TORGHAR CONSERVATION PLAN

2003



Society for Torghar Environmental Protection (STEP)

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EXECUTIVE SUMARRY

The tribal areas in Balochistan are beyond the effective control of Provincial and as well as Federal Government in most cases. The Tribal Laws are more effective in almost every issue. In the early 1980's, due to increased availability of weapons, the populations of large ungulates of the area were declining rapidly and the Provincial Government was unable to provide effective protection to wildlife.

Torghar Conservation Project was launched in 1985, for conservation of Suleiman Markhor (*Capra falconeri jerdoni*) and Afghan urial (*Ovis orientalis cycloceros*) in the tribal lands of Torghar Mountain, Killa Saifullah District, Balochistan, through the efforts of the local people with the Consultation of wild life specialist of USA.

The April 1994 an NGO Society for Torghar Environmental Protection (STEP) was formed for managing the TCP as officially recognized non-profit organization.

STEP has conducted formal and systematic field surveys of Markhor and Urial, starting with the first survey in November,1994 conducted by K.A. Johnson Sponsored by U.S. Fish and wild life services and WWF-International.

Similar surveys were conducted first, by Michael R. Frisina, Charles Wood and Michael Woodford in November 1997, Michael R. Frisina in 1999 and survey of Habitat and disease issue in 2001 by Michael R. Frisina, Michael H. Woodford and Ghulam Ali Awan of WWF – Pakistan sponsored by U.S. Fish and wildlife service office of International Affairs. According to Michael Frisina's report of 1999 Markhor and Urial population are stood at 1684 markhor and 1742 urial. (A sustainable annual trophy harvest for Markhor could be

upto 18 and a sustainable trophy harvest for Urial upto 13).

STEP has also conducted biodiversity surveys leading to rediscoveries and discoveries of small mammals, birds and reptiles.

STEP has achieved it's goals, of complete cessation of illegal hunts, increasing in wildlife populations, providing social and economic incentives to link biodiversity conservation with benefits to community. Today 62 local tribesmen are appointed as Game Guards, protecting nearly 1800 square km of the conservation area.

Tribal Committees of each tribe, composed of members living in and outside Torghar, and a Higher Council of all tribes, involved in the Program, are constituted to empower the local committees.

The Conservation Project is managed by a Board composed of the Higher Council, Tribal Committees and STEP management wing.

TCP is supported by funds generated through limited trophy hunt. It has also received grants from WWF – Pakistan, Houbara Foundation, Safari Club International (SCI) and UNDP Small Grants in the past.

A GEF Medium Sized Project, "CONSRVATION of HABITATS AND SPECIES IN ARID AND SEMI-ARID ECOSYSTEMS IN BALOCHISTAN" has recently been approved and ready for implementation in Torghar mountain and Chagai desert. The future development and non-development plans include: Agriculture, Water resources, Reforestation, Porcupine Menace, Medicinal Plants, Range management, Livestock and Grazing, Medical Assistance, Education, Utility Stores, Financial Aid, Reintroduction of Leopard, Biodiversity Surveys.

Size of Conservation area has doubled after the recent entry of neighbouring tribes in the program.

So far, STEP has been awarded two CITES markhor and five urial hunting permits. STEP could not fully utilize the urial permit because of higher prices and the geo-political situation in the region affecting American hunters.

STEP's request for extra permit is based on the fact that with merger of new tribes and their areas in the Conservation Program, more funds will be required to hire Game Guards and provide economic and social help to the new tribal groups. STEP is also committed to contribute its share of \$ 215,000 to PDFA.

(PART I) BACKGROUND

Location

Torghar, forms the northern most part of Toba Kakar Range, a chain of rugged sandstone mountains approximately 90 km long and 20 to 25 km wide, in Killa Saifullah District, Balochistan Province, Pakistan (see Map). The attitude varies between 2,500 – 3,300 meters. It is bounded on the north by the Kundar River Valley and on the south by the Khaisore Valley.

Climate

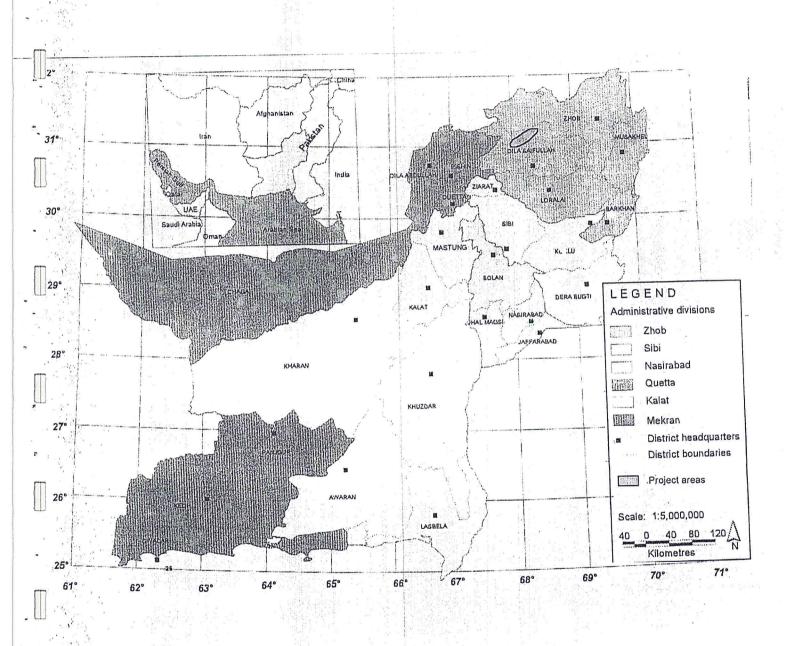
Climate in Torghar is characterized by strong seasonality both in temperature and precipitation. Summer temperatures are hot, up to 35 C. winters are cold, sometimes as low as 15 C, further more there is a strong variation between day and night temperatures. Precipitation during the winter mostly occurs as snow. Rainfall is light and variable, with the annual average about 200-250 mm. March and April are the rainiest months, and some summer rainfall is received in July and August.

Regional History

Zhob is believed to be the cradle of Pathan race. The race culture, language and religion of the people of Zhob (formerly including Killa Saifullah) region is the same as that of the neighbouring North West Frontier Province (NWFP) and Afghanistan. They speak Pashto and call themselves Pashtun. The Persian, Baloch and Central Asian neighbours call them Afghans and to the people of Indian Sub-continent and the West, they are Pathans. They are divided into many tribes, Kakar being one of the largest Tribe, distributed in both Pakistan and Afghanistan. Pashtun are known as most warlike people in the region. They have gained this reputation because they have lived for centuries in the path of invasion of the Sub-Continent from the north and west, and their love for weapons. The Pashtun ruled India for about two centuries before the Moghuls. The British, unlike earlier invaders, came in India from the east. Their subjugation of the entire Sub-Continent was completed by the late nineteenth century. The very last stand against the British was made by the tribes of Torghar. Remains of the Lritish Forts can still be seen in Torghar. The region of Zhob, in which Torghar is located, has been known as Yaghistan (the land of ungovernable) through out the history. Aware of this fact, the British left this and the surrounding areas to its people even after making the line of demarcation only thirty miles north of Torghar between Afghanistan and British India.

Prior to the outbreak of the British-Afghan war in 1878 until the region was taken over by the British in 1884, the chief authority over the Kakar tribe of the Zhob and Bori Valleys and the adjoining districts of Kach and Kowas was exercised by the Jogezai

Location of Torghar Conservation Project, Balochistan Province, Pakistan.



family of Zhob Kakars (District Gazetteers of Balochistan 1906). Between 1878 and 1884, the local Kakars conducted what was essentially a guerilla war against the British. A military expedition launched against the Kakars in October 1884 succeeded in subduing the opponents and Zhob became part of the British Indian Empire.

TORGHAR COMMUNITY

People and land tenure in Torghar

The people of Torghar belong to Kakar tribe. The Kakars are divided into two principal branches, the Sanzar Khail and Sanatya. The Sanzar Khail are sub-divided into the Jalazai, Mardanzai, Abdullazai etc. The Jalalzais are further divided into a number of tribal groups, those living in Torghar area are: the Khudzai, Mirozai, Shabozai, Shahizai, Karimzai, Hakimzai and Mehmanzai. Out of these, Shahizai split into Hussain Khail, Pahlawan Khail and Hazar Khail, Rustam Khail and Ali Khail. Hussain Khail is further divided into Arab, Merhab, Sarmast Hazar and Ahmed. The ownership of mountain is based on tribe, sub-tribe, clan, sub-clan and finally the family (See map of Torghar and Geneology of tribes and sub tribes having land tenure in Torghar). The total population of Torghar is about 4000 people. The Principal settlements in the Torghar are Tanishpa, Kundar, Khaisore, Tor Gh'berg, Tubli and Ubashti. Individual residences are scattered throughout the Hills. The largest village is Tanishpa with nearly 25 households.

Nomadic Tribes

There are other Pashtun tribes which follow a nomadic or semi-nomadic way of life. Torghar lies across one of the traditional migration routes followed by these tribes in their seasonal treks between the Afghan plains where they spend the summer, and winter in various parts of Pakistan. Nearly 20 tribal groups pass through here twice a year, including the Sulaiman Khail, Shinwari, Niazi, Safi, Tarakai, Doutanai Andan, Maryanai, Kharotie, etc. In early spring these tribes travel north to Kakar Khorasan and beyond the Durrand Line into Afghanistan to spend the summer in their tribal territories. All of these tribes are clearly distinguished through their particular type of dress and jewelry. Almost every adult male carries a gun, and they are considered excellent marksmen and hunters. Naturally, they hunt big and small game during their seasonal migrations.

Economy

Torghar society is marked by extreme poverty. The people of Torghar are semi-nomadic pastoralists who tend large flocks of sheep and goats. There are virtually no sources of permanent or temporary employment in Torghar, with the exception of jobs provided by the conservation project. Shepherds are sometimes hired seasonally to tend sheep and goats. Most families have permanent residences in the mountains, where some members of the family live year-round while other members of the family move seasonally with

their flocks. In early spring, many herders move their flocks out of the mountains to the plains of Kakar Khorasan to the north, returning in early autumn with much-reduced flocks, having sold surplus animals in the market.

Agricultural fields and orchards have been developed in Tanishpa where there is adequate level ground and a source of water for irrigation. In some places, land has been cleared and leveled to create fields and orchards. Agricultural crops include various grains. Orchard fruits include almonds and apricots. Tribal people supplement their diet and income by collection of wild products i.e., wild pistachios, rhubarb and various eatable plants.

Wood Cutting

Wood is one of the main source of fuel energy. Tree branches and shrubs are lopped for fuel. The wild pistachios, cutting of live trees and transportation of wood from Torghar is prohibited by the community, however, big branches of Juniper trees are allowed to cut for building purposes.

Grazing

The people of Torghar are mainly dependent on domestic livestock including sheep, goats, donkeys and camels. The size of flocks of sheep and goats depends on affluence of owner and the season. In the migration periods of nomads, the grazing pressure increases, especially at the lower slopes and valleys. The range conditions at higher elevations are less threatened. The major livestock grazing and concentration is in Kundar, in the north and Khaisor valley to the south of Torghar.

Hunting

Traditionally the animals hunted were leopard, fox, wolf, hyaena, markhor and urial. Leopard and fox were killed for the pelt, wolf and hyaena were considered predator of Livestock, and markhor and urial mostly for meat, horn and skin.

In the past years primitive weapons, non availability of ammunition and less number of hunters, limited the number of animals hunted. There were a few professional hunter who claim to have hunted about 800-1000 animals during whole of their hunting careers. The people of Torghar used to hunt basically to obtain meat. According to a former old hunter, Salam Khan "Hunting in these areas was not for sport or necessity, it was just due to a habit to kill".

The outbreak of Afghan war in late 70s introduced modern weapons which was one of main cause for indiscriminate killing of wildlife. The graph of wildlife was dropping in Balochistan and Torghar was no exception. By the early 80s the population of wildlife,

markhor and urial of Torghar was on the verge of extinction.

The leopard has become extinct, as a result porcupines (*Hystrix indica*) has increased which have created mass destruction to wild pistachios which is one of the main source of Fuel, food and income for the community of Torghar

FLORA, FAUNA AND KEY SPECIES

FLORA

Torghar is characterized by "steppe" types of vegetation, which vary with elevation and substrate. The lower slopes (1,000-2,000) of the hills have largely been denuded of trees. Those trees which remain are widely scattered and consist primarily of wild pistachio (*Pistacia khinjuk*), ash (fraximus xanthoxy loides) and juniper (*Junipers macropoda* or *excelsa*) which grow at higher elevation of 2,000 – 3,300 meters. Tamarisk (*Tamarix* sp.) trees border the streambeds, wild almonds (Amygdalus brahnica), wild cherries (Cerafus rechingeri), Ephedra (Ephedra intermedia), Rhubarb (Rheum ribes), Cumin (Bunium persicum) and many other medicinal plants and non-medicinal plants grow in a abundance.

FAUNA

The ungulates include Sulaiman Markhor (*Capra falconeri jerdoni*) and Afghan Urial (*Ovis vignei*), Wolf (*Canis lupus*), Hyaena (Hyaena hyaena), Fox (Valpus valpus and valpus cana) Pallas's Cat (*Felis manul*), Steppe Wild Cat (*Felis silvestris ornata*) etc. and many small mammals include Pika, Jards, Afghan Mole Vole (*Ellobius fuscocapillus*)etc.. The area is also rich in various species of reptiles including horned viper and leaf-nosed viper. About 78 bird species, many of them breeding, have been recorded from the area to date (see Appendix II and III). Torghar also provides safe breeding grounds to such game bird as Chakur, see-see Patridge and Imperial sand grouse. Fortunately the people of Torghar have no tradition of hunting or trapping birds, as a result these are left to live and nest undisturbed.

Markhor

There are five recognized sub-species of markhors (Capra falconeri), Pir Panjal/Chitral markhor (capra falconeri cashmiriensis), Astor markhor (Capra falconeri falconeri), Badakhshan/Bukhara markhor (capra falconeri heptneri), Kabul markhor (capra falconeri megaceros), and Suleiman markhor (Capra Falconeri Jerdoni). The sub species found in Torghar is Suleiman or straight horned markhor.

According to Schaller and Khan (1975), the Suleiman markhor historically was distributed throughout suitable habitats in the Sulaiman, Toba Kakar, and Zarghun mountain rages in Balochistan, and graded into the Kabul markhor form in the mountains and hills just across the Balochistan border in northwest Frontier Province. According to Roberts (1977): "The straight-horned or Sulaiman markhor is more widespread but also severely restricted in numbers. It occurs in scattered isolated populations on all the major mountain ranges immediately to the north and east of Quetta, i.e. Murdar, Takatu, Zarghun, Khaliphat and Phila Ghar. Perhaps their greatest concentration today is in the Toba Kakar range north of Hindu Bagh...including the Torghar Hills west of Fort Sandeman..."

Urial

There are many sub species of urial around the world. The Species found in Torghar is Afghan urial (Ovis vignie---). Its range is from Kalat in Pakistan north to Tajikistan. Only a few decades ago, Afghan urial were plentiful in most mountains of north east Balochistan. At present it is extinct in most of its former habitats and are surviving in reduced numbers precariously in a few places.

Habitat/Food Habits

Suleiman markhor is associated with rugged terrain and arid steppe vegetation, and are quite adaptable to it ecologically. They are found from 660 m elevation in the treeless, arid hills of the southern Sulaiman Range up to 3,300 m in the Torghar and even higher in the main Sulaiman Range. They prefer to use rugged and precipitous mountain sides, where cliffs, rocky caves, overhangs, and large boulders are common. They feed in early morning and late afternoon, resting during midday. Wild pistachios are a favourite food and markhors can often be observed foraging high in the branches of a pistachio tree. Some big markhors are also nocturnal in habits.

The Afghan urial inhabit gentler slopes of the higher mountain ranges, occurring up to 2,750 m. Although their habits have not been studied at Torghar, they most likely eat a typical wild sheep diet of grasses, forbs, and some browse. In Torghar it is observed that sometime markhor and urial have overlapping habitat use but urial primarily utilizes the broad open ridges and slopes and are much more mobile than markhor.

Reproduction

The rut season for Suleiman markhor starts from mid-November and usually lasts upto mid-December. Lambing season is in April and May. Usually one young is born, however in healthy condition many goats give birth to twins.

The urial rut begins in early November and continues until mid-December. According to Roberts (1977): "The gestation period is about 160 to 164 days. Rams show no sign of sexual interest or rut until their autumn when they are 2.5 years of age, but observations on wild herds indicate that only the dominant rams of 4.5 years or older are able to mate with oestrus ewes, the younger males being driven off"

Protected Status

The Suleiman markhor and Afghan urial are protected by provincial law. They are both listed on the Third Schedule of the Balochistan Wildlife Protection Act, 1974. These are "protected animals, i.e., animals which shall not be hunted, killed or captured" (Government of Balochistan, Agriculture Department 1977). The law, however, contains the following provisions pertinent to sport hunting:

"39. Notwithstanding anything contained in this Act Government may, in the interest of scientific or public purpose, allow by notification in the official Gazette, killing and capturing of such wild bird or animal in any specified place by any specified means."

"40. government may, by notification in the official Gazette, in respect to any specified area:-

(i) add to or exclude from the Schedules any wild bird or animal, subject to such conditions as it may impose in each case..."

The markhor (*Capra folconeri*) was listed initially in Appendix II of CITES and at conference of parties 8 at Japan, in 1992, was placed in Appendix I of CITES.

The Afghan urial (Ovis vegnei) was listed in Appendix III of CITES and at Conference of Parties 11 at Nairobi, in 2000, was placed in Appendix II of CITES.

Biological Status

The distribution of the Suleiman markhor has been seriously reduced by over-hunting. Many populations appear to have been extirpated completely, especially in mountains close to human population centers (e.g., Quetta, Zhob) and Afghan refugee cams. Only small and isolated populations remain in may other areas, including the subspecies former stronghold in the Sulaiman Range. The greatest concentration today is in the Toba Kakar range north of Muslimbagh, including the Torghar Hills (Roberts 1977).

Afghan urial populations have also been reduced throughout the species' range in Balochistan, although the magnitude of the reduction and the change in geographic distribution have not been well documented.

(PART II) TORGHAR CONSERVATION PROGRAM (TCP)

Problem identification

The wilderness of northeastern Balochistan has long been famous for its abundant and diverse wildlife; its mountains once contained populations of Suleiman markhor, Afghan urial, leopard, and, in some places, black bear. Torghar was considered one of the most important wildlife areas of Toba Kakar Range. Wildlife has been hunted there for a long time. Although a few primitive weaponry and the scarcity of ammunition limited the number of animals that were killed overall.

Since the late 1970s, the Afghan war initiated a steady flow of refugees, weapons, and ammunition into northeastern Balochistan. With modern weapons (e.g., Kalashnikov) and, especially, ammunition readily available, seasonal migrants, and local residents increased their hunting of local wildlife, indiscriminately killing all ages and sexes of animals. Wildlife populations dwindled throughout northeastern Balochistan, and Torghar was no exception. By the early 1980s Suleiman markhor and Afghan urial populations were reduced to remnants, and leopard had almost been extirpated from the region.

The direct threat facing Balochistan's wildlife went largely unnoticed for years. Then, in 1984, the Government of Balochistan asked Naseer A. Tareen - a professional filmmaker - to produce a film on the wildlife of Balochistan. Government officials assured him that wildlife was plentiful in the province. Early on in the course of filming, he felt that several species of wildlife in the province were threatened with extinction. He was especially concerned about the Suleiman markhor. Aware that the markhor was already considered an endangered species he was prepared to encounter difficulties in filming it, and went to every mountain known to have had Suleiman markhor in the past. It became apparent to him that there were virtually no Suleiman markhor left in most of the well known habitats of the species. Worse still, he realized that nothing was being done to save the dwindling numbers left in a few mountains from extinction.

Programme development

After discussing the problem with Mr. David Ferguson of US Fish and Wild Service (US-FWS) in June 1984 at Washington DC. Tareen asked for some assistance to be given to Balochistan forest Dept. for conservation. In December 1984, Dr. Richard Mitchell of the US-FWS's Office of Scientific Authority accompanied by Dr. Bart O'Gara, then head of the Montana Cooperative Wildlife Research Unit, and Dr. Bruce Bunting of World Wildlife Fund-US traveled to Pakistan to evaluate various projects supported by US-FWS. They traveled to Quetta to discuss opportunities for initiating wildlife conservation activities in Balochistan with provincial officials in presence of Tareen. The then Chief

Conservator Mr. M. Rafiq expressed his inability to initiate any meaningful project to save the dwindling population of Suleiman markhor in areas outside the actual control of the Government. The visiting team suggested to Tareen to save the markhor through private effort. They promised him in development of a plan to initiate a "game guard" programme at Torghar. It was determined that the programme would be funded through the proceeds generated by a limited, controlled trophy hunt of Afghan urial. The tribal areas in Balochistan are largely beyond the reach of Provincial and Federal laws; these areas are governed by tribal laws. (Late) Nawab Taimur Shah Jogezai twice petitioned the Provincial Government for assistance in protection of these areas without any result. When Tareen discussed the suggestion of O'Gara and Mitchell with him, the (Late) Nawab Jogezai approved the plan giving Tareen and his son Nawabzada Mahbub Jogezai the responsibility to initiate wildlife conservation in Torghar area.

Under the plan suggested by Mitchell and O'Gara, Torghar was to be closed to all hunting - by locals and outsiders - and game guards selected from the local population would be hired to enforce the ban by protecting access to the area and reporting all trespassers. Surveys of large ungulates were to be conducted, and, when animal populations had recovered sufficiently, a limited number of permits for Afghan urial were to be sold to hunters - primarily foreign hunters. Controlled hunting of trophy animals was a critical component of the plan for two basic reasons. First, it was to generate the revenue necessary to support the game guard program. Second, in order to motivate the game guards and other local tribal people to give full protection to wildlife it was to impress upon them that the abundance of wildlife was directly tied to their economic well being. If wildlife populations did not recover to the point where they could be hunted - as a result of continued poaching or habitat degradation, for example- then there would be no funding for game guards and no ancillary benefits to other local people.

Implementation

After these discussions it was decided that Torghar would be closed for hunting of markhor and urial to all hunters. The program was stared in 1985 by hiring seven game guards. These game guards were former hunters who agreed to put down their weapons. Their initial duties were to prevent local residents as well as outsiders from hunting in Torghar.

The project continued to advance slowly as the years passed. The first hunting took place in 1986 and the proceeds used to fund the project. Additional game guards were hired every year. New roads were constructed and existing roads were graded. Local people received various types of assistance (financial, medical, agricultural, etc.).

In April 1994, the Torghar Conservation Project was converted into an NGO - the Society for Torghar Environmental Protection (STEP) - and registered in Balochistan, as a non-profit conservation effort.

Problems encountered in implementation

Despite the general support from the forest Department of Balochistan, the (Late) Nawab and Communities of Torghar, Torghar Conservation Project encountered an almost constant stream of problems and obstacles since its inception, mostly relating to the issuance of hunting and export permits. This problem was mainly encountered at the federal level. Many wildlife officials and experts were skeptical about a Conservation Program based on trophy hunting. The concept of sustainable use of wildlife as a tool for conservation had yet to be accepted by the authorities concerned.

Disputes and land tenure

Most tribes and sub-tribes in Torghar are involved in major or minor disputes over land tenure with neighbouring tribe/tribes for economical or social reasons. The majority of the issues are old, dormant and over negligible tracts of land.

TCP Policy

The inter-tribal disputes over land tenure was a matter of concern for TCP because it posed challenges to implementation of a project based on the active support of the communities of Torghar. TCP adopted a policy based on the following principals:

I: Refrain from implicating TCP in disputes that have no impact on conservation project.

II: Find amicable solutions to problems having direct effects on the Program.

III: Wait for settlement of larger disputes through complex traditional methods before absorbing the relative group and their territory in TCP.

IV: No group affiliated with TCP, will be allowed to misuse this association in their disputes with others.

The policy of TCP, based of impartiality and more interference, is generally appreciated by all groups involved. It substantiated TCP's claim of non-interference in the inter-tribal affairs.

Local acceptance

Initially the people expressed suspicion that the project was simply a way for the government to take control of the Torghar. Some of the tribesmen, being fiercely independent and always reluctant to accept government interference in their affairs, opposed TCP. But later when they saw the community benefiting from the project their suspicions ceased. At present, opposition to the project has almost ceased to exist.

Finances

STEP totally depends on the income generated through trophy hunt of markhor and urial by international hunters. In the past it has also received small donations and grants from UNDP, WWF – Pakistan, Safari Club International (SCI) Houbara Foundation helped STEP to undertake economic and social development activities which played a vital role in the raising awareness and creating incentive for people's involvement in conservation.

Game Guards

As previously mentioned, seven game guards were initially hired in spring 1985 to patrol specific areas of the Torghar. Additional game guards were hired in subsequent years. At present, there are 62 game guards from various tries residing in Torghar protecting approximately 1,800 sq. km. of Torghar. It must be recalled that the game guard program is the main source of employment in Torghar, and the salary earned by the guards is an important supplement to each family's income from livestock and agricultural products. For the poorer employed it is the main source of income. (See the following page).

DEVELOPMENT AND WELFARE PROGRAMS

Besides Game Guard-employment, the project has also provided many benefits to the people of Torghar. The activities carried out in past years were environmental related as well as non-environmental programs.

The following activities have been carried out by STEP to help the people of Torghar:

1: Construction of water tanks and Dam

Seven water tanks were constructed in Tanishpa valley, Tubli, Ubashti and Malawi for storage of water from springs and streams for drinking and irrigation purposes. These tanks are extremely useful in dry season when the volume of water in springs and streams is reduced. A dam was constructed in Khaisore to reduce pressure from the mountain.

2. Construction of Irrigation Channels.

400 meters of channels are constructed to supply water from the tanks to the orchards for irrigation.

3. Building of terraced field for orchids.

Tractors were provided to build terraced fields in appropriate places without damaging the habitat. Funds were provided to those who required labor – work instead of tractor in different terrain.

4. Supply and plantation of Fruit trees.

Sapplings of fruit trees were supplied to all those in need of it

5. Expansion and clearing of Springs.

Old springs were cleaned and enlarge to facilitate drinking water for wildlife people and their livestock.

6. Medical aid and Medicines.

Medical Aid. Funds area budgeted annually for supply of medicines and providing medical aid to the people.

7. Medical Camp

Medical Camp. The nearest medical facility to the people of Torghar is available at Killa Saifullah, 90 Kms away. STEP has initiated holding Medical camp in Torghar on August 2002, especially for those women, children and elderly in need of medical help, who cannot make it to Killa Saifullah or Quetta.

8. Incidental funds for poor need people of Torghar.

Funds are also budgeted every year for those faced with hardship needing immediate financial relief. In such cases cash is extended either as loan or outright donation.

9: Supplies of tents, clothing etc.

Most people living in Torghar are semi-nomadic living in tents. STEP supplies tents, cloths and other such items to those badly in need of these.

10: Drought Emergency Relief

During the difficult period of drought, STEP also managed to arrange a large supply package of food stuff to all the people of Torghar.

11: Construction of new link road.

Prior to the inception of Torghar Conservation Program no road existed linking different parts of the mountain. STEP constructed 32 Km long dirt link roads to facilitate transportation to various isolated communities of the mountain.

12: Repair of old link road.

The existing link roads are repaired every year after the rains.

SPECIES ---- SULEIMAN MARKHOR AND AFGHAN URIAL

Population Status of Markhor and Urial in Torghar

From 1985 to 2000, surveys have been conducted to determine the population status of both Suleiman markhor and Afghan urial .

In 1985, when Torghar Conservation Programme (TCP) was launched, Dr. Richard Mitchell spent 18 days and according to his census report the total poluation of markhor and urial were about 200. Dr. Kurt Johnson visited Torghar in summer 1992. During that Visit Dr. Johnson noticed an apparent increase in the number of both species. He initially, roughly estimated the population to be 600 + 200 animals. On subsequent visit to Torghar in November 1994, Kurt Johnson conducted a scientific census survey. This was the first formal survey ever conducted on these two species in the area. It indicated that the TCP area had a population of around 700+ markhor and 1200+ urial. Dr. Johnson concluded that although most mountain ranges in Balochistan have not been formally surveyed, these results suggest that Torghar may be the last remaing strong hold for both species.

Another survey was conducted by Michael R. Frisina, Dr. Charles Woods and Dr. Michael Woodford in 1997. These two surveys, carried out in 1994 and 1997, were based on similar methods used by Dr. Johnson. According to the survey report, an upward population trend was evident. The data indicated +118 percent change between 1994 and 1997 (Michael R. Frisina). The estimated 1997 population of markhor was 1.296+ and that of urial was 1.543+.

In 1999, Michael Frisina and Charles Woods conducted another census survey based on similar methods of the previous surveys, the estimated population of markhor was $\underline{1,684}$ and $\underline{1,742}$ urial.

All of the surveys were conducted by biologists sent by the US. Fish & Wildlife Service.

Sustainable Harvesting

In the context of a conservation hunting programme, a "significant harvest" is one which produces significant benefits for conservation, either through its influence on conservation awareness, attitudes and behavior, the generation of conservation funding, or both. A "sustainable harvest" is one that can be continued indefinitely without causing a negative impact to the population (i.e., without increasing population susceptibility to extinction). In the case of the Torghar Conservation Project, a "significant harvest" is considered to be 18 Suleiman markhor and 13 Afghan urial per year (Michael R. Frisina), those individuals being adult males in older age categories (i.e., those with large horns). The important question is whether such a harvest is biologically sustainable, that is, does not increase the markhor and urial populations' susceptibility to extinction.

Species Life History Characteristics

Although the population dynamics and population genetics of Suleiman markhor and Afghan urial have not been studied extensively, there seems little doubt that "healthy" populations in "healthy" habitat could sustain some level of harvest with little or no negative effects on the population. What is known about the life history characteristics of markhor and urial--relatively long life span, relatively high reproductive rate for a species of its body size, polygynous mating system, relatively high survival of adult age classes, relatively low susceptibility to predators, adaption to rugged and fluctuating conditions (e.g., unusual cold or blizzards in winter, drought in summer) - suggests the markhor and urial populations are relatively tolerant to conservative harvest rates and have the capacity to rebound from overharvest ("demographic vigour").

An important life history characteristic for management purposes is the polygynous, dominance-hierarchical mating system of both the markhor and urial. This type of mating system means that dominant males mate with a number of females while other males may be limited or excluded from breeding entirely (Schaller 1977). In such species there is normally an "excess of males whose loss has little effect on population levels" (Schaller

1977, p. 134). The conservative harvest rate of the Torghar Conservation Project would under normal circumstances (e.g., an excess of males) be expected to have little if any impact on the population reproduction rate.

Population Viability

According to survey reports of Dr. Johnson, 1994 and Michael Frisina, 1997 and 1999 the trend of population of both key species; markhor and urial is on the increase. According to Frisina the markhor population has about doubled in size and the urial population has at least remained stable.

The limited trophy hunting has not effected increase in the population of markhor and urial, as Dr. Johnson stated "The simple fact that both population have continued to grow steadily while subject to a strictly controlled trophy hunt is ample evidence that harvest

levels have been conservative".

Frisina recommended that "Trophy hunting has not impacted the ability of markhor and urial population to increase. The male population segment a sustainable annual trophy harvest for markhor should be 18. A sustainable trophy harvest for urial should be 13.

Current Habitat Conditions

Some markhor and urial habitat in the Torghar Hills - especially in the valley bottoms and along caravan routes-has been and continues to be degraded to some degree by domestic livestock grazing and fuel wood collection. Fortunately, many habitats in rugged terrain are inaccessible to domestic livestock and have not suffered as much. In addition, natural predator-prey relationships in many areas have been disrupted by the killing of leopards because of their livestock depredations.

IMPACTS OF THE PROJECT

Negative impacts on biodiversity

The Torghar Conservation Project has had no negative impact on the biodiversity of the Torghar. Managed trophy hunting is a precise method of harvest. Only targeted individuals are taken, and there is normally no incidental take (although superficially wounded individuals may sometimes escape). Because markhor and urial are "top herbivores," the harvest of many individuals could conceivably modify the habitat, but the harvest of 6-8 individuals per year would be insignificant. Likewise, predators such as the leopard or could be detrimentally affected by the harvest of many markhor and urial, but the loss of a few individuals per year would be insignificant.

Positive impacts on biodiversity

The Torghar Conservation Project has directly resulted in a substantial reduction, if not complete cessation, of markhor and urial hunting in the Torghar . The project is concerned about all wildlife in Torghar, not just large ungulates.

In addition, STEP is gradually educating local tribal people about the importance of wildlife. By using the example of leopard perdition on porcupines the inter relatedness of wildlife and the importance of cause-and-effect relationships in natural ecosystems is being illustrated.

Large Mammals

A number of surveys for small mammals, birds and reptiles have been conducted in Torghar. Dr. Charles Woods of University of Florida U.S.A. with scientists from Pakistan Museum of Natural History, Islamabad, visited Torghar in October, 1996 and

again in March 1997.

Discoveries

Two new species of Lizzard were discovered, a Gecko (Tenvidactylus rhodocandus) and a new taxon of Lizzard (Laudakia melanura nassiri) by the scientist of Pakistan Museum of Natural History (PMNH), Islamabad. Afghan Mole vole (Ellobius fuscocapillus), believed to be extinct from Pakistan, was rediscovered in Torghar. Articles on these findings have been written in "Hamadryod" Madras, India (1998), "Journal Bombay Natural History Society", India 1999 and "Russian Journal of Herpetology", Moscow (1999).

Ornithology reports on the birds of the Sub-Continent so far have maintained that Haw
Finch (Loccothraustes coccothraustes) is more than a vagrant visitors to Quetta and
Chitral regions in summer. Its breeding limits were reported to be west of Iran. After
years of observation and filming it was discovered that Haw Finch nests regularly in
Torghar. It was also confirmed by T.J. Roberts on a visit to Torghar in 1998.

Socio-cultural

There are no social, religious or cultural barriers to instituting a sport hunting programme in the Torghar Hills. In fact, the tribal people of Torghar have a very strong tradition of hunting that had to be overcome to protect the markhor and urial populations. Fortunately, the tribal make-up of Torghar has been the principal factor contributing to the successful cessation of hunting.

Torghar is an isolated area with a relatively small human population. Most residents know each other and/or are related by birth or marriage. Thus, potential poachers face severe social pressures if they violate the "no hunting" law and kill animals. Poachers are quickly found out, usually with dire consequences. Several people have been fined, jailed, or asked to leave the mountain as a result of violating the no-hunting law.

Research

It is essential to have a thorough knowledge and understanding of history and all other social aspects of a community involvement in practicing conservation based on the sustainable use of natural resources. In reality the "Community" in Torhgar happens to be separate tribal communities with distinct tenures and interests. A formula has to be formed, based on ownership and equity. For this purpose Mr. Luc Bellon, an anthropologist from france has been engaged by STEP to conduct a thorough study of Torghar and its tribes. Some of Bellon's recommendations have already been incorporated in the Program and its plans.

Awareness

Ironically, the extinction of leopard and its ruinous consequences proved to be a practical lesson in the importance of prey-predator relationship in biodiversity for the people of Torghar. People have come to realize that killing leopards has had negative consequences for their livelihoods. They are well aware of the importance of biodiversity and the need for its conservation.

A short video report was prepared several years ago for the benefits of those who are unable to visit Torghar. It has been shown extensively to audiences at home and abroad which has created an understanding of TCP.

The footage used in this report are taken from a 16 mm under production film being done on the gradual progress of TCP. The film project is nearing its completion and will be ready for screening in a short period.

Recognition

The conservation efforts to save the Sulieman markhor, Afghan urial and the general biodiversity in Torghar has been recognized by awards from Prince Phillip of U.K., Prince Bernhard of the Netherlands, The president of France and the U.S. Fish & Wildlife Service, Washington D.C.

(PART III) FUTURE OF THE STEP

Existing conservancies

The Torghar Conservation Project is based on the principle of sustainable use of wildlife by community. It is acknowledged as a successful model by experts. STEP is now replicating its experience in Torghar in the adjacent tribal communities and their territories.

TCP practically function as a combination of 5 distinct conservancies, having separate committees of tribal elders living outside Torghar and representative residing in the mountain. The area of each group is protected through game guards belonging to that specific group. The interests of every tribe in the Program is safe guarded by the relevant Committee.

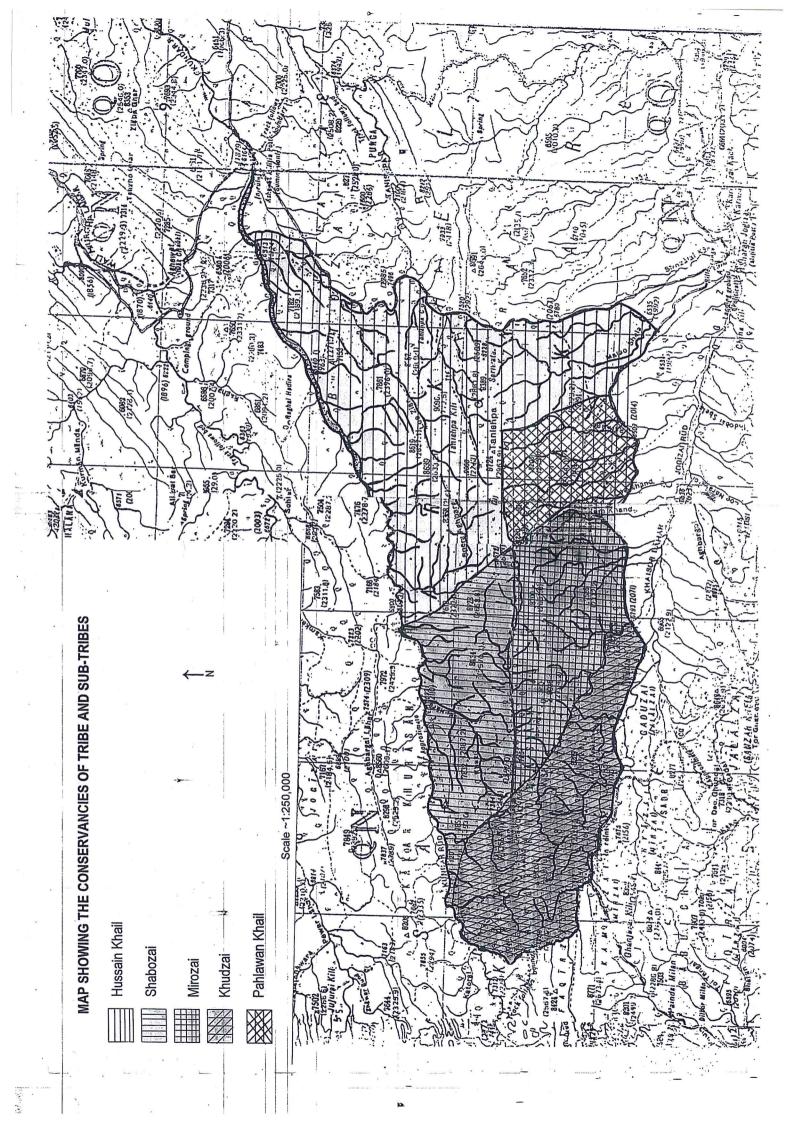
As mentioned earlier, there are 5 tribal groups and several sub-groups with distinct ownership of the mountain and its lands. (see map).

Expansion - New Conservancies

The tribal and sub tribal groups residing adjacent to Torghar Conservation Project (TCP) area were eager to join the program. One of STEP's objective is to initiate such conservation project in other areas with active participation of communities.

STEP has agreed to include neighbouring tribes into the Conservation Program. After holding discussions with neighboring tribes to sort out terms and conditions, the three new tribal communities of Mehmanzai, Khuadizai and Babakarzai are joining the program for the first time. Also, sizable territory, outside TCP, belong to several subsections of the same tribe, already part of the project, is being added to the Program. With these additions, the Torghar Conservation area has doubled in size. (see map)

In this new scenario three new tribal groups, Mehmanzai, Khuadizai and Babakarzai are added to TCP area, the other groups, Ali Khail, Rustum Khail and Hakimzai, with small numbers and lesser territories in the old TCP area neither have committees nor jobs (with the exception of one game guards post for Hakimzai), but in the larger TCP these groups are entitled to have jobs and Committees of their own because of their lands and populations in the newly incorporated areas of Pitawi, north of Kundar.



Karimzai is the only tribal group which remains outside TCP because they have a dispute with Shahizais – their western neighbour. That territory will only be absorbed into TCP once the settlement between the two groups is reached.

GAME GUARDS - TORGHAR CONSERVATION PROJECT.

TANISHPA (Shahizai)

No.	Name of Game Guard	Tribal Affiliation	Location
1.	Abdullah (Jamadar)	Shahizai/Arab Khail	Tanishpa
2.	Agha Mohamad	Shahizai/Arab Khail	Tanishpa
3.	Mohd Afzal	Shahizai/Arab Khail	Tanishpa
4.	Haji Sheran	Shahizai/Arab Khail	Tanishpa
5.	Karim Dad	Shahizai/Arab Khail	Tanishpa
6.	Jalal Khan	Shahizai/Arab Khail	Tanishpa
7.	Noordad	Shahizai/Arab Khail	Tanishpa/Malawi

KHAISORE (Pahlawan Khail)

No.	Name of Game Guard	Tribal Affiliation	Location
1	Daroo (Jamadar)	Pahlawan Khail	Khaisore
2	Daroo s/o Raza Jan	Pahlawan Khail	Khaisore
3	Hamid Ullah	Pahlawan Khail	Khaisore
4	Gul Rang	Pahlawan Khail	Khaisore
5	Ghaafar	Pahlawan Khail	Khaisore
6	Khudaidost	Pahlawan Khail	Khaisore
7	Ahad	Pahlawan Khail	Khaisore
8	Baloch	Pahlawan Khail	Khaisore
9	Abdul Ahad	Pahlawan Khail	Khaisore

UBASHTI (Khudzai)

No.	Name of Game Guard	Tribal Affiliation	Location
1	Ghulam	Khudzai	Chorgai
	(Jamadar)		Chorgan
. 2	Mulla Meero	Khudzai	Ubashti

3	Hayat Ullah	Khudzai	Ubashti
4	Mohammad Jan	Khudzai	Ubashti
5	Fateh Khan	Khudzai	Chorgai

TORGHBERG (Mirozai)

No.	Name of Game Guard	Tribal Affiliation	Location
1	Safar Khan	Mirozai	Torghberg
	(Jamadar)	. 1	
2	Niamat Ullah	Mirozai	Torghberg
3	Sadiq	Mirozai	Torghberg
4	Janan	Mirozai	Torghberg
5	Niamat Ullah	Mirozai	Torghberg
6	Mohd Saleh	Mirozai	Torghberg
7	Haq Dad	Mirozai	Torghberg
8	Narai	Mirozai	Torghberg
9	Abdul	Mirozai	Torghberg
10	Ameer	Mirozai	Torghberg
11	Khaney	Mirozai	Torghberg
12	Bismillah Jan	Mirozai	Torghberg
13	Qadir Kako	Mirozai	Torghberg

ULWAR KUNDAR (Shabozai)

No.	Name of Game Guard	Tribal Affiliation	Location
1	Gul Mohd	Shabozai	Lward Kundar
	(Jamadar)		
2	Sahadat	Shabozai	Lward Kundar
3	Abdul Rehman	Shabozai	Lward Kundar
4	Haji Yousuf	Shabozai	Lward Kundar
5	Basharat	Shabozai	Lward Kundar
6	Gul Wahab	Shabozai	Lward Kundar
7	Bor	Shabozai	Lward Kundar
8	Shinko	Shabozai	
9	Manan	Shabozai	Lward Kundar
10	Mohd Noor	Shabozai	Lward Kundar
11	Bismillah Jan	Shabozai	Lward Kundar

KUNDAR (Hazar Khail, Mehrab Khail, Sarmast Khail, Ahmed Khail, Hakimzai, Shahizai)

No.	Name of Game Guard	Tribal Affiliation	Location
1	Mela Khan (Jamadar)	HazarKhail	Speraghberg
2	Noor Mohamamd	Hazar Khail	Speraghberg
3	Daroo Khan	Hazar Khail	Speraghberg
4	Mohd Khan	Mehrab Khail	Kundar
5	Ghafoor	Mehrab Khail	Kundar
6	Mullah Yahya	Mehrab Khail	Kundar
7	Soorat Khan	Mehrab Khail	Kundar
8	Baqi Dad	Sarmast Khail	Kundar
9	Mohammad Ali	Sarmast Khail	Kundar
10	Akhtar	Sarmast Khail	Kundar
11	Abdul Rehman	Sarmast Khail	Kundar
12	Bari Dad	Sarmast Khail	Kundar
13	Gul Khan	Ahmed Khail	Kundar
14	Khudaidad	Ahmad Khail	Kundar
15	Paindai	Ahmed Khail	Kundar
16	Khushal Khan	Shahizai	Kundar
17	Rahim Khan	Hakimzai	Kundar

PDFA

A GEF Medium Sized Project, "CONSRVATION of HABITATS AND SPECIES IN ARID AND SEMI-ARID ECOSYSTEMS IN BALOCHISTAN" has recently been approved and ready for implementation in Torghar mountain and Chagai desert. Society for Torghar Environmental Protection (STEP) is co-financing US\$ 215,000 for the said project. This amount will be generated through trophy hunting. It is a five-years project having the following main objectives:

- 1. To raise awareness of local communities and stakeholders about biodiversity conservation and sustainable use of natural resources.
- 2. To create an enabling environment for community based biodiversity conservation and natural resources management.
- 3. To build institutional capacity of local communities, NGOs, and government institutions to conserve and make sustainable use of biodiversity.
- 4. To strengthen the Conservancies and establish management regimes for conservation and sustainable use of biodiversity.

5. To diversity and improve rural livelihoods and reduce pressure on habitats through better agro-pastoral practices and sustainable resource use alternatives.

This project directly corresponds to two key recommendations with regards to Emerging Priorities in Biodiversity under GEF, namely:

- Increase emphasis on sustainable use and benefit sharing of biodiversity:
- Increase links between local livelihoods and biodiversity conservation as a critical component for the achievement of sustainability.

Trophy Permits

As stated earlier, STEP is mainly dependent on trophy hunt. The Torghar populations of markhor and urial is estimated to be close to 2,000 animals for each species. STEP receives a quota of two markhor and 5 urial permits annually. It barely utilizes the urial permits because of the current geo-political situation in the region and the high prices for urial trophy in camparison to the rates for the same species in Central Asia. Only one urial hunt was sold for the recent hunting season, and non in the preceding season.

ORGANIZATION

STEP - MANAGEMENT WING OF TCP

Although the Torghar Conservation Program (TCP) was initiated in 1985, Society for Torghar Environmental Protection (STEP) came into being in 1994 as a registered NGO. There were a number of reasons for such unconventional approach:

No Model to replicate

TCP was a unique tribal initiative, without much financial or technical support from outside or a model to follow.

Race against time

The main objective was to save the remaining dwindling populations of markhor and urial in Torghar, without these a conservation project would have been meaningless.

Tribal Politics

The opposition to the program from certain tribal quarters was based on the fears that it was no more than a ploy by the Government to take over their mountain.

Low profile

In order to allay such fears the program remained a private effort maintaining a low profile and an informed administrative setup. The Nawab remained the role authority.

Evolutionary process

As the conservation program progressed, the trust of tribal people in the program and its aims also built up steadily. An administrative setup also evolved gradually to manage the burgeoning Program.

Governance

The administration and management is strictly based on the ground realities. First and formost it has to fluctuate with the needs and demands of the Conservation Program. Secondly, it has to cater to the sensibilities of various tribal groups of Torghar. (see figure 1).

The Governing Body of STEP is the Higher Council which is composed of Chairman, Administrative officials, Committee of elders and Mountain Committee. (See Fig. 2)

Tribal Committees

As another step in direction of empowerment of the communities, a number of Tribal Committees have been formed for the management of the conservation program in Torghar. (for details see annex 1)

FUTURE - Development and Non Development plans Agriculture

Agricultural activities in Torghar are presently limited to a few fruit orchards in Tanshipa Valley, providing fruits for both local consumption and supply to markets outside Torghar.

Climate of the area is most suitable for growing quality apples, almonds, and cherries. Orchards and crops are grown on terraced fields because the area is mountainous and uneven. Leveling lands and preparing terraced fields require bulldozers and tractors, but the cost of these is beyond the means of any tribesman. The plan calls for the moderate development of orchards and croplands through leveling and terracing of fields, distribution of trees, seeds, development of nurseries and training local tribesmen in agricultural practices'. "Model" orchards and fields will be developed with the assistance of agricultural experts to help teach locals for quality product and improved yield. STEP is also aware that conversion of wilderness into agricultural lands will lead to fragmentation of habitat. Therefore such activities will be undertaken only if ecologically

sound and feasible.

Water Resources

Torghar is rich in water resources in comparison to most mountains in Balochistan. Springs -both permanent and seasonal - are the main source of drinking water for people, animal and agriculture. Much of the water is wasted due to lack of storage facilities and improper irrigation.

To combat the deficiencies, this plan calls for the construction of a number of reinforced concrete storage tanks and water supply channels to increase agricultural activities, improve the drinking water supply of local people, and provide a steady source of water for livestock. Hand-pumps shall be installed at the localities where surface water is unavailable. Khaisore and Kundar are vast pasture lands having no source of permanent water. STEP also plans to build a network of storage dams at proper locations in Khaisore and Kundar. It will reduce the pressure of livestock on wildlife habitat and its vegetation.

Reforestation

The people of Torghar are aware of the importance of trees as one of the vital sources of sustenance for their existence in the mountain. The most domiment specis, wild pistachio, is the main source of fuel, fruit and foliage for animals in autumn. This important tree is being destroyed by porcupine on a large scale. Plans are underway to initiate social forestry, mostly near habitation (without introducing alien species), to fulfill the fuel-wood requirements without pressurizing wild trees.

Porcupine Menace

According to the people of Torghar, population of Porcupine increased with extirpation of leopard from the mountain. It attacks the bark of pistachio tree that lead to the ultimate destruction of tree. It also destroys roots and bulbs of many other valuable plants.

STEP is hesitant to use pesticide for control of porcupine because of its negative effects on the ecosystem. It is decided to search for its borrow and destroy this pest through conventional methods.

Medicinal Plants

No scientific work or data collection is ever been done on the plants in Torghar. Torghar is rich in medicinal plants and herb, including two types of Ephedra (Ephedra intermedia), wild almond (Aanygdalus brahnica); gazoban (Trich odesma indica), 'ajwain' (Carum capticum), black cumin (Bunin persicum) and many more. The locals collect numerous plants, herbs, seeds, root and resins for domestic medicinal purposes

and sale to traditional medicine stores in town. The future plans of STEP calls for research on plants of Torghar by scientist and also initiate cultivation of such valuable plants as black cumin to help increase the income of local inhabitants without exerting pressure on the plants growing in the wild.

Range Management

A study of Habitat and Disease issue in Torghar was undertaken by M. Frisina, M. Woodford and G.A. Awan in 2001 to assess condition of the habitat. They prepared a plan for restoration and management to be implemented by STEP in its future plans.

The main objectives of the plan is as under:

- 1. Through sustainable use management, protect the overall biodiversity of the TCP while maintaining a secure and diversified economic base from which the people of Torghar can maintain a secure future.
- 2. Maintain healthy and disease free wild and domestic animal populations within the carrying capacity of the land.

Livestock and Grazing

The local economy is traditionally based on livestock; the local people invest their savings in purchasing more sheep and goats. The size of herds is also a relevant indicator of social status. The upward trend in expanding number of livestock poses direct threat to the ecology of habitat and its biodiversity. The upsurge in domestic animal population has also lead to the abandonment of the traditional "Pargor" system. The "Pargor" practice called for rotational grazing in common pastures.

The two key factors, economic value of wildlife and the livestock losses caused by recent drought, have proved to be catalysts in the tribesmen's acceptance of STEP's plane to replace the large numbers of sheep and goats with smaller size of healthy herds. STEP is also committed to help the community with the marketing of animals ready for sale: A strategy for livestock management is being devised on the following line:

- 1. Reintroduce and implement "Pargor" a rotational grazing system designed to maintain the soils and vegetation in harmony with wild and domestic ungulates.
- 2. Regularly vaccinate all domestic livestock that reside in the TCP.

- 3. Through population monitoring establish annual sustainable-use hunting season quotas for markhor and urial as a means for funding STEP and the TCP.
- 4. Accoplish a baseline inventory of livestock range and wildlife habitat within the TCP. This baseline will serve as data base for monitoring vegetation resources.

Medical Assistance

In the past STEP has succeeded in providing medicine and Medical aid to the people of Torghar from the limited funds generated through trophy hunting, and through medicines supplied by Houbara Foundation, grant of UNDP Small Grants Program and SCI. This assistance has been a great help for the people of Torghar. Poverty and cultural traditions and lack of communication infrastructure prevent many tribal people, especially women and children from visiting doctors.

In the future plan the medical aid and assistance will continue on regular basis. Medical camps will be set up, including male and female doctors, in dirferent part of Torghar two or three time per year.

Education

The great majority of the people of Torghar are illiterate. There are 3 government one-room primary schools, in Malawai, in Tanishpa and Ubashtai. But these are too far from the other communites and its qualifications of teachers and quality of education is far from being adequate. The people of Torghar have been asking for help in this respect. STEP plans to establish at least 3 schools to be located at Kundar, Torghberg and Khaisore. The plan also calls for addition of environmental subjects to the curriculum. The tribesmen has also agreed to allow their girls to attend the schools.

Utility Stores

There is no store for supply of provisions in Torghar and people travel long distances to procure the basic necessities of life. The future plans include establishment of two stores to sell the essential goods on no profit no loss basis. Once established, the stores will be owned and operated by the community.

Financial Aid

STEP realizes that the poverty in Torghar necessitates the establishment of an endowment fund to provide some relief to those in dire need of help. Most organizations operating for this purpose loans money on interest which can cause problems for the Program because Torghar lies in a religio-political belt. STEP has

planned to create such a fund free of interests out of its own resources.

Reintroduction of Leopard

The unchecked growing population of porcupine has played havoc with tees and plants. The method for quick control through pesticides is ecologically negative approach; the safer approach of destroying the pest in its burrow is slow and time consuming. A permanent solution for control of porcupine menace lies in the re-introduction of Leopard. The people of Torghar have weighed the tremendous damage caused by porcupine against the minor losses to wildlife and livestock by leopard and arrived at a decision. They are eager for its return to the mountain. STEP is willing to oblige them. The pressure of leopard with minimal threat to wildlife and livestock, is incontestable and many people in Torghar are eager for its return to their mountain.

Biodiversity Surveys

Under the future Plan STEP will carrying out surveys of Markhor and Urial every year during each fall, and as suggested by K.A. Johnson a standard survey methodology will be used for spring surveys to assess productivity (production of young).

As in the past, surveys of small mammals, birds and reptiles were carried out by Charles A. Woods and team from Pakistan Museum of Natural History in Torghar, further extensive surveys will be conducted in the future. As mentioned earlier, no survey for flora and fauna has ever been conducted in Torghar. STEP plans to initiate conservation and sustainable use of medicinal plants, making botanical surveys an important part of the biodiversity conservation. It is likely that new endemic species of flora and fauna may be found.

Fig. 2

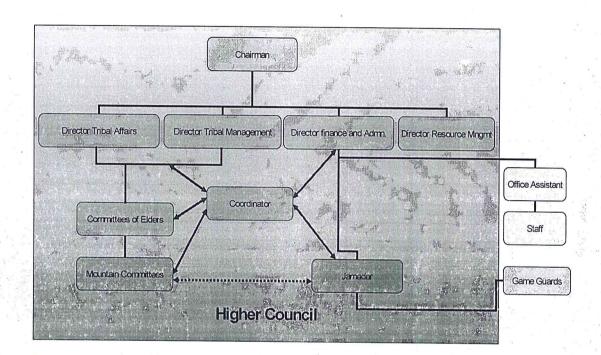


Fig. 1
Genealogy of tribes and sub-tribes having land tenure in Torghar Jalalzai Ayub Khan Khudizai Ali Khan Hakimzai Khuadizai Mehmanzai | Mirozai | Karimzai Jogizai Shahizai Shabozai | Rustum Khail Pahlawan Khail Jalal Hussain Khail Ali Khail Hazar Khail Sarmast Khail Arab Khail Mehrab Khail Ahmad Khail Rustam Khail

STEP – SOCIETY FOR TORGHAR ENVIRONMENTAL PROTECTION RULES AND BY-LAWS

Name of the society

The society shall be known as:

SOCIETY for TORGHAR ENVIRONMENTAL PROTECTION (STEP).

Area of operation

It will be operative in TORGHAR Mountain, Toba Kakar Range, Balochistan (Pakistan); and will potentially include the surrounding habitats.

Address of the society

Office No. 7, Arbab Market, Qilla Saifullah.

Quetta Office

65-Regal Plaza, Third Floor, Circular Road, Quetta, Balochistan.

Aims and objectives

The society accepts the objectives embodied in the statutes and principles of the National Conservation, of Pakistan (NCS) and world charter of Nature and its aims and objectives shall be:

- 4.1 To conserve both the living and non-living resources of the Program Area.
- 4.2 To improve living conditions, health, education, and the well being of the people living in the Program Area.
- 4.3 To enhance the biodiversity and the general ecology of the Program Area through development schemes and improvement the wildlife habitat.
- 4.4 To conserve and promote the cultural heritage of the area.
- 4.5 To manage and exploit the natural resources sustainably, based on scientific methods for the general betterment of the population of the Program Area and to uplift their socio-economic conditions.
- The management and exploitation of the resources shall be subject to the relevant rules and regulations currently enforced in Balochistan.
- 4.7 To promote awareness among the people of the program area through education about the importance of conservation of the depleting environment.
- 4.8 To receive loans, donations, raise funds in the name of STEP for implementation of programmes on such terms and conditions as may be expedient.
- 4.9 To acquire from the Government or any authority, licenses, concessions, permits, grants, land rights and any other relevant privileges.
- 4.10 To raise and borrow any money and funds, in the name of STEP, required for purposes of STEP, without security or on such security as the society may think fit and to repay any such borrowings.
- 4.11 To complement and supplement Government and other donor agencies' efforts, in conservation, social welfare and development.

- 4.12 To undertake all conservation and development works i.e., wildlife management, reforestation, range management, construction of roads/bridges, water supply, irrigation channels and other works in the Program Area with participation of the people of Program Area, the Government and other NGO's.
- 4.13 To develop local talents and provide training facilities and higher education in the field of social sector activities and monitoring evaluation and reporting of the activities.
- 4.14 To invest funds of STEP in such manner as may be considered fit for the furtherance and advancement of the objects of the society.
- 4.15 To take all such actions aiming at conservation socio-economic development of the area.
- 4.16 To arrange seminars and workshops with collaboration of donor agencies, Government, and other NGO's.

Finances and funds

- The income generated by sustainable harvesting of natural resources (Trophy Hunts) will be used for daily expenditures, wages, office expenditures, travel expenditures and expenditures incurred by specific activities in the Program Area (conduction of hunts, surveys, monitoring, promotion of the program etc.)
- The income generated by sustainable harvesting of natural resources (Trophy Hunts) will further be used for non-development activities implemented by the Mountain Committees (medical help, food provision etc.).
- 5.3 Within the income generated by sustainable harvesting of natural resources (Trophy Hunt), the hunting permit fee, exportation charges and other relevant expenses will be paid by STEP.
- 5.4 The benefits deriving from the income generated by sustainable harvesting of natural resources (Trophy Hunt), to be distributed to each Mountain Committee, will be calculated according to the land, within the Program Area, owned by the tribal groups represented by the concerned Mountain Committee.
- 5.5 Donations from individuals and grants from National and international donor agencies, including NGOs, will be used for development works (building of water related infrastructures, roads etc.)
- 5.6 Development works will only be implemented in the Program Area.
- 5.7 The financial year of the society will run from July 1st to June30th. The financial procedures and practices will be according to the STEP Financial Procedure Manual.
- 5.8 All taxes, where applicable will be paid by STEP.

ADMINISTRATIVE COMPOSITION

Board

- a. The board will replace the previous Council
- b. The board will be composed of 7 people, all appointed by the present chairman
- c. Members of the Board will serve for a term of 5 years
- d. The Board will appoint the Chairman of STEP
- e. The Board will advise the Chairman when requested

- f. The Board has the capacity to dismiss the Chairman, under two months notice, for motives which the Administration of STEP will recognize as valid.
- g. The Board will hold meeting on a bi-annual basis, to which the Chairman will attend.
- h. Any member who did not attend three consecutive meetings, and failing to provide with a valid reason, will be terminated from membership.
- The quorum necessary for the transaction of the business of the Board shall be four.
- A resolution in writing signed by all directors shall be as valid and effectual as if it had been passed at a meeting of the Board duly called and constituted.

Chairman

- 7.1. Chairman will be appointed by the Board for a period of five years.
- 7.2. Chairman will appoint the Chief Executive.
- 7.3. Chairman will supervise the overall activities of STEP.
- 7.4. Chairman will ensure that any activity carried out by the Program is not used for purposes with which the Program is not concerned, such as solving tribal disputes.
- 7.5. Chairman will intervene to solve any Tribal dispute within the Program Area which threatens the Program. Any intervention will be carried out in consultation with the Chief Executive.
- 7.6. Chairman will supervise the Higher Council and the performance of its duties.
- 7.7. Chairman will chair all meetings held by Higher Council.
- Chairman will authorize any member of the Administration to act on his behalf.
- 7.9. If unable to attend a meeting, Chairman will nominate, in writing, a person to represent him.
- 7.10. The Chairman will ensure that all actions undertaken by the Coordinator are aimed
- Chairman has authority to fire any employee of STEP, after having consultation the Board.
- 7.12. The Chairman will decide, with consultation of the Board of Management, the amount to be fined to a person having made false accusations. The DCM will ensure that the above fine will be collected.
- 7.13. If a fine could not be retrieved from the proven poacher by the Mountain Committee, the DCM will be responsible for retrieving the fine.

Administration

8.1. Chief Executive (CE)

- 8.1.1. Chief Executive will represent STEP in any transaction, deal, or negotiations with any other institution or individual, nationally or internationally.
- 8.1.2. Chief Executive will make, draw, endorse, sign, accept, negotiate and give all cheques, promissory notes, securities, and any other legal contract and legal documents.
- 8.1.3. Chief Executive will authorize any member of the Administration to act on his behalf in operating bank accounts.

- 8.1.4. Chief Executive will hire, in consultation with the Chairman, any employee of STEP. This includes those employees composing the Administration of STEP, as well as any employee within the mountain who will not fall under the authority of any Mountain Committee.
- 8.1.5. Chief Executive will appoint the Mountain Guides & Watchers team after consultation of the Chairman. These employees will not fall under authority of any Mountain Committee.
- 8.1.6. Chief Executive will plan and secure all conservation activities to be undertaken in the Conservation Area.
- 8.1.7. Chief Executive will be responsible for generating funding for any conservation activity to be undertaken in the Conservation Area.
- 8.1.8. Chief Executive will represent STEP in relevant meetings, seminars, etc., both nationally and internationally.
- 8.1.9. Chief Exevutive will attend all provincial and federal government meetings which aim at deciding upon the allocation of hunting permits to STEP.

8.2. Director of Tribal affairs (DTA)

- 8.2.1. DTA will be appointed by Chief Executive.
- 8.2.2. The DTA will ensure that any activity carried out by the Program is not used for purposes with which the Program is not concerned, such as solving tribal disputes.
- 8.2.3. The DTA will settle/arbitrate the disputes among the people of the Program Area which could affect the Program.
- 8.2.4. The DTA will provide, if needed, appropriate security measures.
- 8.2.5. Any decision taken by DTA which involves the Program will be taken in consultation with the Chairman and the Chief Executive.
- 8.2.6. Any kind of suggestion, request or complaint issued by the DTA should be made in writing and addressed to the Chief Executive

8.3. Director finance and administration (DFA):

- 8.3.1. DFA will be appointed by Chief Executive.
- 8.3.2. The DFA will be responsible for all financial activities of STEP.
- 8.3.3. The DFA will hold, manage and dispose of STEP funds as authorized by the Chief Executive.
- 8.3.4. The DFA will maintain and operate all the bank accounts of the society singly or jointly as directed by the Chair.
- 8.3.5. The DFA will determine the budget and its usage for the Mountain Committees.
- 8.3.6. The DFA will supervise and monitor all distribution of income, in cash or in kind, taking place in the Conservation Area.
- 8.3.7. The DFA will supervise and monitor all Conservation Works carried out in the Conservation Area.
- 8.3.8. The DFA will be responsible for accommodating trophy hunters within the Conservation Area, as well as securing the hunt.
- 8.3.9. The DFA will maintain all account books and financial reports. He will present financial statements of accounts annually, at the Board Meeting.

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- 8.3.10. The DFA will prepare the annual budget in consultation with the Chief Executive and present it before the Board.
- 8.3.11. DFA will supervise the General Administrative Staff.

8.4. Coordinator:

- 8.4.1. The coordinator will work under the direction of Chairman and DFA. He will be directly accountable to both the Chairman and DFA for any action he undertakes in the name of the Programme.
- 8.4.2. The main duty of the Coordinator is to ensure a communication link between the following:
 - Chairman of STEP
 - STEP Administration
 - Mountain Committees
 - Mountain Guides & Watchers
 - Committee of Elders
- 8.4.3. The Coordinator will ensure that any decision taken, action induced, by STEP is effectively applied within the Program Area.
- 8.4.4. The Coordinator will ensure that all funds disbursed by STEP, in cash or in kind, destined to the people living within the Conservation Area, effectively reach their destination.
- 8.4.5. The Coordinator will monitor any development work carried out by the Program, and report matters to the DFA or the Chairman.
- 8.4.6. The Coordinator will, along with Jamadars, monitor the Mountain Guards and the performance of their duties.
- 8.4.7. The Coordinator will be responsible for dealing with local government institutions.
- 8.4.8. The Coordinator will collect and consign any report, complaint or demand emanating from Mountain guards, from Mountain Committees, from Committees of Elders, or from any other individual living in the Conservation Area.
- 8.4.9. The Coordinator will ensure that any oral report is transcribed in a written form.
- 8.4.10. The Coordinator will ensure that reports are filed and forwarded to the Administration of STEP.
- 8.4.11. The Coordinator has the authority to file a report, in a written form, addressed to the Administration of STEP, on any issue he feels may damage the Program and has not been reported by any other individual(s).
- 8.4.12. The Coordinator will distribute the pay to every Mountain Guards.
- 8.4.13. Any the decision of delaying payment, cutting payment or firing a Mountain Guard will be taken only by the Chairman, under recommendation of the Jamadar or Coodinator

IMPLEMENTING AGENCIES

STEP will create the following bodies for a better implementation of its projects.

These aim at generating greater responsibility and decision power for the people living in the Conservation Area

Mountain Guides & Watchers

- 9.1. The Chief Executive will nominate and appoint a team of Mountain Guides & Watchers
- 9.2. Mountain Guides & Watchers will only be composed of people living within the Conservation Area.
- 9.3. Criteria for employing Mountain Guides & Watchers will include:
 - Their competence, knowledge and understanding of animal behaviour;
 - Their competence, knowledge and understanding of the social issues in the Conservation Area;
 - Their capacity to report on individuals, including those belonging to their own tribal group.
- 9.1. The Mountain Guides & Watchers will be directly hired by STEP Administration, thereby holding no connection with the Mountain Committees.
- 9.2. The Mountain Guides & Watchers will be responsible for all matters concerning the hunts carried out by the Program.
- 9.3. The Mountain Guides & Watchers will monitor the mountain and its biodiversity.
- 9.4. The Mountain Guides & Watchers will assist any researcher or team of researchers present in the Conservation Area for the purpose of collecting data (surveys, assessments, etc.).
- 9.5. The Mountain Guides & Watchers will monitor the Mountain Guards as well as the Mountain Committees. They will report any kind mismanagement, or misconduct thought to be of some harm to the Program.
- 9.6. Any report, complaint or demand made by the Mountain Guides & Watchers will be addressed to the Coordinator.

Jamadars

- 10.1. The Chief Executive will nominate and appoint a team of Jamadars, numbering one for every Mountain Committees.
- 10.2. Jamadars will be directly hired by STEP Administration, thereby holding no accountability to the Mountain Committees.
- 10.3. The Jamadar will monitor the deeds and actions of Mountain Guards. He will ensure that the Conservation Area is effectively guarded and that no hunting takes place.

- 10.4. The Jamadar will collect and distribute the pay to the Mountain Guards for whom he is responsible.
- 10.5. The Jamadar will collect oral or written reports on any matter concerning the Mountain Guard Team.
- 10.6. The Jamadar will ensure that these reports are transmitted to the Coordinator.
- 10.7. The Jamadar will recommend sanctions against Mountain Guards for alleged faults. The decision to actually undertake any sanction will be taken only by the Chairman.

Mountain Guards

- 11.1. The Administration of STEP will decide upon the number of Mountain Guards to be appointed by each Mountain Committee.
- 11.2. The Mountain Committee will nominate whom to appoint as Mountain Guard.
- 11.3. The Mountain Committee will decide, for the Mountain Guards under its responsibility, upon the modalities of tenure for this job.
- 11.4. The Mountain Guard will be appointed by the Mountain Committee on provision that the person is recognized knowledgeable about the Conservation Area's biodiversity; capable of reporting against any person living in the Conservation Area, including members of the same tribe; that the Guard is living in the area while performing duty.
- 11.5. The Mountain Guard will be responsible for guarding the game population and prevent any hunting in the Conservation Area.
- 11.6. The Mountain Guard Team is responsible for investigation on any alleged poaching. The investigation will be made by an Investigation Team composed of Mountain Guards belonging to different Mountain Committees.
- 11.7. The investigation team will consign a written report against the alleged poacher. The report will be given to the Coordinator. If the accusers report without any written statement, a written statement will immediately be made by the person receiving the report.
- 11.8. The person or persons who report and prove the poaching will be rewarded with cash.
- 11.9. Any person accusing another of poaching under false allegations will be fined.
- 11.10. The Mountain Guard will be further responsible for ensuring the security and protection of wildlife and biodiversity at large. He will cater for the environment and signal any degradation, of any kind, to the Administration of STEP.
- 11.11. Throughout the year, the Mountain Guard will be assigned such tasks as maintaining roads, maintaining streams for wildlife, protecting trees from predators, controlling grazing and minimizing competition between domestic livestock and wildlife, etc. The completion of such tasks will be monitored by the Mountain Committee, the Jamadars, as well as the Mountain Guides & Watchers.
- 11.12. Any individual living in the Program Area can, at any time, recommand the replacement of one or many Mountain Guards.
- 11.13. The complaint can only be filed under the two following allegations: that the hired person or team is doing harm to the program; that the appointed person

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- or team are proven incompetent at performing their duty. This complaint will be in written form and given to the Coordinator.
- 11.14. The replacement of one or more Mountain Guards can only be decided by the Higher Council.

Mountain Committees

12.1. Mountain Committees composition

- 12.1.1. The Mountain Committee will be exclusively composed of people living within the Program Area
- 12.1.2. Any person living within the Program Area, excluding those employed by the Program, is entitled to be sitting in the Committee.
- 12.1.3. The Mountain Committees will be nominated by the members of the concerned tribal group living in the Conservation Area.
- 12.1.4. The composition of the Mountain Committees will be acknowledged and approved by the members of the concerned tribal groups living in the Conservation Area, through a written agreement involving the head, or a member, of each household.
- 12.1.5. The Mountain Committee will be approved if those people, above mentioned, recognize that one or more person sitting as Mountain Committee Member is capable of defending their rights and interests.
- 12.1.6. Mountain Committee members will not be entitled to any financial facilities as remuneration for their membership.
- 12.1.7. Mountain Committee members will not be able to claim a job for themselves during the duration of their membership.
- 12.1.8. The father, son(s) or daughter(s) of a Mountain Committee member will not be entitled to any job.
- 12.1.9. Committee members will appointed for 2 years

12.2. Purpose, Competence and Responsibilities

- 12.2.1. Mountain Committees' main purpose is to safeguard the biodiversity and the environment of the Program Area.
- 12.2.2. Mountain Committees will be held responsible for the increase or decrease of animal Population in the Mountain Area. Any decrease of animal population will lead to sanctions on the Mountain Committees. The nature of the sanctions will be decided by the Chairman or the Chief Executive.
- 12.2.3. The Mountain Committees will represent the rights of all individuals falling under their authority.
- 12.2.4. The competence of the Mountain Committee is circumscribed to the group it represents. One Mountain Committee will have no say in doing or decision taken by another Committee. Any issue involving more then one Committee, or two or more tribal groups, each falling under a different Committee will only be dealt with by the Higher Council.
- 12.2.5. The Mountain Committee will be responsible for distributing all assets coming from the Program to the tribal group which they represent.
- 12.2.6. The Mountain Committee will held accountable for fairness by which the benefits are distributed. The Mountain Committee will be responsible for finding the most appropriate system of distribution.

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- 12.2.7. The Mountain Committee will be responsible for recommending specific people for specific jobs in the area falling under its authority.
- 12.2.8. Mountain Committees are responsible to check on Mountain Guards, or any other employee falling under their competence, ensuring that their duties are performed in properly.
- 12.2.9. Mountain Committee is responsible for reporting to the Coordinator any misconduct, by any individual(s), if thought to be endangering the Program. This includes poaching, any action which could threat the biodiversity of the area, or any action which will damage, or threat to damage, the Program.
- 12.2.10. Mountain Committees are responsible for reporting to the Coordinator any misconduct from Mountain Guards or other employees under their responsibility.
- 12.2.11. In case an individual is proven to have poached, the Mountain Committees are responsible for retrieving the fine. If the poacher inhabits the Conservation Area, the fine will be retrieved by the Mountain Committee to which the poacher belongs.
- 12.2.12. Any report on Mountain Guards or other employee will be made in written form. The report should either be consigned in a written form at the time of addressing it to any concerned party, or should be written by the person receiving the report.
- 12.2.13. A Mountain Committee has the authority to recommend the dismissal of an employee performing duty in the area falling under its authority, on allegation that the concerned employee is not performing his duty or is damaging the Program. Any such suggestion will be submitted, in a written form, to the Higher Council.

12.3. Conservation activities and relief programs

- 12.3.1. Mountain Committees are responsible for suggesting new jobs or any activity which had not been initially planned by the Program and which could improve the outcome of the program or benefit the mountain biodiversity.
- 12.3.2. Suggestions made by the Mountain Committee to carry out any new activities will be submitted for approval, in a written form, to the Higher Council.
- 12.3.3. Mountain Committee will chalk out and monitor small development projects.
- 12.3.4. Mountain Committees are responsible to chalk out the hardship cases and to bring this matter to the knowledge of the Director of Finance and Administration.
- 12.3.5. Mountain Committee will point out patients and recommend them to the Coordinator. If the patient must seek treatment in Quetta, then the Coordinator will refer to the Director of Finance and Administration. Both the Coordinator and the DFA will decide upon carrying the treatment according to the availability of funds.

12.4. Decision making

- 12.4.1. The Mountain Committee will have no head or Chairman. Every Mountain Committee Member will have an equal say in discussion or decision making processes.
- 12.4.2. The Mountain Committee will only approve of unanimous decisions.

- 12.4.3. Any decision taken by the Mountain Committee will be consigned in writing, signed and attested by each person involved in the decision making.
- 12.4.4. Any report, suggestion or complaint addressed to other STEP representatives (Chairman, Board of Management, or Higher Council) will not be oral but will be made in written form. The report, suggestion or complaint should either be consigned in a written form at the time of addressing it to any concerned party, or should, at the most, be written by the person receiving the report, suggestion or complaint.
- 12.4.5. Meetings should be called upon well ahead of time.
- 12.4.6. Meetings will be attended by every Mountain Committee member. If any Mountain Committee member could not attend a meeting, he can, if he wishes, delegate his authority to another Committee member through a written notice. In case the absent Committee member has not delegated his authority, the meeting will not take place.
- 12.4.7. A Mountain Committee member who cannot attend a meeting more then twice will be terminated from the Mountain Committee, unless the Higher Council is convinced of his valid reasons.
- 12.4.8. If a Mountain Committee member is dismissed from the Committee before termination of his mandate, his successor will have to be acknowledged and approved by the members of the concerned tribal groups living in the Program Area, through a written agreement involving the head or a member of each household.

12.5. Complaints against Mountain Committees

. If any person, living in the Conservation Area and falling under authority of a given Mountain Committee, is dissatisfied with the concerned Committee, or any of the Committee members, this person is entitled to bring the matter to the Coordinator, or the Higher Council.

12.5.1. Any complaint against a Mountain Committee or any Mountain Committee members will be addressed to the Coordinator who will consign it in a written form.

Committee of Elders

13.1. Committee of Elders Composition

- 13.1.1. The Committees of Elders will be composed of elders living inside or outside the Program area. They will only represent tribal groups which can claim members living in the Conservation Area.
- 13.1.2. Members of Committees of Elders are not eligible to membership to any Mountain Committee.
- 13.1.3. Members of the Committees of Elders will not be entitled to any financial facilities as remuneration for their membership
- 13.1.4. The composition of each Council of Elders will be acknowledged and approved by the members of the concerned tribal groups living in the Program Area, through a written agreement involving the head or a member of each concerned household.

13.2. Purpose and responsibilities

13.2.1. The purposes and responsibilities of the Committees of Elders will the same as those assigned to the Higher Council.

- 13.2.2. The Committees of Elders will be responsible for advising and supporting the Mountain Committees.
- 13.2.3. Committees of Elders will be representing each household present in the mountain
- 13.2.4. The Committees of Elders will secure and protect the rights of the tribal group(s) it represents from within the mountain.
- 13.2.5. The Committees of Elders will address the rest of STEP representatives only during Higher Council meetings.
- 13.2.6. In case of poaching, and if the relevant Mountain Committee failed to do so, the Committees of elders will be responsible for retreiving the fine from a proven poacher.

Higher Council

The Higher Council will operate as a bridge between the Administration of STEP and the Implementing Agencies

14.1. Higher Council Composition

- 14.1.1. The Higher Council will be composed of
 - STEP Chairman
 - STEP Chief Executive
 - Mountain Committee representative(s). A Mountain Committee will have an equal number of representatives then that of the Committee of Elders it is linked to.
 - Committees of Elders representative(s). A Committee of Elders will have an equal number of representatives then that of the Mountain Committee it is linked to.
 - Jamadars.
- 14.1.2. Members of the Higher Council will not be entitled to any financial facilities as remuneration for their membership.

14.2. Purpose and responsibilities

- 14.2.1. The Higher Council's is to safeguard the biodiversity and the environment of the Program Area from outside as well as from inside forces.
- 14.2.2. The Higher Council will deal with any issue which involves several tribal groups from within the mountain
- 14.2.3. The Higher Council will deal with any issue which involves individuals living outside the mountain, who are members of one or several tribal groups present in the Conservation Area.
- 14.2.4. The Higher Council will create a forum, enabling those who are aware of any decision's impact to be involved in the decision making process.
- 14.2.5. The Higher Council will enable those who retain some kind of authority, whether on the tribe or sub-tribe level, to participate in the decision making process of the Program.
- 14.2.6. The Higher Council's purpose is to solve problems for which those living in the Program Area may not have the required capacity.
- 14.2.7. The Higher Council will monitor all policies to be implemented in the Conservation Area.

- 14.2.8. The Higher Council will ensure that the Program does not initiate anything which might have unwanted repercussions on the tribal affairs and/or the social set up of the Conservation Area.
- 14.2.9. The Higher Council will ensure the any activity carried out by the Program is not used for purposes with which the Program is not concerned, such as solving tribal disputes.
- 14.2.10. The Higher Council will ensure that the benefits generated by the program are fairly distributed in the Conservation Area by the Mountain Committees.
- 14.2.11. The Higher Council will ensure that the Mountain Committees do not exercise authority, power or pressure beyond that which are stipulated in the present bye-laws.
- 14.2.12. The Higher Council has authority to dissolve part or the whole of a Mountain Committee, upon conviction, on one or more persons' claim, that the Mountain Committee is illegitimate, biased, is not performing its duties or is damaging the Program.
- 14.2.13. If a fine could not be retrieved from a proven poacher by Mountain Committees or the DCM, the Higher Council will demand the equivalent amount from the relevant Mountain Committee and Committee of Elders.

14.3. Decision making

- 14.3.1. The Higher Council will only approve of unanimous decisions.
- 14.3.2. All participants of the Higher Council will be heard in an equal manner and any issues should be addressed collectively.
- 14.3.3. In case unanimity is not reached, the Chairman is invested with the power of taking a final decision.
- 14.3.4. Any decision taken by the Higher Council will be consigned in written, signed and attested by every person involved in the decision making.
- 14.3.5. Decisions will be taken during General Assemblies or Extraordinary Assemblies or regular meetings.
- 14.3.6. The Higher Council will hold a General Assembly once a year to assess the program's evolution and inform all its members of achievements or decisions which have taken place, or any problems which arose.
- 14.3.7. Extraordinary Assemblies will be called upon if any emergency situation takes place.
- 14.3.8. The Coordinator will be responsible for informing all relevant person of any Higher Council meeting.
- 14.3.9. General Assemblies will be attended by every Council member. If any Higher Council member could not attend the Assembly meeting, the former can delegate authority to another Council member through a written notice. An absent Council member who has not delegated authority will not be taken into consideration for any decision making during the concerned meeting.
- 14.3.10. Extraordinary meetings can be called upon, at any moment, by the Chairman or any STEP Board of Management member, any Higher Council member, any Committee member, or any person from the Program Area.
- 14.3.11. Any complaint or demand justifying calling the Higher Council should be filed in written. The complaint or demand should either be consigned in a

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- written form at the time of addressing it to any concerned party, or should, at the most, be written by the person receiving the complaint or demand.
- 14.3.12. Any person calling the Higher Council on false or unjustified allegations will be punishable. The punishment will be decided by the Higher Council.
- 14.3.13. The decision of calling the Higher Council will be recommended by the Coordinator, and approved of by the Chairman.
- 14.3.14. Extraordinary meetings will only be attended by concerned parties. If a concerned Higher Council member could not attend the Assembly meeting, the latter can delegate authority to another Council member through a written notice. In case the absent concerned Council member has not delegated authority, the decision to maintain or postpone the meeting will be the responsibility of the Chairman.
- 14.3.15. Minutes of all meetings will be written and made available in the Administration's office. The minutes will be translated both in Pashto and English.

Poachers

- 16.1. Any person found guilty of poaching will be fined 5 sheep or 8 goats.
- 16.2. The Higher Council will be responsible for retrieving the fine.
- 16.3. If the fine could not be retrieved, the relevant Mountain Committee and Council of Elder will provide STEP with the equivalent amount then that of the original fine.
- 16.4. The collected fines will be alloted to the area in which the poaching took place in the shape of medical aid or *mrasta* (relief fund).

Other Jobs

- 17.1. Specific jobs will be appointed by the management of STEP to the Mountain Committees. The names of the persons to whom the jobs are appointed will be suggested by the Mountain Committee.
- 17.2. The number of jobs given will be decided by the management of STEP.
- 17.3. The duties and duration of jobs will be specified by the management of STEP.
- 17.4. The salary for the jobs will be specified by the management of STEP.
- 17.5. The appointment of jobs will exclusively be based on the capacity of the person to fulfil the required duty.
- 17.6. The appointed employee will be accountable to the Mountain Committee for the duty performed.

STEP By-Laws Amendment

- 18.1. The Chairman has the power, at any moment, to amend the By-Laws of STEP.
- 18.2. Amendments can be suggested by the Higher Council. These amendments will only be applied if approved of by the Chairman.

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1.	Nawabzada Aurangzeb Zogezai	
	Chairman	Date:
2.	Sardar Naseer Tareen	
	Chief Executive Officer	Date:
3.	Tahir Rasheed	
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	Board Member	Date:
4.	Nadir Gul Bareach	
	Board Member	Date:
5.	Muhammad Anwar	·
	Board Member	Date:
6.	Muhammad Paind Khan	
	Director Finance & Admin	Date: