

(Draft Report)

Final Evaluation:

'Conservation Education & Awareness Component
of
Mountain Areas Conservancy Project

Consultant: Raja Muhammad Zarif

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ACKNOWLEDGEMENTS

Consultant wishes to express appreciation to Energy & Environment Unit – UNDP Country Office Islamabad and IUNC - Pakistan – The World Conservation Union who entrusted and facilitated to undertake this evaluation study.

Thanks are also extended to the National Project Manager, Mountain Areas Conservancy Project (MACP) who facilitated and shared his experiences and views that helped in the finalization of this document.

The unforgettable cooperation extended by the IUCN, MACP and WWF-P Conservancy area staff, community leaders, members, villagers, teachers, students, youth and religious leaders during severe climatic condition is highly appreciated. Under prevailing circumstances and time constraints and without their support, this report would have been an uphill task.

This report might not have been possible had there not been the unwavering and resolute support, guidance, and encouragement so graciously afforded by Dr. Ghulam Akbar, Director Environmental Education of WWF-Pakistan at Islamabad.

Last but not the least, the support received from all those who have participated in administrative, logistic, travel, provision of literature, field discussions and observations, sharing of their experiences and views, and facilitation in any manner to embark on and finalize this study is highly appreciated and acknowledged.

LIST OF ACRONYMS

AKRSP	Aga Khan Rural Support Program
AKES, P	Aga Khan Education Service, Pakistan
APS	Army Public School
ACC	Area Coordination Committee
AFP	Adventure Foundation Pakistan
AMPS	Al Mustafa Public Schools
AKS	Aga Khan School
ANPW	Annual Networking Planning Workshop
BACIP	Building and Construction Improvement Program
BEAJ	Baltistan Association of Environmental Journalists
CCS	Chitral Conservation Strategy
CEC	Commission of European Communities
CMC	Conservancy Management Community
CEE	Coordinator Environmental Education
CIC	Conservation Information Center
CCHAs	Community Controlled Hunting Areas
CBO	Community Based Organization
DCC	District Conservation Community
DoE	Directorate of Education
HERP	Hunza Education Resource Project
HEC	Hunza Education Committee
ICDP	Integrated Conservation & Development Project
IUCN	World Conservation Union
LFA	Log frame analysis
LEAD	Leadership for Environment and Development
MT	Master Trainers
MACP	Mountain Areas Conservancy Project
MELGRD	Ministry of Environment, Local government & Rural Dev.
MoU	Memorandum of Understanding
NAs	Northern Areas
NWFP	North West Frontier Province
NRM	Natural Resource Management
NACS	Northern Areas for Conservation Strategy
NGO	Non government organizations
OHP	Over Head Projector

PAC	Project Advisory Committee
PCP	Participatory Conservation Planning
PRIF	Pre Investment Feasibility
PSC	Project Steering Committee
PDCN	Professional Development Center North
PDCC	Professional Development Center Chitral
PRA	Participatory Rural Appraisal
RNA	Resource Need Assessment
RPM	Regional Project Manager
SEE	Society for Environmental Education
SEC	Serena Environmental Committee
SMC	School Management Committee
ToP	Terms of Partnership
UNDP	United Nations Development Program
VCC	Valley Conservation Committee
VCP	Valley Conservation Plan
WCC	Women Conservation Committee
WED	World Environment Day
DFID	Department for International Development
EED	Environmental Education Division
EEP	Environmental Education Programme
EE	Environment Education
EEMS	Environmental Education Model School
EC	European Commission
EPA	Environmental Protection Agency
E&A	Education and Awareness
FIR	First Investigation Report
FES	Fuel Efficient Stove
GEF	Global Environmental Facility
GED	Government Education Department
GoP	Government of Pakistan

EXECUTIVE SUMMARY

Conservation, Education, and Awareness component of MACP is a “non-ending” process that tends to educate and train key players and masses in environmental education with lasting impacts such that to manage the natural resources of the project areas in a sustainable manner.

WWF-Pakistan has substantially contributed to build the knowledge and capacity of teachers, students, youth, community committee members, and religious leaders, to undertake activities related to conservation of biodiversity in the project areas. This has been effectively done by establishing village conservation committees, and by designing and implementing culturally appropriate strategies and involving women in the decision-making processes, besides making the concerned interest groups aware of the benefits of conservation and sustainable usage of biodiversity components in the on-going community development schemes.

The overall evaluation rating of the performance of WWF-Pakistan was found “**Good**” in the perspective of accomplishing the demands of the mandate under **OUTPUT 2**. The overall impact of activities undertaken by the WWF- Pakistan on **OUTPUTS 1,4, and 5** of the MACP documents was also adjudged as “**Good**”. These conclusions are drawn on the premise that WWF-P performed well in building the capacity of institutions and individuals at the community-based organizations to conserve biodiversity in sustainable manner and by concentrating on agencies and communities to pool-up financial and human resources for eco-development in conservancies.

As for the evaluation of **EC Support Project**, the overall performance of WWF-P was assessed as “**Very good**” in terms of training and education material building but “**Excellent**” in capacity buildings of staff, departments and partners and involvement of schools and youth.

INTRODUCTION

Background

An initiative of the United Nations Development Programme (UNDP), the Global Environmental Facility (GEF) and the Government of Pakistan (GoP), the Mountain Areas Conservation Project (MACP) was intended to empower the local stakeholder communities to use the natural resources in a sustainable manner without compromising the integrity of the natural environment. The World Wide Fund for Nature-Pakistan (WWF-P) is co-implementing one of the project components pertaining to education and awareness of the local communities under Output-2.

The co-financing of WWF-P under EC project dealt with ancillary issues such as waste disposal, littering, pollution, soil erosion and management of community wood plots in addition to provision of support for the development of literacy training materials with conservation themes.

WWF-P Task

To accomplish the objectives of Output-2, WWF-P was entrusted to:

- develop and implement a communication strategy;
- implement a “Schools in Conservation” program;
- operationalise informal awareness programmes; and
- ensure the support of local mullacracy in the conservation and sustainable usage of biodiversity

WWF-P requested UNDP and GEF - the principal financing agencies - at the end of five-year period for final evaluation of the **Conservation Education and Awareness Component of MACP** logically termed as **Output-2** along with European Union (EU) funded project titled “**Environmental Education Program in Support of MACP**” - shortly termed as **EC Support Project** - as co-financing to meet the MACP objectives.

EVALUATION SCOPE

Objectives

The final evaluation was meant to critically review all the systems put in place and analyze the favorable and unfavorable conditions and their implications on

the effective and efficient implementation of the project keeping in view the capacity of implementing agencies and support given by the partners and stakeholders. As such, following are decisive objectives of the evaluation:

- To assess the progress of Conservation Education Component and EC project vis-à-vis the outputs as enunciated in the project documents
- To assess their effectiveness towards achievement of the project objectives and goals i.e. support to MACP in Component No. 1, 4 and 5
- To identify gaps in implementation of the project activities
- To assess sustainability of the project (i.e. the likelihood of the project interventions continuing after donor support discontinues)
- To determine ways and means to improve the project design with special focus on the content and delivery of environmental education and awareness in mountain communities as a replication strategy

Methodology

Evaluation has long been important for funding agencies to assess the extent of actual change against stated objectives, and thus to judge whether or not development assistance has been successfully used. This can be done, by involving external experts evaluating against indicators that have been determined externally or through rigid, imposed monitoring procedures. Yet changes are afoot and organizations are increasingly using M&E for internal learning and continual improvement to their work.

Evaluation of the Output-2 involves the assessment of change through processes that engross many people or groups, each of whom is affecting or affected by the impacts being assessed. It is a challenging process as different stakeholders examine their assumptions about what constitutes progress – and together deal with the contradictions and conflicts that can emerge.

For managers of funded work, evaluation stimulates a shift from assessing impacts based on given perceptions of benefits to include the perceptions of the target population. Evaluation can, therefore, provide more comprehensive information on efficiency, relevance, sustainability, impact and effectiveness of work in progress. By learning from mistakes *en route*, it can lead to timely corrective action. By highlighting the successes of people's efforts, it can increase motivation. The systematic and continual exchange of information can also strengthen working relationships. As the effectiveness of evaluation is based on sharing information, it requires careful identification of those who should share

information and what information is worthwhile sharing. The following procedure was adopted for evaluation methodology:

1. **Literature Review:** As a first step and before undertaking field work, the review of the project documents and related literature was made to gain in depth knowledge about the theoretical aspects of approaches/ methodologies adopted for the implementation MACP.
2. **Meeting Stakeholders:** As second step meetings were held with members of valley conservation committees, social and religious leaders, villagers, allied departments, and non-governmental organization working in the area to have their independent views about the activities undertaken by the project.
3. **Field Observation:** The third step was impact assessment of activities undertaken by WWF-P through Participatory Rural Appraisal (PRA) approach to seek opinion of trained teachers, students, village youth, members of local institutions, field staff, project supervisors, line departments, and local NGOs.
4. **Physical Verification:** In the fourth step, the selected project areas were visited along with the WWF-P staff to study project level activities to gain information regarding implementation of Output-2 dealing with education and awareness of targeted communities.

This evaluation report is based on the assessment of key parameters of four areas: (i) relevance and appropriateness; (ii) effectiveness; (iii) sustainability; (iv) efficiency; (v) impacts; and (vi) design improvement.

Analytical Approach

The analytical part of the report is based on:

a) Effectiveness

1. Extent of achievement of the project objective
2. Extent of communities' understanding and adopting E&A concepts
3. Actual and planned project benefits
4. Unforeseen benefits & results
5. Adequacy of project activities to realize objectives

b) Relevance

1. Alignment of E&A objectives with MACP's objectives
2. Changes, if any, in directions to better reflect E&A needs

c) Sustainability

1. Extent of E&A support likely to continue project activities
2. Willingness of involved parties to continue E&A activities on their own

d) Efficiency

1. Extent of cost-effectiveness of ways and means adopted for E&A
2. Appropriateness of step taken in each phase
3. Extent of appropriateness of interventions and methods used for E&A

e) Impacts

1. For a discussions about conservation issues
2. Support to enhancement of MACP “Conservancy” concept
3. Apparent change in community’s perception
4. Local media coverage
5. Communities exercising sustainable practices
6. Reduction in fuel wood pressure on natural resources
7. Improvement in outlook of socio-economic conditions in the area
8. Reduction in hunting/poaching cases
9. Religious leaders support
10. Youth, school, villagers etc. participation in conservation activities
11. Activeness of institutions in Environmental Education (EE)
12. Institutionalization of EE at school level
13. Mechanism developed to integrate EE with school curricula

f) Design Improvement

1. Better ways to improve project objectives
2. Improvement of mechanism to integrate EE with school curricula

Evaluation Rating

The Output-2 component of the MACP was evaluated on five-point rating scale (1=Excellent, 2=Very Good, 3=Good, 4=Satisfactory, and 5=Poor) based on quantitative and qualitative performance judgment of evaluator and target groups in evaluation process. The rating was developed for consistency while the evaluation parameters included:

- (a) Achievement of objectives and planned results
- (b) Attainment of outputs and activities
- (c) Implementation approach
- (d) Stakeholders involvement
- (e) Impacts
- (f) Monitoring and evaluation

- (g) Replicability
- (h) Sustainability

General Evaluation

The project made strong provision for impact monitoring of the developed indicators for the assessment of performance. A Sub-contract was awarded to WWF-P keeping in view its technical capacity in the field of conservation education and awareness to accomplish activities and task listed under Output-2 of the MACP document. WWF-P as per agreement was bound for timely delivery and quality inputs as per terms of MoU.

OUTPUT-2 component of the project was related to imparting of conservation values to the local communities through a well-targeted conservation education and awareness drive, with developing avenues for sharing of information/experience regarding wild resource management amongst villagers.

As per agreement the activities under Output-2 were to be undertaken by WWF-P while GEF inputs were limited to conservation awareness-related works to support biodiversity management efforts in the Conservancies.

The supplementary issues such as waste disposal, littering, pollution, soil erosion, and the management of the community woodlots in addition to development of literacy training material with conservation theme. The inputs for ancillary activities were contracted by WWF-P from the Commission of European Communities (CEC) under the project entitled “**Environmental Education Program in Support of MACP**” commonly termed as EC. The specific intervention logic for the achievement of Output-2 by the WWF-P was:

- i) Develop and implement communications strategy
- ii) Implement “School in Conservation” Program
- iii) Operationalise informal conservation awareness program
- iv) Enlist the support of religious leaders in conservation activities

Project Area

The project area covered four conservancies as per details given in Table-1.

Table 1: Location and Composition of MACP Conservancies

S.No.	Conservancy	Mountain Range	Location District	Area (Km ²)	Population
1.	Qashqar	Hindukush	Swat, Dir, & Chitral	3,050	104,272
2.	Trichmir	Hindukush	Chitral	3,580	27,497
3.	Gojal	Karakoram	Gilgit	4,830	31,827
4.	Nangaparnat	Himalayas	Skardu & Diamer	4,905	121,362
Total				16,365	284,958

The conservancies selected for the project interventions were located in not only the remotest areas of the Northern Pakistan but also facing the climatic, topographic, economic, and transportation harshness and difficulties. Majority of the population in the area was poorest of the poor and had total dependence on natural resources to meet their ends.

Ecological Context

The project area has epic potential from the biodiversity perspective. The flora and fauna of the region is assorted with globally represented noteworthy species including Snow leopard, Markhor, Himalayan ibex, Ladakh urial, Blue sheep, Marco polo sheep, Musk deer, Flying squirrel, an array of avifauna, and a range of economically useful flora. A retrogressive trend of flora and fauna has been mainly set in the project area on account of increasing human population, agriculture extension, non-regulated use of pastures/rangelands and indiscriminate hunting and poaching of ecologically threatened species. Thus conservation and sustenance of Broad Mountain landscape, threatened local and migratory fauna, and declining economically and ecologically important flora was considered need of the present time.

Social Context

The human population is permanently concentrating in the valley bottom with terraced landscape for agriculture between natural and man-made water channels. The upland areas are generally used for pastoral activities and seasonal agricultural practices at suitable places. Unwise agriculture practices, hunting and retaliatory killing of predators, unchecked removal of trees and bushes for commercial and domestic use as timber and fuelwood and gathering of medicinal plants for personal use and sale threatened the natural resource of the project area.

Causes to Species and Habitat Threats

The primary causes of the threats to ecosystem and biodiversity in the project area were mainly associated with low institutional capacity and weak policies yielding self-interests of individuals' structural, social, and economic powers. The education and awareness campaign to some extent motivated the innovators and educated individuals but early and late adopters of project interventions have yet to join the campaign of the project. That is why the VCCs could bring in:

- i) Half-hearted participation of communities to plan and manage the resource
- ii) Poor control of VCCs to enforce agreed practices of resource use and conservation
- iii) Masses have yet to trust and believe the introduced interventions for the sustained management the depleted resource base.
- iv) The networking within and between communities is yet to function.
- v) The alternative commercial fuel sources are not only expensive but subject to erratic and delayed supplies.
- vi) Livelihood opportunities at village and conservancy levels are limited
- vii) Moral values to sustain the resource are in a weaker position in remote areas as "tragedy of commons" is the rule of the game.

(a) Stakeholders' Involvement

The GEF-Pre-Investment Facility (PRIF) phase developed overall participatory strategy to engage local communities in conservation planning by building upon institutional base provided in the form of Village Organizations (VOs) and Women Organizations (WOs) by the Aga Khan Rural Support Program (AKRSP) in the project areas.

Taking advantage of social mobilization efforts made in the past by the AKRSP and other Non Governmental Organizations (NGOs), the MACP established Valley Conservation Committees (VCCs) at the cluster (watershed) level for engaging community members in conservation management efforts. Results of general evaluation scores and ranking of MACP is tabulated as under:

Activities undertaken	Ranking Score	Evaluation Status
1. Selection of project area	1	Excellent
2. Ecological context	1	Excellent
3. Social Context	2	Very good
4. Community working to reduce threats	4	Fair
5. Stakeholders involvement	3	Good
Overall Ranking	2	Very good

The overall ranking of the MACP project as per given mandate is **“Very good”**. The activity wise evaluation results are as follows:

- The selection of conservancy’s areas can be rated as **“Excellent”** as several rural support programs have already development village-based organizations for their activities. These have provided strong base to support formulation of conservation committees at Conservancy and District levels.
- Majority of known endemic species of plants and animals of Pakistan are found in the project conservancy areas. In terms of ecological context, ratings of the conservancies are ranked as **“Excellent”**.
- Tenure status of pastures and wastelands is yet to be determined as those are traditionally used as communal lands. Based on evaluation ranking, the project area in the social context is rated as **“Very good”**.
- The analysis revealed that major factors of threats were still dynamic. The entrenched and sublime anti-project forces in the communities are not fully tuned to the level of accepting the objectives of management plans and empowerment of local institutions. The overall rating of communication and awareness strategy for early adopters has been ranked **“Very good”** but adjudged **“Fair”** when evaluated at masses level.
- Lack of livelihood opportunities, alternative fuel and fodder sources, and trust on VCCs were the major proponents to be an impediment in the way of desired pace of community-based conservation of natural resources. The activities related to formulation of VCCs and their involvement at all stages is evaluated as **“Good”**.
- The communities of each site developed Conservation Plans (CPs) and entered into Terms of Partnership (ToP) for the mutual benefits and to provide checks and balances while enforcing the conservation measures undertaken by the project. New institutions as District Conservation Committees (DCCs) were created at the district level to oversee conservation management in each conservancy. The main aim to do so, was to mold the communities’ development efforts to support conservation objectives of the project. All such efforts are ranked **“Very good”**.

In-depth Evaluation - Output-2

The final evaluation of Output-2 was meant to provide the donors as also the exclusionists, an independent assessment of progress made against the pre-defined targets during the project period (July 1999 – December 2005). Specific objectives of the formative evaluation were:

1. To assess the progress of the Conservation Education Component and EC project vis-à-vis the output given in the project document;
2. To assess their effectiveness towards achievement of project objectives and goals in support of MACP Components No. 1, 4 and 5;
3. To identify gaps in implementation of project activities;
4. To assess sustainability of the project;
5. To determine ways and means to improve the project design, with special focus on the content and delivery of environmental education and awareness in mountain communities as a replication strategy in future.

The Mid Term Evaluation Report (MTER) judged that WWF-P has produced impressive array for education and awareness (E&A) campaign in MACP areas under Output-2. The meticulously developed material has been used to educate and aware students in schools, teacher trainers and teachers, VCC members, government officials, village men, women (to some extent) and youth, and mullahs. The project has also used local public media to have mass communication and promote conservation of natural resources and biodiversity through MACP. The evaluation team also observed that E&A component more effectively directed towards building cooperation and capabilities of local institutions and government departments for co-management of MACP areas. Active community participation is considered as an essential component of MACP. Effective long-term management of the four Conservancies was based on capacity building of community level organizations to plan, manage, and conserve biologically diverse resource at local level.

A Logical Framework Matrix (LFM) developed to implement Output-2 was evaluated as per activities mentioned in the project documents to arrive at meaningful evaluation ranking as per devised methodology. Evaluation ranking of correlated activities is given in Table-2.

Table 2: Evaluation of Activities undertaken by WWF-P for Output-2

Activities for Output-2	Performance indicators	Evaluation Ranking
2.1.1 Assess conservancy-specific communication and conservation awareness needs through a Scoping exercise	Communication & Awareness Strategy was documented through Scoping exercise.	1
2.1.2 Develop a project logo	The Project logo gives a quick peep in to what it intends to accomplish. Being an impressive and imaginative, the Logo has a pleasant impact on the onlookers	2
2.1.3 Develop a web page	A web page has a very vital role in making the project known the world over, besides providing up-to-date information on the project-based interventions. It also gives some very crucial information to educators and researchers helping them in designing projects on similar lines elsewhere in the world. As such, the Web site is of tremendous importance.	1
2.1.4 Prepare a regular conservation worksheet for radio/print media	Developed worksheets for radio and print medias	2
2.1.5 Develop linkages with education/awareness initiatives of the regional conservation strategies	The linkages were developed but not very effective	3
2.2.1 Select teachers for "train the trainers" activities	Teachers were selected and trained as master trainers	1
2.2.2 Develop training material and education modules with the help of teachers	Training material and modules developed with the help of teachers	1
2.2.3 Integrate conservation awareness into primary school curricula	The primary school curricula had topics related to environment and conservation, which were strengthened by training teachers in teaching methodologies and material.	2
2.2.4 Organize teachers training workshops	Teachers training workshops were arranged.	2
2.2.5 Organize lectures on conservation related topics	Lectures were organized in schools and community centers	3
2.3.1 Design resource materials for use in community outreach	Community outreach material was designed	3
2.3.2 Organize awareness raising activities as part of inter-village exchange	The inter-village exchange activities were organized	3
2.3.3 Organize conservation awareness workshops for religious leaders	Workshops were arranged for religious leaders	3
Overall rating of Output-2		Very Good

OUTPUT-1 Community Organization and Planning

The MTER pointed out that many community groups have shown strong commitment, enthusiasm, and resourcefulness but most of the project's efforts over the period of initial three years remained focused on harmonizing the activities leading to organization of community and participatory resource

planning across the proposed conservancy area. The field units have put in determined efforts to engage the key community members and enroll the villagers in the process.

The progress to work with communities in a synchronized manner became more slow, complex and difficult with the passage of time. The anticipated pace of work was markedly hindered because of lacking interest or suspicion about the continuity of thought-out activities after the project completion phase. The community mobilization appears to be a non-ending endeavor and is needed to continue throughout the project period or afterward till the communities are fully assured and capable of handling the resource conservation in a sustainable manner.

The mistrust of villagers to manage the resource with the help of representative local organizations and institutions on their own was diluted to greater extent as activities pertaining to education and awareness trickled down to the levels of village youth, religious leaders, and households. Masses are still apprehensive about transparency of implementing and controlling activities of participatory resource management plan in its spirit by the VCCs. In the absence of development activities related to water, fuel, income generation, health, and education, the creation of awareness to conserve flora and fauna of the project area will be an assertive exercise.

The situation is ripe to demonstrate effectiveness of participatory plans over a small area under the control of the respective VCCs by seeking the cooperation of stakeholders of the village. This will not only provide an opportunity to study the level of motivation and social dynamism among the participating communities and institutions developed but also facilitate MACP to standardize the implementation mechanism to achieve replication over larger areas.

OUTPUT-4 Village Eco-Development

Economic development through integration of regional, ecological, and biological interventions was the main stay of the MACP. The partner agencies were made responsible to propose an eco-development structure at suitable places such as irrigation channels, hydro powered lift irrigation system, ecologically viable and sustainable grazing practices, improved livestock husbandry, social forestry, and entrepreneur development to increase household income by providing technical and financial support.

MTER judged that little progress was made by the potential partners to gain the desired level of eco-development. The useful partnership could not be developed between MACP and non natural resource management (NRM) organizations and

government departments. The failure to provide desired development resources or assistance has also affected the progress to be made in other components of MACP.

The major objective Output-4 was to motivate partners to embark on productive infrastructure and livelihood activities responding to eco-development needs as orchestrated in the Conservation Plan of MACP. As no significant headway has been made to develop co-operation between MACP and partner agencies/departments, therefore, the E&A component had no opportunity to provide their inputs in planning and implementation of ecological sound development schemes.

OUTPUT-5 Sustainable Natural Resource Use and Village Livelihood

The village livelihood was foreseen to improve by attaining sustainable natural resource use (SNRU) under this component. This seems to be craving objective of MACP after having cognizance of the impoverished and subsistence state of the natural and man-made resources in the conservancy valleys. The major focus of this component was to improve resource tenure and custodianship through trophy hunting, commercial use of medicinal plants, improved pasture and livestock management, and ecotourism for better livelihood of villagers.

The MTER observed that greater attention was needed to this component as small number of communities has successfully established trophy hunting of ibex and markhor. The report also emphasized whole-hearted attention on strategic attention for innovative and creative options for small business planning, credit financing and marketing of other natural resource products and services relevant to village enterprise culture.

The WWF-P succeeded under E&A component of Output-2 to disseminate information through trainings, education material, lectures, literature, seminars, competition, walks, charts, films, radio broadcast, newspapers, and signboards to educate and increase awareness among target groups and villagers. The teachers, students, youth, VCCs members, religious leaders, village elites, beneficiaries of trophy hunting, tourist guides and innovators are appeared to highly motivated for the sustainable use of natural resources. They also appeared to be highly satisfied by the activities undertaken by the WWF-P for E&A of the community in conservancy areas.

Evaluation Findings

- The evaluation study indicates that the overall ranking of activities undertaken by the WWF-Pakistan for project component OUTPUT-2 was accomplished in a **“Very Good”** manner (Table 2).
- The E&A activities were found satisfactory in effectiveness, excellent in relevance, good in sustainability, and very good when in reliability, impact, and design. The overall impact is rated as **“Very Good”** (Table 3).
- There is none in the project area who is openly against the local institutional and human-resource capacity to handle E&A. Most of the villagers in the project areas proclaim array of benefits if local institutions take their rightful place in the system. It was equally evident that capacities are not being utilized or built at the pace that these claims would imply to be essential.
- The capacity building of local institutions is highly acknowledged by the communities but over-reliance of these institutions on project staff and resources could be easily noticed for the E&A activities that could be managed more efficiently and effectively by the local teachers, community members, mullahs, and political leaders.
- A radical handover of responsibilities of MACP to the local partners is unlikely to occur as long as local organizations are held accountable for their ultimate operational performance.
- The E&A component has made good progress in capacity-building inputs in the form of training, material and the supply of modest attached components for the resource centers. But the intended outcomes in terms of improved performance, better adoption to local realities, and sustained preparedness of the local partner institutions and community members can be judged when MACP transfers the responsibilities.
- The capacity-building for E&A component has provided logical foothold for deciding who should have their capacity built to do what, and when. The actual ebb and flow of investments in capacity building was not followed.
- The capacity-building investments must be targeted towards “good” local institutions and individuals, and stop feeding those which have no significant track records.
- Capacity building is a particularly important aspect of exit strategy in most of the E&A projects. Massive services are frequently required to manage and run service structure developed for this purpose. The source of income to run these activities could not be formalized by the VCCs to run E&A activities in future.

Table 3: Evaluation of Issues and Parameters of E&A Components

Issues	Parameters	Achievement Level			Ranking	
		High	Medium	Low		
Effectiveness	• MACP	√			1	
	• Adoption		√		2	
	• Benefits			√	3	
	• Unforeseen			√	3	
	• Activities	√			1	
	• Policy measures			√	3	
	Overall Impact					Good (3)
Relevance	• In-line	√			1	
	• Direction	√			1	
	Overall Impact					Excellent (1)
Sustainability	• Beyond Project			√	3	
	• Willingness		√		2	
	Overall Impact					Good (3)
Efficiency	• Cost effective		√		2	
	• Actions taken		√		2	
	• Methods	√			1	
	Overall Impact					Very Good (2)
Impacts	• Forum discussions	√			1	
	• Enhancing concept	√			1	
	• Perception change	√			1	
	• Media coverage		√		2	
	• Outlook (Socio-economic)	√			1	
	• Fuel wood Pressure	√			1	
	• Illegal hunting/poaching	√			1	
	• Religious Leaders' support	√			1	
	• Target groups	√			1	
	• Institutions' activeness		√		2	
	• School level	√			1	
	• School curricula	√			1	
	Overall Impact					Very Good (1.5)
	Design	• EE Ways Improvement			√	2
• Integrate Curricula		√			1	
• Overall Improvement		√			1	
Overall Impact					Very Good (1.5)	
E&A Impact					Very GOOD (2)	

EC Support Project

The European Union funded project “**Environmental Education Program in Support of MACP**” was to be implemented by WWF-P in MACP areas. The insufficient knowledge and inadequate training of communities in resource management were considered the root-cause of natural resource degradation in the project area. The PFRIF study recommended incorporation of Environmental Education component in the larger framework of MACP.

To fill-in the gaps in MACP component of Output-2, WWF-P with the financial assistance of EC, provided support to MACP to address the ancillary E&A activities to:

- Train project staff to conduct PRAs
- Conduct training workshops using participatory methodologies for transfer of technology
- Undertake demonstration projects in participatory community resource management by communities
- Train communities of neighboring villages by the trainers from the project sites
- Conduct Annual Planning and Networking Workshops (APNW) for WWF-P education staff and partners
- Provide central support for overall project in financial management, reporting and monitoring by WWF-P
- Develop modules of Conservation Education one each for elementary level
- Train female Teacher Educators in conservation education
- Train female teachers in education techniques to deliver the curriculum
- Sign agreements with government departments
- Deliver presentations on conservation issues to students
- Train teachers to organize various conservation events and activities
- Develop agenda together with trained teachers for greening activities in schools
- Improve public spaces/schools involving students and youth as part of greening program
- Develop conservation education manual for teachers
- Teachers applying conservation education in schools
- Develop six supplementary packages for teachers/students
- Develop wall charts for schools on different conservation issues
- Booklets on resource management techniques for the use of trainers/trainees as guideline
- Develop two case studies and distribute among relevant organizations

Achievements of Target

1. All the project staff was trained by WWF-P to conduct PRAs in RNA exercises organized by MACP in the four-conservancy areas.
2. Eleven against targeted four training workshops using participatory methodologies for demonstration project were conducted. Of these, six workshops were conducted in NAs and five in NWFP on Nursery Raising, Fuel Efficient Stoves (FES), Solar Cookers (SC), management information, EEM schools, Conservation Information Booths (CIB),

- Solid Waste Management (SWM), Community Hall Management (CHM) and Plantation.
3. Nineteen against sixteen demonstration projects in participatory community resource management were completed. Of these, ten were demonstrated in NAs and nine in NWFP on Nursery Raising and Plantation, FES, SC, EEM Schools, CIB, CHM, and SWM.
 4. Six exchange visits of the neighboring communities have been conducted to show demo project sites of all the four conservancies. The balance six visits as per schedule could not be undertaken because of delayed VCCs formation in the conservancies.
 5. The EC project organized five short training courses for the project staff and partners, four networking, two mid-year progress reviews, one scoping workshop and one media coordination workshop.
 6. Twenty-two modules on different environmental education themes were developed and implemented.
 7. Forty-five female graduate teachers (24 in NAs and 21 in NWFP) from government, NGO, and privately run school systems were trained as teacher educators in Environmental Education (EE).
 8. Three hundred ninety eight female schoolteachers were trained in EE.
 9. MoUs were signed with Education Department, AKESP, Army Public Schools and VCCs for the implementation of EE activities in conservancies.
 10. Two rounds of EE follow-up were conducted.
 11. Twenty Nature Study Camps were organized in which more than 576 students and 71 teachers participated.
 12. Thirty greening activities including speech and essay competitions, walks commemorating international environmental days, nature fairs and festivals were organized.
 13. Thirty-three school space improvement activities were undertaken by compound plantings, landscape beautification, water supply, sanitation, classroom displays etc.
 14. A manual for teacher training was developed.
 15. Seven supplementary education packages (including three booklets and four flipcharts) were developed.

16. Eight posters and two wall charts were developed as teaching aids and display.
17. Three booklets were developed and distributed.
18. Eight case studies were developed to project different project interventions.
19. Enlisted the support of eight religious leaders in the conservancy areas and developed literature highlighting conservation in Islam.

The EC project performance was evaluated on the basis of individual activities and their grouping into four major fields namely; 1) Trainings, 2) Capacity building, 3) Involvement of schools, and 4) Education material production. The findings of evaluation for the above categories is as follows:

- The score ranking indicates that WWF-P performance in EC project was categorized as “**Very Good**” in the field of training and conducting workshops to supplement E&A activities and other components of MACP (Table 4).
- The performance under EC project was found as “**Excellent**” in capacity building of teachers in the field of environmental education and training (Table 4).
- The performance of EC project also remained “**Excellent**” in case of involvement of schools in EE.
- The level of producing education material for the master trainers and students has been rated as “ **Very good**”. However, there is room for improvement to display the material in culturally acceptable and socially computable pictorial forms to illustrate the state of natural resources with and without management states high lighting present and future benefits and losses.
- The overall performance of EC project ancillary EE activities to support MACP project activities for Outputs 1,4, and 5 were evaluated as “ **Very good**”.

Table 4: Evaluation of E&A Support through EC Project

Activities	Achievements		Status	Ranking
	Target	Actual		
• PRA trainings	• MACP staff	• Trained all	✓	2
• Participatory Training	• 4 workshops	• 4 workshops	✓	2
• Management Demonstration	• 16 #	• 19 #	✓	1
• Neighbors village trainings	• 12 by trainers	• 6 #	✓	3
• Networking Workshops	• 4 numbers	• 8 #	✓	1
Overall Trainings				Very good (2)
• Module Workshops	• 12 #	• 22 #	✓	1
• Educator Teachers Training	• 20 #	• 45 #	✓	1
• Teachers Trained	• 400 #	• 398 #	✓	1
• Agreements with partners	• All	• All	✓	1
• EE Teachers refresher	• Nil	• 8 #	✓	1
• Follow-ups	• 2 #	• 2 #	✓	1
Overall Capacity Building				Excellent (1)
• Presentations delivered	• 800 #	• 1,804 #	✓	1
• Nature Camps	• 16 #	• 20 #	✓	1
• Greening Schools	• 20 #	• 30 #	✓	1
• Space improvement by youth	• 24 #	• 33 #	✓	1
Overall Involvement of Schools				Excellent (1)
• Conservation manual	• 1 #	• 1 #	✓	2
• Conservation packages	• 6 #	• 7 #	✓	1
• Wall-charts/Posters	• 10 #	• 10 #	✓	1
• Trainers guides/ booklets	• 4 #	• 3 #	✓	2
• Case studies preparation	• 2 #	• 8 #	✓	1
Education material produced				Very Good (2)
Overall Assessment				Very Good (2)

Fuel Efficient Stoves (FES)

The quantum of fuel wood consumption is quite high in the conservancy areas due to cold climatic conditions as compared to other regions of the country. Resultantly, to meet household fuel wood needs, the local population banks upon nearby forest areas or local markets for its procurement. In order to curtail down pressure on adjoining forest areas, the WWF-P along with representatives of VO members negotiated with the community on 40% cost sharing basis to supply fuel-efficient stoves to increase fuel efficiency and improve household hygienic conditions. On recommendation of the community 40 FES were distributed as per agreed terms and conditions. The FES users were found satisfied with performance of these stoves and others are buying from the local manufacturer depending upon their capacity to afford initial cost of Rs. 2,550.

Analysis

The importance of trans-valleys protected areas is becoming increasingly recognized in the conservation of shared resources and migratory species. The MACP project and E&A approaches adopted have the desired strength and sustainability to assist government with such shared resources to develop. The E&A component also has the ability to work out a mechanism to collaborate sustainable management where possible or appropriate to establish cross - valley protected areas.

The long-term suitability of E&A component depends upon impact and cooperation extended by the community organizations and institutions in the areas. It was observed that in systems of smaller size an individual has a great deal of impact. This impact was achieved when she/he had the initiative. The important indicator to judge initiative was the ability of building an innovative E&A practice.

The other side of the coin was cooperation. The balance between individual initiative and cooperation in small rural based conservancy systems may be so precarious that all E&A gears (providers, administrators, and community leaders) must succeed both individually and collectively for accomplishment of raising community awareness and educating individuals to manage natural resources in a sustainable manner.

The sustainability of MACP project is marked by the inability of local committees and institutions to undertake E&A activities in an impact-bearing manner due to social and cultural reasons. Upon the exit of WWF-P/MACP donors the local institutions and individual activists may not be able to perform the way it is during project period. Therefore, integration of E&A Component at VCCs level through the cooperation of individuals is essential.

Exhibit-1 describes the standpoint of integrating E&A within rural communities as the basis for retention. It has three domains—the staff self, the village conservation committee/organization, and the community-at-large and their elements to be considered when studying the integration of E&A innovations in project areas.

EXHIBIT 1: Domain and Dimensions of Integration

Individuals	Organization	Community-at-large
Historical Self Socioeconomic background Previous rural experience Role model and mentors Family background & support Education & experience	Committee Kind of committee Committee structure Size and power of committee Role of extra-local players Historical development	Rurality and extra-local ties Sociocultural milieu Social networks and cohesion Class division
Social Self Social group affiliation Immediate family Roles to fill Institutional membership Community settings Present cultural mix	Members Demographic Number of members Religious ideology Level of cooperation, communication, and interaction Anchorpersons Types of innovation	Economic Current development efforts Resources available (people, institution, financial, knowledge)
		Political Political institution and leadership Level of villagers' involvement Ability to see possibilities
Emergent Self Values Aspirations Strength of identity Creativity	Development Level of involvement Objectives & goals Innovation Self reliance	Other Historical development Geographic coherence

The mutual relationships development between the society (folk), community (place), and work factors (economics) influence each other quantitatively and qualitatively. This is somewhat analogous to three primary principles characterizing the community integration process—security, freedom and identity—and their component dimensions. These principles express more than simple motives to drive E&A actions and integration of community, resulting in decisions to either stay or leave the community organizations (Exhibit 2).

Field discussions and observations revealed that E&A diffusion is not an “event”, but a “dynamic process” as it involves the committee members, their families, relatives, friends, the environment (including attitudes of local authorities), and the community-at-large. These factors are interrelated and, over time, a change in one may trigger a change in others. In simple words, one can expect higher level of E&A among community with lesser degree of diffusion in terms of implementing the resource conservation activities as planned if environment and community-at-large are not responding. More or less similar situation exists in most of MACP areas. The situation can be improved by integrating E&A process as explained in Exhibit 2.

Exhibit 2: Dimensions of Security, Freedom, and identity

Dimension of security	Dimension of Freedom	Dimension of Identity
Confidence in resource restoration	Challenge and diversity	Loss of anonymity
Commitment to aspiration and goals	Ability to educate people	The “like-minded” nature group
Ability to meet household’s needs	Cooperation with people	Roles played and taken
Comfort with institutions	Cooperation within community	Respect for nature
Degree of call coverage	Respect for E&A	Fulfilling aspirations in place
E&A environment and anchorperson	Power in E&A relations	Self belongingness to community
E&A institution development	Ability to develop NRM	Self awareness time and place
Social and cultural network	Diversity in interaction	Creation of future goals in place
Respect for E&A and at-large	Involvement in affairs	
	Personal and family activities	
	Self and place development	

Wood-burning Heaters

The climatic conditions in the MACP areas made the wood as most common source of home heating. Unburnt wood fuel can cause unnecessary air-pollution in the surroundings and nuisance for the neighbour in addition to wastage of money. When wood is burnt completely its residue is ash and Carbon dioxides and water vapors are emitted.

Fireplace or wood stoves are worth to investment. These stoves are generally used to heat a specific room or zone of the house. The technological development generally focuses on the control of fire, heat output, burn times and installation options that have greatly improved. The wood stoves are generally made of steel, stones or cast iron. To choose an efficient design one must look for:

- *Using dry fuel wood*
- *Allowing enough air flow and time for complete combustion*
- *Buying the right size heater is important*
- *Promoting secondary combustion to reduce air pollution*

E&A Overall Impact Assessment

The impact E&A activities in MACP project areas were evaluated in the light of the methodology mandate chalked out in Terms of Reference (ToR). The scoring and impact of E&A activities is given in Table 5.

The evaluation revealed that E&A activities of WWF-Pakistan were instrumental in generating discussions among different forums within and across the communities for and against the implementation of MACP in the target areas. These discussions led to formation of VVCs in those areas, which were lagging behind. In addition to this the process helped in clearance of doubts from the minds of those who were apprehensive about curtailment of their benefits when the control and management of natural resources will be entrusted to the VCCs constituted to pursue project objectives and goals.

Table 5. Overall Impact Assessment of E&A Activities

Category	Impact Assessment		
	Level	Score	Ranking
Community Forum's Discussion	High	1	Excellent (1)
Forum's discussions on conservancy issues	High	1	1
Forum's discussions on power issues	High	1	1
Forum's discussions on benefit sharing	High	1	1
MACP Concept enhancement	High	1	Excellent (1)
Local Media Coverage	High	1	Very Good (2)
Radio	High	1	2
Newspapers	High	1	2
Community Exercising NRM practices	Medium	2	Good (3)
Wildlife	Medium	2	3
Grazing	Medium	3	3
Forest	Medium	3	3
Reduction in Fuel Wood	Medium	3	Fair (4)
Outlook of Socioeconomic improvement	Static	3	Fair (4)
Reduction in illegal hunting/poaching	Medium	2	Good (3)
Religious Leaders' support	High	1	Very Good (2)
Youth, teachers, and activists' participation	High	1	Good (3)
Implementation EE after exit	Medium	2	Good (3)
EE institutionalization at School	High	1	Very Good (2)
EE Integration with school curricula	High	1	Very Good (2)
Overall Performance Based on score	Medium	2.5	Good (3)

The radio broadcasts and newspapers reports, though less frequent, and trainings of teachers and local staff also raised the understanding of general masses in the area to have first hand information about the MACP.

Teachers, students (including girls) and village youth achieved the higher standards of understanding about natural environments when trained to organize various events and activities related to environments and resource conservation. This also triggered concept to keeping their school, home, market places, and village surroundings free from pollution in the form of random littering and garbage dumping and adopt environment friendly mechanism for disposal.

The institutionalization of EE in schools also provoked discussions at household level by the students to motivate other family members including women to adopt conscious measures to keep their environment clean and understand the benefits that can accrue if the natural resources are managed in sustainable manners. Formation of village-youth committees by the dropouts in Sost village in Hunza Valley is the glaring example of trickle down effect of E&A activities of the project.

The socioeconomic outlook of the MACP project area though remains almost static but the people of the area have developed a sense of mitigating their natural resources to maximize their benefits in a sustainable manner. Trophy hunting and Eco-tourism are the main focus of community and they do realize that disappearance of wild animals and forests in their areas will ultimately decrease their direct and indirect level of income and survival. Trophies hunting in winter and tourist in summer are the participatory and valued natural resource related activities on account of their immediate returns.

Effective management of forest and water resources conservation practices in the areas could not hold grounds at community level as benefits reaping horizon is long-term and burdened with uncertainties governing common use. Individual tree-planting and protection efforts on owned land are prominent. The freely grazing livestock of the village is the major factor to discourage planting on both owned and common lands.

The communities had “gut feelings” of shortage of fuel wood and blow of escalating market prices. They also have experience of realization of striking income and savings on fuel wood expenditure from trees planted in the past. But lack of will, short sightedness, shortage of water, and climatic and topographic atrocities renounce practical actions to increase tree cover. The MACP had to invent ways and means to motivate people for their active participation in planting tree at least in the stream and riverbeds to check erosive action of water and provide sizeable wood source for the community.

The key evaluation findings pertaining to impact assessment of E&A activities by WWF-Pakistan venture are:

- The overall performance and influence of village committees and communities at-large in the MACP areas was greatly hampered by the ethnic turmoil in NAs.
- Several rural support programs in the study areas were instrumental in social mobilization and thus facilitated establishment of Valley Conservation Committees (VCCs) in the project areas.
- The E&A mostly succeeded to mobilize and sensitize teachers, students, and members of the VCCs through training, distribution of printed material, arranging quiz and speech competitions and walks during renowned environmental days but masses in the communities remain unmotivated to observe set mutual obligation under Terms of Partnership (TOP) agreement.
- The E&A activities also promoted women participation but the folk remained limited to activities undertaken at the household level and training centers. It is too early to sensitize them to play an active role in outdoor conservation activities keeping in view the prevailing ethnic and cultural limitations.
- It is difficult to find anyone who is openly against building local institutional and human-resource capacities. The E&A component enhanced the ability of community to plan and chalk out procedural guidelines for natural resource conservation.
- The poor performance of local community organization after the exit of MACP was widely acknowledged by the masses. The main message was that processes of natural resource conservation and development have long-term perspective for funding, partnerships and engagement. There was no indication that community-at-large is convinced that local institutions without external funding will have genuine commitment to take leading roles of conserving the resources.
- There is a general tendency of the VCCs to respond to criticism with calls for more training inputs, rather than methodical and critical analysis of what capacities were built through past training, how these capacities were utilized and sustained, and, above all, what impact these capacities have had on committee/community performance. The MACP may review mechanism of how could better assess the outcomes of investments made in locals' capacities building in terms of funding, partnership, and engagement.

Emerging Lessons

The following are some of the major emerging lessons concerning the effectiveness of the internal change process triggered by the E&A component:

Resource Stewardship

- Different community groups and organizations have begun to raise their voices for the conservation of dwindling natural resources.
- Conservation became the part of agenda during routine community meetings and social gathering.
- The urge for effective mechanism of watch and ward to curb destructive activities such as poaching, hunting, and green felling is being felt amongst the majority community members.
- The community feelings for rehabilitation and release of injured and captured animals are gaining grounds. An example of snow leopard cub's care in the house is as astounding friendship with predator.

Income Generation

- Capital building of VCCs through trophy hunting is the main thrust of the conservancy areas. The money thus accumulated can be utilized for welfare of the community at-large.
- Locals have started realizing their role in the effective and sustainable management of adjoining natural benefit for financial and economic gains that can accrue to the community if planned properly.

Partnership

- The education partners including Education Department, Professional Development Centers (PDC), Aga Khan Education Service (AKES), Zahoor Education Academy, and Allama Iqbal Open University in the area have shown their willingness to continue E&R programs as partners.
- District level coordination committees have developed a sense of responsibility to promote E&R activities for better understanding of environment for masses in the area.

- **Environmental Sensitization**
- The schoolteachers have better equipped with environmental knowledge dissemination methodology and are sensitized to promote knowledge and awareness about the role of environment play in economic and social stability of human population in the area.
- The religious leaders and media are convinced to promote the vital role of natural resources and their importance in religion and social systems of the communities living around.

The youth of village Sanik in Garam Chashma area were sensitized through demonstration of E&A to form a group to initiate solid waste management activities and build their financial resources to undertake such activities in future.

The Way ahead

To have better foresight of future and design improvement ways for environmental education to achieve MACP's objectives in a desired manner the current strengths and weaknesses are summarized as under:

Strengths	Weakness and Threats
<p>Multi-functionality The outcomes and outputs of MACP extend to a range of potential participants and beneficiaries, which are also covered by E&A.</p> <p>Independence The WWF-P staff was though aligned with MACP but allowed to work independent from local authorities. It helped to engage with partners and general public and enable them to be more risk-taking than other organizations.</p> <p>Longevity The credibility of E&A component has increased over time and local institutions, partners, community members, youth, women, at villagers at-large recognize the long terms strategic natural resource management.</p> <p>Influence There is evidence E&A activities influence on other institutions and agencies extending beyond the MACP areas.</p> <p>Integrated The role of E&A in integrating environmental, social and economic concern is widely acknowledged.</p> <p>Inclusive The MACP's inclusive approach to local involvement engages a wide cross section of local community and helps to create strong public and political support.</p>	<p>Lack of cohesiveness Whilst flexibility and dynamism is key strength of MACP, it has resulted into diffused program of E&A on account of lacking cohesion and common grounds when working with community. Thus the E&A activities could be effectively utilized for sustainable development of natural resources.</p> <p>Poorly monitored The quality and consistence monitoring of E&A components vis-à-vis Output 1,4, and 5 of MACP was ill timed and inadequate.</p> <p>Unclear accountability At local levels the lines of accountability for effectiveness and continuity of E&A component was not only confusing but also unclear particularly when the community has to sustain it after the withdrawal of WWF-F or MACP.</p> <p>Incompetence of VCCs to Handle E&A The village committees are yet not competent to effectively handle and look after E&A activities and resource centers, the way done under MACP endeavor.</p>

Conclusion Drawn

- The overall effectiveness of E&A activities undertaken by WWF-Pakistan was found good
- The Natural Resource Conservation Education and Awareness is an *on-going process* that demands regular monitoring and follow-up
- The education and awareness activities were found fairly efficient in terms of costs and methods.
- The activities relevance excelled in line and direction
- The sustainability strength of incorporated education and awareness strategies in terms of continuity and willingness was vigorously found in teachers, students, religious leaders, committee members, and partners
- The strategies adopted for education and awareness activities were found quite efficient in terms of costs and methods
- The impacts of education and awareness activities in terms of discussions, perceptions, religious leaders, target groups, and school curricula was high
- The historical pattern of control and management of the natural resources in the conservancies has not yet completely changed in spite of positive contribution made by the MACP and WWF-Pakistan to manage the resources in a sustainable manner. More action by MACP, in conjunction with other stakeholders, is required to address this issue.
- E&A is both a timely and strategic opportunity for to mobilize resources and expertise across the Northern Areas of Pakistan.
- The vision of E&A seeks to strengthen ecosystems at all scales across the Conservancy Areas, and instill a sense of pride among all villagers for the special significance these areas hold in safeguarding our natural treasures.
- E&A will serve as a kind of "guide-lines" for Mountain Areas Ecosystem management on sustainable basis in Pakistan, helping to secure resources and channeling them to critical areas.
- Special attention may be given to building local level E&A strategic partnerships between diverse stakeholders and programs as the Natural

Resource Conservation Education and Awareness is a “**non-stop**” and demands regular monitoring and follow-ups.

Awareness and Education (E&A)

The lesson learnt from this evaluation is that ‘E&A retention’ is an ongoing process. It requires monitoring in order to identify emerging issues and timely intervention/resolution to strengthen an educationist’s desire for sustainable development of community’s resources and livelihoods.

Proposed Improvements in Implementation Strategy

The long-term goal of MACP is to develop for all mountainous areas a well-designed and well-managed system of biodiversity conservation that will meet the environmental and social needs of each project area. It is therefore proposed that the implementation strategy be reformulated with specific objectives as follows:

1. Education for sustainable development must continue to highlight the importance of addressing the issues of natural resources as part of broader agenda.
2. The linkage of E&A component with societal and economic considerations must be enhanced to enable learners to adopt new behavior in protection of natural resources.
3. Booklets of local folklores and short stories promoting natural resource conservation and life may be prepared in illustrative form matching with local culture.
4. Young children are generally more receptive and curious about their environment. They are also our future decision makers and leaders. It is best to “catch them young” for E&A pertaining to natural resource conservation.
5. The affluent section of our society plays a dominant role in environment degradation as their “high consumption – high waste” lifestyles. The value of conserving resources and products needs to be imbibed especially the affluent sections through E&A.
6. Instead of making separate course on environment for school children, the approaches of environmental studies may be incorporated in existing curricula.

7. The teachers' training institutes and facilities developed by the AKED at Gilgit and Chitral can be effectively blended through collaborative mechanism to undertake on going process of E&A activities in MACP areas after the exit of the project.
8. The local media and religious leaders may be made more proactive to play influential role.
9. The E&A component may be made participatory in nature rather than imparting conservation values from outside.

Environmental Concern

Environmental training and study opportunities helped foster pro-environmental attitudes amongst local people. However, the desired results of improving socioeconomic outlook of community could not be achieved because of insignificant ability of VCCs to save and non-availability of credits at low interest rate from local credit institutions.

The chances of reduction in illegal hunting and poaching may gain grounds on account of money share accruing to communities. MACP should also develop a plan for environmental management in collaboration with people and identify productive activities compatible with conservation objectives.

Persons Provided Support for Field Visits and Data Collection

1. Syed Ikmail Hussain Shah, Regional Manager, MACP, NWFP
2. Dr. Ghulam Akbar, Director Environmental Education & Northern Areas, WWF – Pakistan
3. Babar Khan, Coordinator Environmental Education & Northern Areas, WWF –Pakistan
4. Altaf Hussain, Coordinator Environmental Education, MACP NWFP
5. Najam Ul Huda, Coordinator Environmental Education, MACP NAs
6. Muhammad Zafar Khan, Environmental Education Officer, MACP Gojal
7. Ms. Narjis Yaseem, Environmental Education Officer, MACP Skardu
8. Amjad Khan, Environmental Education Officer, MACP Mingora
9. Atta Elahi, Environmental Education Officer, MACP Chitral

ITINERARY FOR THE VISTS TO GILGIT, SAKARDU, CHITRAL AND KALAM

Tuesday 06-12-2005	Peshawar to Islamabad
Wednesday 07-12-2005	Left from Islamabad by road for Gilgit in the evening at 1800
Thursday 08-12-2005	Reached Gilgit in the evening at 1830 and held informal discussions with MACP and IUCN staff.
Friday 09-12-2005	Meeting with Director Education, Master Trainers, Ismalia religious leaders, PDCN, MACP, Wildlife Department, and Forest Department.
Saturday 10-12-2005	Field visits of MACP area for field observations and data collection.
Sunday 11-12-2005	By road travel to Sakardu. On way visited MACP areas for field observations and data collection.
Monday 12-12-2005	By Air travel to Islamabad and by road to Peshawar.
Tuesday 13-12-2005	By Air to Chitral. Held meeting with MACP staff, Master trainers, PAMP staff, and AKES training institute.
Wednesday 14-12-2005	Field visits for observations and data collection.
Thursday 15-12-2005	By road departure for Mingora
Friday 16-12-2005	Visit to Kalam for field visit, observation, and data collection.
Saturday 17-12-2005	Discussions with Regional Manager MACP, staff and Master Trainers and left for Peshawar.