance of Juniper forest ecosystems to the target audiences in any general sense; it does not have the time or resources to have an impact in this area. The project team should instead plan a small number of awareness-raising/ information/ education actions with precise objectives to contribute to this Output.* The Project viewpoint “The project is addressing both kind of audience, local as well as general. Various awareness activities and products have been and are being prepared keeping these audience in consideration.

Since Junipers are of global and regional significance, there is merit to advocate it at the higher levels. If national/provincial and district authorities recognized its importance then maybe there is hope beyond the project life.

This issue also needs to be linked back to the promotion of a shared vision for the future of the Juniper Forests (see Output 2.3 below)".

The documentary planned to be made must also be made at the earliest.

Outcome 2: Mechanisms for replicating and disseminating the sustainable utilization regimes across the entire Juniper forest ecosystems of Balochistan evolved

Output 2.1: Community and government jointly recommended approach and lessons from each selected valley under outcome 1

The project plans to expose the stakeholders in the Juniper tract to be exposed to the project interventions to motivate them for replication. Except for a three day workshop at Quetta no such initiative seems to have been taken.

Output 2.2: Capacity for up-scaling, replication and dissemination strengthened, notably in government departments

No intervention has so far been made. *A realistic and feasible replication/dissemination plan may be prepared with the help of all stakeholders: recommendation [15].*

Output 2.3: Successful approaches from outcome 1 available for replication across all the Juniper forest ecosystems in Balochistan

The project has helped in the formation of an Integrated District Development Vision (IDDV) for Ziarat wherein the successful approaches from Outcome 1 have been built in.

Output 2.4: Where appropriate, successful approaches from outcome 1 disseminated across Pakistan and countries with similar threats and ecosystems

The information on the project findings has been updated on IUCN website.

Earthquake Rehabilitation Initiatives

UNDP had allocated additional US\$ 78,000 for assisting the affected communities after severe earthquake in 2008. Through this initiative, 8 rehabilitation schemes related to water resources and flood protection are in progress.

6. Project Monitoring and Evaluation

The Project Document describes the planned arrangements for project monitoring and evaluation. These are based on the prepared project plan with performance indicators, and reporting against that plan in accordance with UNDP, GEF and government requirements. Under these arrangements, the project management is required to submit a quarterly Progress Report to the government and UNDP, and to compile an annual Project Implementation Review for UNDP and the GEF, and an Annual Project Report to the Tri-Partite Review body. The project implementing agency, IUCN, is required to report to the Project Implementation Committee and Project Steering Committee, at project inception and 6-monthly intervals. Two independent evaluations are also scheduled, the current MTR and the other at the close of the project.

The reporting schedule is being adhered to. However it has been observed that the monitoring reports record activities but do not enable project managers, supervisors or evaluators to evaluate progress towards planned objectives. The Project viewpoint “It is because of specific reporting formats of UNDP which are more quantitative. UNDP needs to be apprised of this limitation”.

The revised LFA provides performance indicators and a baseline situation report for each proposed Outcome and Output. The progress reports have not been evaluated on the basis of this LFA. MTR recommendation [16] is that a simple system of information management should be introduced across the project, consisting of routine recording of the basic data needed to monitor progress towards each Output. The data recording should be a simple part of the working routine of each project staff member, using a standard structure provided by the logical framework to prepare detailed activity plans, trip reports and activity reports. Each quarter, the information system would provide a succinct note of progress towards each Output. These would be compiled straightforwardly into quarterly and annual progress reports, in the required formats (APR, PIR), which would be linked directly back to the project's logical framework plan.

7. Lessons learnt

Through the MTR, instances were noted of good and poor practices that had especially helped or hindered the project towards achieving its objectives. These instances are drawn together here as lessons for future comparable efforts.

Adaptive management, project design, inception and MTR

The project formulation process: project implementation and monitoring are likely to be assisted by having a complete, carefully thought-through and precise logical framework that is readily understood, owned and used by the project team.

It is also important for project managers and supervisors to be able to “adapt” the project progressively to changing circumstances and to developments brought about by the project itself. The project viewpoint “This has been the norm from day 1. The project has aligned itself along the ground realities and would keep this approach being followed”.

The project formulation process took place several years before operations began, and it was important for aspects of the design such as costs and salary scales to be adjusted at intervals during the project’s life. The project management team should have the opportunity to revise the main elements of the project plan, at inception and again during the project’s life. Holding of the inception workshop in 2007 and the revision of LFA was a good initiative.

The project as a mechanism for sustained change

The government agencies and officials need to give greater recognition to the project as a mechanism for bringing about change, and to realize that they are themselves among the principal targets for change. In order for the objective to be realized, government agencies must work pro-actively with the project to reform themselves, so that they become effective parts of the enabling environment for biodiversity conservation.

There is little indication of this thinking in the relationship between the project and the government officials involved. A common attitude among government officials is that they are supervising the administration of a project, and that the project is primarily a short-term boost to a government agency’s capacity to carry out its work. Many projects are valued principally as sources of supplementary revenue. It is not easy to move beyond this attitude and recognize that in fact the project’s purpose is to assist the agency to develop its capacity to work differently. The government agencies themselves have to accept the need for reforms, to plan and to develop their capacities. They need to develop a partnership relationship with the project, so that they can call on the project to assist them – through training, facilitation or technical advice – in these reform and capacity development tasks.