

A Review of Community-Based Trophy Hunting Programs in Pakistan

Prepared for the Mountain Areas Conservancy Project
with the collaboration of
The World Conservation Union (IUCN-Pakistan),
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TABLE OF CONTENTS

Acknowledgements.....	5
LIST OF ACRONYMS AND ABBREVIATIONS.....	6
EXECUTIVE SUMMARY.....	7
A BRIEF INTRODUCTION TO THE WILD CAPRINAE OF PAKISTAN.....	8
AN INTRODUCTION TO COMMUNITY-BASED TROPHY HUNTING PROGRAMS.....	10
Community-based Trophy Hunting Programs in Pakistan.....	11
THE REVIEW PROCESS.....	13
REPORT FINDINGS.....	14
The Role of the National Council for the Conservation of Wildlife (NCCW).....	14
<i>CITES</i>	14
<i>Quota Allocation</i>	14
<i>Export Permits</i>	14
<i>Monitoring and Reporting</i>	15
<i>Urial</i>	15
The Role of Provincial Governments.....	16
<i>Data Collection</i>	16
<i>Permit Allocation</i>	17
<i>Marketing</i>	17
<i>Fees</i>	18
<i>Government's Role</i>	18
The Role of the Communities.....	19
<i>Data Collection</i>	19
<i>Marketing</i>	19
<i>Conservation Management Plans</i>	20
<i>Village Conservation Funds</i>	21
The Role of NGOs.....	21
<i>Workshops and Training</i>	21
<i>Marketing</i>	22
RESULTS OF EXISTING PROGRAMS ON THE STATUS OF SUBJECT POPULATIONS.....	23
<i>Illegal Hunting</i>	25
PROGRAM OPERATION.....	26
Data Collection, Record Keeping and Reporting.....	26
Population Data.....	26
<i>Censuses and Surveys</i>	27
<i>Defining Trophies</i>	28
<i>Record Keeping</i>	29
<i>License Protocols</i>	29
<i>Reporting System</i>	29
Conservation Management Plans.....	29

Financial and Marketing	30
Hunting Fees	30
<i>Government License Fee</i>	30
<i>Community Trophy Fee</i>	31
<i>Auctions</i>	32
<i>Domestic Hunters</i>	32
<i>Trophy Fee Payment Mechanism</i>	32
CTHP Conservation Fund	33
<i>Financial Transparency and Trust</i>	33
The World Market	34
<i>Services and Payment Policies</i>	34
<i>Import/Export of Sport-Hunting Weapons</i>	35
Consistency	36
District Conservation Committees	36
Capacity Building and Training	37
Specific Observations	38
Northern Areas	38
NWFP	39
Balochistan	40
Challenges and Questions	42
<i>The Long-term Outlook</i>	42
<i>Urial</i>	42
<i>Predation</i>	42
<i>Personnel</i>	43
<i>Co-operation & Complementarity</i>	43
CONCLUDING REMARKS	44
SUMMARY OF KEY RECOMMENDATIONS	45
National Council for the Conservation of Wildlife (NCCW)	45
Provincial Governments	46
Communities	46
NGOs	46
Other	47
REFERENCES CITED	48
APPENDIX 1 - CITES CONFERENCE OF THE PARTIES 10	50
APPENDIX 2 - CITES CONFERENCE OF THE PARTIES 11	52
APPENDIX 3 - TERMS OF REFERENCE	54
APPENDIX 4 - SUMMARY OF MEETINGS HELD DURING THE REVIEW PROCESS	56
APPENDIX 5 - CHECKLIST OF QUESTIONS USED IN THE REVIEW PROCESS	57
APPENDIX 6 - AUCTIONS	58

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List of Acronyms and Abbreviations

AKRSP - Aga Khan Rural Support Programme
CIC - Conseil International de la Chasse
CITES - Convention on the International Trade in Endangered Species
CMP - Conservation Management Plan
CoP - CITES Conference of the Parties
CSG - IUCN Caprinae Specialist Group
CTHP - Community-based Trophy Hunting Program
DC - Deputy Commissioner
DCC - District Conservation Committee
DFO - Divisional Forest Officer
GEF - Global Environmental Facility
GoP - Government of Pakistan
GR - Game Reserve
HVO - Hushe Village Organisation
IUCN - The World Conservation Union
KNP - Khunjerab National Park
MACP - Mountain Areas Conservancy Project
NAFD - Northern Areas Forest Department
NAs - Northern Areas (of Pakistan)
NCCW - National Council for Conservation of Wildlife
NGO - Non-Governmental Organisation
NP - National Park
NWFP - North West Frontier Province (of Pakistan)
NWFPWD - North West Frontier Province Wildlife Department
PA - Protected Area
PRIF - Pre-Investment Feasibility (GEF pilot project phase)
PTDC - Pakistan Tourism Development Corporation
SCI - Safari Club International
SKB - Skoyo-Karabathang-Basingo (villages)
SKIDO - Shahi Khyber Imamabad Development Organisation
STEP - Society for Torghar Environmental Protection
Asian SUSG - Asian Sustainable Use Specialist Group
SVK - Shagharthang Valley & Kachura
ToR - Terms of Reference
UNDP - United Nations Development Programme
USFWS - U.S. Fish & Wildlife Service
VCC - Village Conservation Committee
VCF - Village Conservation Fund
VO - Village Organisation
VWG - Village Wildlife Guide (= Village Wildlife Watchers)
WD - Wildlife Department
WWF - World Wide Fund for Nature
WWF - Pakistan - World Wide Fund for Nature - Pakistan

Executive Summary

This is a report on the first comprehensive national-level review of trophy hunting programs in Pakistan. However, it is only a first step towards the ultimate national goal of developing and maintaining an effective trophy hunting program as part of the overall biodiversity strategy. The primary objective of the trophy hunting program is the conservation of large mammals such as Caprinae, along with their habitats. This is achieved through a system which benefits local communities by providing incentives to conserve their wildlife resources.

The review was based on an intensive 3.5-week period of fieldwork in the mountain regions of the Northern Areas, the NWFP and Balochistan, Pakistan. The review process was participatory, involving consultation and discussion with community conservation committees, and representatives of governments and NGOs. While based primarily on my findings, it also incorporates suggestions and ideas from various participants. The results include an evaluation of the current trophy hunting programs, together with recommendations for their improvement and/or maintenance.

Pakistan is positioned to lead the world in the application of community-based trophy hunting programs to the conservation of biodiversity in mountain ecosystems. The programs it has initiated are progressing but require support and nurturing if they are to provide sustainable conservation benefits for wildlife and communities.

It will take courage, leadership and a commitment on the part of governments to support the community-based conservation programs if biodiversity is to be conserved in Pakistan. The Federal government needs to act as a buffer between communities and Provincial governments to ensure that the biological principles are adhered to and that communities are free to go in the directions they wish to meet their conservation goals. Both levels of government must support communities involved in CTHPs and also ensure that the programs are free of any corruption. There is a clear need for transparency and accountability on the part of all parties and all process involved in CTHPs.

NGOs such as IUCN-Pakistan and WWF - Pakistan must also continue to play a significant but supportive role in helping communities develop the capacity necessary to run their own programs. They can also make a considerable contribution to technical training not only of community wildlife guards but also of government field staff. Such training increases technical capacity and further strengthens links between government workers and community members.

Ultimately, NGOs and governments can, and should, play only a supportive role, because VOs need to become relatively independent if CTHPs are to be sustainable.

The ultimate goal of Pakistan's community-based trophy hunting program is the conservation of the country's rich and precious biodiversity. Successful community-based trophy hunting programs should not be thought of solely as a means to generate funds. Conservation benefits must be placed firmly at the forefront at all times.

A Brief Introduction to the Wild Caprinae of Pakistan

Pakistan has a rich diversity of wild Caprinae (sheep and goats) and is one of the key countries globally for Caprinae conservation. There are at least 7 caprin species in Pakistan, divided into as many as 12 subspecies (Hess et al. 1997, Roberts 1977) (Table 1). All but one of these are of interest to sport hunters. Living mostly in small fragmented populations, these animals range from the desert hills in southern Balochistan and Sindh, to the foothills and high mountains in the north.

Table 1. Current international conservation status of wild caprins found in Pakistan. The presence of Himalayan tahr (not shown) in Pakistan is doubtful.

Taxon	2000 IUCN Red List*	CITES Appendix
Western Himalayan goral (<i>Naemorhedus goral bedfordi</i>)	LRnt**	
Blue sheep (<i>Pseudois nayaur nayaur</i>)	LRnt	
Sindh wild goat (<i>Capra aegagrus blythi</i>)	VUA2cde	
Chiltan wild goat (<i>Capra aegagrus chiltanensis</i>)	CRC2b	
Asiatic or Himalayan ibex (<i>Capra sibirica</i>)	LRlc	
Flare-horned markhor (<i>Capra falconeri falconeri</i>)	ENC2a	I
Straight-horned markhor (<i>C. f. megaceros</i>)	ENC2a	I
Blanford's urial (<i>Ovis orientalis blanfordi</i>)	VUC1	II
Afghan urial (<i>O. orientalis cycloceros</i>)	VUC1	II
Punjab urial (<i>O. o. punjabiensis</i>)	ENA1cde, C1+2a	II
Ladakh urial (<i>O. o. vignei</i>)	ENA2cde, C1+2a	I
Marco Polo sheep (<i>Ovis ammon polii</i>)	VUA2cde, C1	II

* Hilton-Taylor (2000)

** IUCN Red List categories: LR = low risk; VU = Vulnerable, EN = Endangered; CR = Critically endangered. For subcategory codes see IUCN (1994)

The Western Himalayan goral is restricted to the outer Himalayan foothills. Little is known about this forest dweller and it is of little or no interest to trophy hunters.

Tibetan blue sheep occur in the northern mountains of the NAs, in the upper reaches of the Shimshal Valley and possibly Gujerab Valley (T.J. Roberts, in litt.). These animals are of interest to sport hunters, and Pakistan might have some of the largest trophy individuals of this subspecies (A. Khan, pers. comm.).

Wild goats are scattered throughout the arid and often isolated mountain ranges of southern Balochistan and southwestern Sindh. Two forms are recognised in Pakistan - the Sindh wild goat, locally referred to as Sindh ibex, and the Chiltan goat or Chiltan markhor. This latter subspecies is restricted to the Chiltan hills, southwest of Quetta. Uncertainty surrounds its taxonomic position because its external morphology exhibits characteristics intermediate between wild goats and true markhor. In addition to considering the Chiltan goat as a markhor, Roberts (1969, 1977) described another four subspecies of markhor in Pakistan. Schaller and Khan (1975) recognised only two, combining Kashmir and Astor

forms as flare-horned markhor (*C. f. falconeri*), the Kabul and Suleiman forms as straight-horned markhor (*C. f. megaceros*), and Chiltan markhor as a wild goat. The CSG and the IUCN Red List follow Schaller and recognise two subspecies of markhor. Most of the world's population of markhors occurs in Pakistan from the mountains of Balochistan north to NWFP and the NAs (Hess et al. 1997, Roberts 1977). Asiatic or Himalayan ibex are probably the most abundant wild Caprin in Pakistan, inhabiting the high alpine zone throughout the mountain systems in the NWFP and NAs.

Pakistan has several subspecies of wild sheep, and all are threatened to some degree. Urial (*Ovis orientalis*, also referred to as *Ovis vignei*) are the most widespread of Pakistan's wild sheep, though not numerically abundant. These sheep generally live in arid habitats, and are scattered throughout the country from around Skardu in the north, southwards, west of the River Jhelum, through Balochistan and into southwestern Sindh. Urial populations are usually small and fragmented, and hence vulnerable to many threats. Depending on which authority is followed, between 3 and 4 subspecies of urial are recognised in Pakistan (Roberts 1985, Schaller 1977, Valdez 1988): Afghan urial, Blanford's or Balochistan urial (sometimes included with Afghan urial, e.g. Schaller 1977), Punjab urial, and Ladakh urial. The taxonomic status of urial is the subject of a current taxonomic review that includes DNA analysis. A second species of wild sheep, Marco Polo sheep, lives in a restricted area along the northern border with China. This represents the southern extent of this argali's global distribution.

An 8th species of wild caprin might also occur in Pakistan. Himalayan tahr (*Hemitragus jemlahicus*) inhabits the eastern edge of Poonch District (Azad Jammu and Kashmir), according to the map of the Zoological Survey Department (1986). However, other authorities either make no mention of it (Qayyum 1985), or doubt its presence in Pakistan (Roberts 1977).

An Introduction to Community-Based Trophy Hunting Programs

Trophy hunting is a form of sport hunting that has been practised perhaps as long as humans have hunted. Usually, the animals sought as trophies have large weapons such as horns, antlers or tusks. Consequently, trophies are invariably males, and the animals most frequently considered as trophy species are the ungulates. Trophy hunting usually involves a hunter seeking the largest individual in a taxon or geographic area (Frisina et al. 2000).

It has often been suggested, as part of the justification for such hunts, that trophy animals are “over-mature” males past their prime who are about to die anyway. This is not the case. Trophy males are invariably in their prime breeding years. Where natural predators exist, the probability of finding “over-mature” males is exceedingly low, for once a male reaches the end of his prime, his condition deteriorates rapidly and he succumbs either to predators or inclement weather. In deer, the antlers of very old males actually decrease in size should the animal be able to survive that long.

It is important that almost all ungulate species hunted for trophies show marked sexual dimorphism (males and females differ significantly in appearance) and are polygynous (1 male mates with several females, while a female mates usually with only 1 male). As a consequence of polygyny, removing some males from a population does not necessarily affect the reproductive capacity (growth rate) of the population. This also means that even small populations can be subjected to trophy hunting, often without jeopardising the population. The critical aspect, regardless of population size, is to ensure that sufficient mature males are left for normal reproduction rates to be achieved and that the long-term survival of the population is not jeopardised.

Evidence suggests that in the short term, there are few if any negative effects of trophy hunting. This is to be expected, at least where the majority of mature males are not hunted. What is unknown is the long-term genetic impact of this activity, because trophy hunting removes what are most probably the genetically superior individuals from a population. Again, the impact will likely be minimised if only a fraction of the mature trophy males are taken each year. However we still have no data to support this supposition.

The value of trophy hunting in conservation is the fact that hunters are prepared to pay relatively large amounts of money for the privilege of hunting trophy animals. If the money is used to conserve the populations from which the trophies are taken, then the program might be sustainable. Population and habitat restoration might also be achieved, creating a protective umbrella for biodiversity in general.

For many threatened species, the single common threat results from the activities of the world’s increasing human population through habitat destruction/alienation and over-harvesting. Given that humans are the major threat, IUCN (1980) and others recognised that a deciding factor in the success of biodiversity conservation would be to change people’s behaviour towards wildlife. It was also recognised that lasting change is often most readily achieved if accompanied by benefits that provide positive rather than negative reinforcement. Properly designed trophy hunting programs have the potential to provide benefits, so what remains is the challenge to ensure that these benefits reach the people most affected, and that they respond by protecting the environment. This recognition has led to the development of many different types of community-based conservation programs throughout the world, including community-based trophy hunting programs (CTHPs).

It must be emphasised that the primary purpose of *CTHPs* is *not the generation of money or provision of community benefits - it is the conservation of wildlife and their habitats. In CTHPs, this primary goal is achieved in part through the community, and to a lesser extent, by governments benefiting from the revenue generated.* In other words the primary goals (conservation) are achieved through the attainment of *secondary objectives (community benefits)*.

CTHPs will function only because of positive feedback created through community benefits generated from the hunts. CTHPs will function effectively only when the benefits received from the hunts result *in conservation efforts on the part of the community. This in turn can increase the size and quality of the hunted population and create enhanced trophy hunting opportunities, as well as providing broader environmental benefits. The sustainability of these programs depends almost totally on this feedback. It cannot be imposed from outside either by government or NGOs (Sirdar Naseer Tareen, pers. comm.).*

In 1973, markhor was placed in Appendix II of CITES. Then, in 1992, it was transferred to *Appendix I, effectively halting legal trophy hunting* by foreign hunters in member countries. However, at the 10th CITES Meeting of the Conference of the Parties in 1997, *it was decided to permit Pakistan to export up to 6 markhor per year. Resolution Conf. 10.15 of the Conference of the Parties (CoP) states:*

Pakistan is actively promoting community-based management of wild resources as a conservation tool and has approved management plans for ibex that ensure the financial benefits derived from trophy hunting of a limited number of specimens go direct to the managing communities and that the communities use an equitable share of such financial benefits to sustain the management programme for the species; (Appendix 1)

This change was made because Pakistan was proposing *to develop a community-based trophy hunting program (CTHP) to conserve markhor, with the support and active participation of communities.*

The ultimate aim of *CTHPs should be to eventually make communities operationally independent of NGOs and governments. To be considered operationally independent, a community requires little support from either NGOs or governments. NGOs and governments might have a role as advisors when requested, with both provincial and federal governments monitoring the program.*

No single specific formula can meet the conditions or *requirements of all communities or regions, but a common framework for CTHPs should be adopted throughout Pakistan.*

Community-based Trophy Hunting Programs in Pakistan

In 1983 the Wildlife Wing of the NWFP's Forest Department began the Chitral Conservation Hunting Program, a trophy hunting program for markhor. This was not strictly a community-based conservation program because all proceeds went to the government. This initiative *was developed by Dr. Mumtaz Malik, Conservator of Wildlife, and operated in co-operation with a hunting organisation, Shikar Safari Club. The program lasted for 8 years until the GoP banned the export of trophies along with all big game hunting throughout Pakistan. While the program functioned between 1983 and 1991, members of Shikar Safari Club took 16 markhor during 2 licensed hunts per year in and around Chitral Gol National Park. About US \$250,000 in fees, deposited in a special account of the NWFP government, has not yet been spent (Johnson 1997).*

The longest running CTHP in Pakistan is the Torghar Conservation Project (TCP), established in 1986 on tribal lands in the Torghar range of northwest Balochistan. This project was initiated by the late Nawab Taimur Shah Jozegzai and Sardar Naseer Tareen in response to concerns about the status of Afghan urial and Suleiman markhor populations in the Torghar Hills. With technical input from U.S. wildlife biologists, TCP initiated a conservation program to stop poaching. Using revenue from the sale of a small number of trophy hunts, local people were hired as wildlife guards if they agreed to stop poaching. In 1994, TCP was formalised as a registered NGO - the Society for Torghar Environmental Protection (STEP). In the first 10 years it generated about US \$460,000 from hunts for 14 markhor and 20 urial (Johnson 1997). Currently, STEP employs 55 local game guards (VVGs) from several sub-tribes. The positions are now distributed equitably across the sub-tribes who select the individual game guards. In this way, it is not only the game guard that patrols against poachers, but so do almost all other male members of a sub-tribe (Sardar Naseer Tareen, pers. comm.).

Two senior conservation NGOs are major proponents of CTHPs in Pakistan. WWF - Pakistan was the second to develop true CTHPs, beginning in 1989 in the Barr Valley in NAs. Asiatic or Himalayan ibex

have been the focus of WWF's CTHPs. IUCN-Pakistan's involvement in trophy hunting began when, between January 1995 and April 1999, it implemented a Pre-Investment Feasibility (PRIF) project - Maintaining Biodiversity in Pakistan with Rural Community Development. The PRIF was undertaken in collaboration with GoP, NAFD, and NWFPWD. A major objective of the PRIF was promotion of sustainable use of wild resources by encouraging conservation of wild species and contributing to local community development. A community-based trophy hunting program involving two species of Caprinae, markhor and Asiatic ibex, was developed to provide an economic incentive for communities to conserve biological diversity, including wildlife habitats. The IUCN-Pakistan PRIF has since led into a full-scale conservation project - Mountain Areas Conservancy Project (MACP). This is funded primarily by the Global Environment Facility (GEF) through the UNDP.

The Review Process

The Terms of Reference for this review are given in Appendix 3. The meeting schedule arranged by IUCN-Pakistan (Islamabad), in co-operation with local IUCN staff, WWF - Pakistan, NAFD, NWFPWD, and STEP, was followed during field work, and added to where possible (Appendix 4). Interviews were conducted with members of VCCs in the villages, and on two occasions with their representatives at other locations. A standard checklist of questions (Appendix 5) was used as a guide during interviews to maintain consistency in data collection. Unfortunately, only communities close to jeep roads were visited, and in at least in one case we were not taken to a community because of internal community problems. Individual members of remote, isolated communities can have different viewpoints (IUCN 1999), so my report cannot represent the full range of community conditions and concerns.

I also attended the Trophy Hunting Review & Planning Workshop held in Gilgit on 23rd May, as well as the Consultative Meeting on Trophy Hunting Review in Islamabad on 9th June and the Consultative Meeting on the Management of National Parks in Pakistan, in Islamabad on 10th June 2000. I presented a preliminary report on this review at the consultative meeting on 9th June.

My review relies heavily on the accuracy of the information supplied to me, which for the most part was through translators, sometimes involving 3 languages. I have assumed that we received an accurate picture of the conditions and concerns within communities.

Report Findings

The Role of the National Council for the Conservation of Wildlife (NCCW)

It is important to recognise that there is a total ban on big-game hunting in Pakistan, except in community-controlled hunting areas. In 1991, the Federal government imposed a 3-year ban on all big game hunting. This ban officially lapsed in 1993 but practically remained in effect, although it was ignored in the case of CTHPs. To remedy these inconsistencies, the Federal Cabinet decided in December 1999 that the official ban would be reinstated starting in the 2000-2001 hunting season. In July 2000, NCCW recommended that CTHPs be exempted from the hunting ban. In August 2000, the Federal Cabinet officially banned big game hunting, except for exemptions recommended by NCCW for CTHPs. This ban applies to all big game species and provides a role to NCCW for regulating harvest of both CITES and non-CITES species such as ibex, blue sheep and urial.

CITES

The National Council For Conservation of Wildlife (NCCW) has a limited but vital role in CTHPs in Pakistan, being involved in three main areas. It is responsible for helping the GoP meet the recommendations made in CITES Conference of the Parties (CoP) - CoP 10 (Appendix 1) and CoP 11 (Appendix 2). Specifically, CoP 10 recognises that:

conservation of the species will depend on the capacity of the State to regulate use and on local people having sufficient incentives to maintain the species in preference to their domestic livestock;

The GoP is responsible for guaranteeing that international conventions are adhered to, so NCCW must take a leading role in ensuring that the provincial governments and NGOs are promoting and supporting conservation activities that meet these agreements.

Quota Allocation

NCCW allocates quotas for CITES listed species. Currently, NCCW in accordance with CoP 10, allocates a quota for a maximum of 6 markhor each year. The quota is allocated amongst the provinces' markhor conservation areas. It is based on information provided in the markhor conservation plans submitted by the provincial governments. These plans are developed by the communities in conjunction with an NGO, the provincial wildlife department, or both. Site-specific quotas are then communicated to the provinces, who issue hunting licenses on application from hunters or outfitters.

A recent international decision placed all urial subspecies in CITES Appendices. *This means that* all urial in Pakistan are either in Appendix I or II, so any hunting allocation for these animals is made by NCCW on a community-specific basis.

NCCW also allocates hunting quotas for Asiatic ibex, but unlike species in CITES Appendices, the allocation is to the provinces, not to specific CTHPs. Community specific allocation is made by the provincial governments.

Quotas are supposed to be based on population data, but this has not always been the case. In addition, political considerations are used in allocating markhor quotas to provide benefits to each province involved.

Export Permits

In a 1998 meeting of NCCW, the Council decided that:

" Export permits for both CITES and Non-CITES trophies shall be issued by the NCCW Secretariat. NCCW Secretariat may be authorized for issuance of export permit and Ministry of Commerce be requested for necessary amendment in the next trade policy."

This decision was pursued and resulted in a 1999 decision by the Ministry of Commerce to authorize NCCW to issue trophy export permits, *under the Import and Export (Control) Act, 1950* and in supersession of the Export Policy Order of 1998. The decision was that:

"NCCW as management authority in Pakistan is authorized to make exemptions for the following purpose, namely: (i) research; and (ii) trophies from community-managed conservation areas."

When a hunt is successful, the results, together with information on the trophy, are communicated by the provincial governments to the NCCW for issuance of an export permit under the Export Act. NCCW issues such permits for all trophy species regardless of whether they are CITES-listed or not. The only proviso is that the animal was taken in a community-controlled hunting area.

Monitoring and Reporting

As a signatory to CITES, the GoP is also obligated under COP 10 to provide the CITES Secretariat

".. a special report on the status of *Capra falconeri* including its population status and the number of hunting trophies exported during the previous quota year; as optional information, that Pakistan include details of the permit numbers, the identification numbers of the tags attached to the trophies, the countries of destination and the numbers of the import permits; that the Secretariat submit a report to each regular meeting of the Conference of the Parties;"

Originally this report was to be submitted on 31 March each year, but in CoP 11, it was changed because:

The Secretariat considers that a recommendation to report on population status every year for a national population of wild animals occurring in remote and difficult mountainous terrain may not be implementable in practice and places an unnecessary burden on the range State. The Secretariat therefore suggests that Pakistan should provide information to the Conference of the Parties on a sustainable monitoring programme at an appropriate frequency that would cover all important subpopulations of markhor, for consideration of a possible refinement of the recommendation in paragraph e) of Resolution Conf. 10.15.

In addition, in CoP 10, it was required that "Pakistan will implement a rigorous programme to monitor community-based management plans, including annual surveys of the wild population".

Such a monitoring program is not yet in place but this seems a task most appropriate for the NCCW as the representative of the Federal government responsible to CITES. To meet this requirement, NCCW should request reports, including annual survey results, from the provincial WDs and relevant NGOs. To accomplish this, NCCW will need to come to an agreement with the provinces about the contents of the reports so that the reporting agencies know what is expected of them.

- GoP should immediately establish a monitoring program, at an appropriate frequency, for all markhor populations to avoid non-compliance with CITES. It would be valuable if this monitoring program were applied to other species in CTHPs.

Urial

The inclusion of all urial subspecies in one of the two CITES Appendices, and the concomitant control of any hunting allocations, should provide the NCCW with both the encouragement and justification to oversee and set the ground rules for the conservation of these threatened wild sheep (see **Challenges and Questions - Urial**).

- To ensure not only the sustainability of CTHPs, but also the success of biodiversity conservation as a whole in Pakistan, the NCCW needs to become a truly federal body. To do so, it will need to be revamped and given the authority to make decisions related to international agreements, and have the responsibility to co-ordinate internal wildlife issues throughout the country.

- NCCW should consider developing a mechanism whereby the Council encourages both VOs and provincial governments and ensures that they meet conservation commitments entailed in CTHPs. Such a mechanism will be important for promoting international confidence in the CTHP process in Pakistan, while providing a means to monitor changes in the program. Further, it will help meet one of GoP's key obligations to CITES. For example, the NCCW could draw up rules and procedures governing the operating procedures for CTHPs. Many of these have already been included in current CTHPs, such as CMPs and their contents, accounting procedures for VCFs, and reporting procedures. To ensure compliance with these terms, the NCCW should grant or withhold quota allocations and export permits, as necessary. NCCW should develop monitoring procedures for all CTHPs, especially those involving CITES species.
- NCCW should take a proactive role in developing common conservation operating principles for CTHPs across Pakistan (see **Consistency**). For example, this could include development of a standard reporting procedure that ensures all CTHPs adhere to minimum standards of conservation action. It could also require that both population data and conservation action be considered when allocating quotas and issuing export permits.
- Criteria for allocating permits for markhor and other hunted species need to be based primarily on biological considerations and only secondarily on community benefits. Therefore NCCW should request that provincial governments or NGOs provide them with adequate population data before they allocate quotas for a species. In addition, to meet the spirit of the CITES CoP 10 (Resolution 10.15) and 11, NCCW should also review the CMPs or other evidence to ensure that there are both obvious and achievable benefits to the community and to the conservation of markhor and urial.
- NCCW should seek the authority to recommend issuance of temporary import/export licenses for foreign hunters' firearms, as part of their current, straightforward procedure of issuing trophy export permits (see **Import/Export of Sport-Hunting Weapons**).

The Role of Provincial Governments

Of the 3 areas visited, the NWFPWD is the only provincial government agency having a significant role in developing and administering CTHPs. The NWFPWD was one of the first to initiate programs of this type in Pakistan. Until recently in the NAs, CTHPs have been developed solely by NGOs. NAFD have been concentrating on other activities. To participate more fully in CTHPs, the NAs government will need to strengthen its capacity in wildlife management by developing a dedicated wildlife department. In addition to STEP, which is an independent, registered conservation program, the DFO Wildlife in the Balochistan government is hoping to initiate 3 community programs at Takatoo, Khalifat and Chantair. These will focus on conservation of straight-horned markhor and native juniper forests. Other Balochistan communities have expressed interest in CTHPs (Mr. Y. Khan, Balochistan Forest Department, pers. comm.).

Data Collection

In NAs, data collection is primarily carried out by biologists from IUCN-Pakistan or WWF - Pakistan in co-operation with VWGs. This should and is being changed to increase the involvement of the NAFD. To achieve this, it will be necessary to build the wildlife management capacity of NAFD personnel. This will involve various steps including training in census techniques, data recording, etc. Such training should be provided through workshops presented jointly by IUCN-Pakistan and WWF - Pakistan (see **Role of NGOs - Workshops and Training**).

In the NWFP, Wildlife Department staff is more directly involved in data collection. Within the tribal areas of Baluchistan, government is not involved in wildlife data collection. Instead data is collected by the VWGs. Periodically, foreign wildlife biologists have been invited to survey the markhor and urial populations in Torghar (Johnson 1994, 1997; Frisina et al. 1998; Frisina 2000).

Permit Allocation

The provincial governments have been authorised to allocate trophy hunting quotas only for non-CITES species, and only for community-based conservation initiatives (CTHPs). Elsewhere in Pakistan, there is a complete ban on big-game hunting.

For CITES listed species, the NCCW allocates quotas to communities within the provinces that have CMPs, so markhor quotas are community specific. However, NCCW should ensure that the quotas it allocates are based on sound population data. In turn the provincial governments and/or participating NGOs need to ensure that proper censuses are made by VWGs in co-operation with NGOs and/or government wildlife staff. Once quotas have been allocated by the NCCW, permits for foreign hunters are issued by the provincial governments on application by the hunters or outfitters on their behalf. Outfitters also handle the application for import/export permits for the hunter's firearms.

Because of the Federal ban on hunting and the protocol for exceptions, NCCW provides a quota for ibex which is supposed to be based on census data. In NAs, consultative meetings have made recommendations to the Chief Secretary on distribution of the quota. Representatives from the government, VCCs and NGOs participate in this process. They have adopted a set of criteria, starting in the 2001-02 season (Table 2), that must be met before a quota is allocated to a VCC. These criteria appear reasonable. However, at least in 2000, the NA's consultative meeting was held before NCCW met to decide on its quota levels. There is no evidence that NCCW used the same criteria as were used in the NA's consultative meeting. Partly as a result of this different approach, the two allocations differed. It is probable that the allocation made at the NA's consultative meeting was based on more appropriate criteria. In 2000, NCCW ignored the quota of 15 ibex recommended by the NAs consultative meeting and allocated a quota of 20 ibex to NAs. Clearly the two parties need to co-ordinate their meetings and the criteria used.

Currently in NWFP, trophy hunting for Himalayan ibex is quite limited. Mostly, ibex hunts are included as part of the package for a flare-horned markhor hunt, so that should hunters fail to take a markhor they can still hunt an ibex. It is uncertain whether ibex quotas in NWFP are based on systematic surveys.

Table 2. Criteria to be used by NAs, all of which must be met before a quota is recommended by the consultative forum.

Criteria
1) Presence of trophy-sized animals
2) Good probability of hunt success
3) Capacity of the community to undertake a hunt
4) Utilisation plan for fund/income
5) Conservation plan and membership in DCC
6) Notification of controlled hunting area

Marketing

Except in the NWFP, provincial governments currently have little or no role in the marketing and conduct of hunts. This is probably wise. To date, the NWFPWD, has been responsible for all the markhor marketing, such as advertising the hunts on websites and in German newspapers, etc. The NWFPWD has expressed a desire (Dr. M. Malik, NWFPWD, pers. comm.) to continue to be involved in marketing hunts for VOs. While this might be useful initially, communities should be encouraged to market their own hunts. In that way, CTHPs will be more likely to be sustained. Based on experiences in other parts

of the world, the most important role for government is to monitor how communities market hunts and how outfitters deal with VOs. An advantage of governments avoiding direct involvement in commercial hunting ventures, is that it increases the confidence of foreign hunters and international conservation agencies. It is vital for Pakistan's international conservation reputation that government activities are totally at arm's length from the commercial and financial aspects of CTHPs (see also **Role of Communities** and **Role of NGOs** following).

Fees

Foreign hunters pay US \$3,000 for Himalayan ibex and US \$25,000 for markhor. Domestic hunters pay Rs. 25,000 (ca. US \$450) for ibex. There have been no legal hunts by domestic hunters for markhor, but unlike Himalayan ibex which are more plentiful, there is probably no reason why domestic hunters should not pay the same fee as foreign hunters to hunt this endangered species.

Currently, in all three provinces, the total hunt fee is fixed by NCCW. Until 2000, the fees were divided, with 25% going to the government as a license fee, and 75% to the VCC where the hunt took place, as a trophy fee. In the summer of 2000, the NCCW changed this to 20/80, to conform with CoP 11 (Appendix 2), in which Pakistan's 1998 annual report stated that "Village communities participating in markhor conservation will receive 80% of the revenue from hunting." Alternatives to the fee structure and fee amounts are discussed below (see **Hunting Fees**).

The current division of trophy fees within the two Markhor Conservancies in NWFP (i.e. Community-Managed Game Areas) is 50% to the community where the successful hunt took place, and the other 50% is divided equally among the remaining communities. This is causing dissatisfaction. The argument put forward is that the majority of communities protect and conserve the animals during most of the year and it is only chance in which village's area the animals are hunted. Given Caprin seasonal range movements and fidelity to specific areas, it is quite likely that markhor use the same rutting and winter ranges each year. This means that given the current hunting season (which should not be changed), hunts will invariably occur in the same community's area year after year. Ideally, a study needs to be made to determine the seasonal movements of animals within a conservation area. However, as this would be both expensive and time-consuming, the best interim solution is to divide the funds from trophy hunting equally among all participating communities within each of the Community Controlled Hunting Areas (Markhor Conservancies).

In NAs and theoretically in NWFP (Anon. 1998), the hunter makes two payments: One goes directly to the community for the trophy fee and one to the government for the hunting license. In Balochistan and, in practice in NWFP, the hunters make a single payment to the provincial government to cover both the license fee and the trophy fee. The NWFP government then distributes the trophy fees to communities at an annual ceremony in spring or early summer. There appears to be no equivalent procedure in Balochistan for timely payment of the community's trophy fee, but one should be introduced immediately.

If such pay-out ceremonies are to be adopted elsewhere, the interval between the hunting season and the payment event must be brief and of a length that is satisfactory to both the government and the VCCs. A maximum period of 3 months would be reasonable. Also it would be most beneficial if such ceremonies are held as close as possible to the communities so that community travel expenses are minimised.

Government's Role

The long-term potential of CTHPs to be sustainable depends on them being run largely by the communities.

- Government should not be involved directly in the operation of CTHPs except perhaps as a temporary measure in the early stages of CTHP development, until the necessary level of community capacity is achieved. The overriding roles of both levels of government in CTHPs should be in monitoring 1) that wildlife populations within a community managed hunting areas are benefiting as a result of the CTHP, and 2) that the communities are able to maintain the CTHP.

The Role of the Communities

The anticipated role of communities includes:

- active participation in conservation actions (e.g. employment of VWGs, acceptance of no-poaching, development of CMPs, specific livestock management measures and strategies to deal with fuelwood shortages)
- wise use of VCFs and transparency and accountability of accounts and expenditures
- marketing of hunts
- provision of facilities and services for hunts

The definition of a “community” needs to be clear for the purposes of a CTHP and needs to be discussed. For the sake of initiating the discussion, it is sufficient to define a community as being any group of people with a VCC and a VCF, having responsibility for a CTHP, including its conservation projects, and who share the financial and other benefits. It would also include cases in which several communities, in the more traditional sense of the word, belong to a larger community that jointly share the benefits and responsibilities of a CTHP. Such is the case with the two Markhor Conservancies in NWFP.

Data Collection

Currently all communities with CTHPs are directly involved in data collection primarily through their VWGs who survey populations in co-operation with NGOs and/or government personnel. In NAs, VCC representatives attend an annual Trophy Hunting Review & Planning Workshop where ibex quotas are allocated by group consensus based on survey results and other criteria (Table 2).

Surveys are carried out in blocks or areas, each surveyed on the same day wherever possible to avoid double counts. Surveys are carried out by teams comprising VWGs and personnel from NGOs and provincial wildlife departments. Counts are made whenever possible between December and January, which is the period of rutting. This is usually the ideal time for counting adult males and adult females in Caprinae populations, but is not optimal for counting young. If estimates of natality and recruitment were to be required, additional censuses at other periods of the year would have to be made (see also **Defining Trophies** below).

- Every effort must be made to conduct annual counts in December-January to determine the number of trophy males and to track population trends.

Marketing

Few if any communities are currently involved in marketing hunts, but they are directly involved with the conduct of hunts. Usually VWGs act as guides for the hunters. To maximise the probability that CTHPs will be sustainable, it is recommended that communities should play a major role in marketing hunts through direct negotiations with outfitters or hunters. However, before this can happen, most VOs will require training in negotiation skills and in becoming familiar with the requirements of international hunters. To help them develop the necessary skills to market their hunts, NGOs must develop and offer training workshops.

Because marketing of CTHP hunts is not well developed in Pakistan, IUCN-Pakistan together with WWF - Pakistan, should organise a workshop to explore the most appropriate means of marketing. This workshop should include representatives from recognized international and local outfitters, together with members of representative VCCs. Some questions that should be explored include: the role of outfitters in CTHPs (e.g. whether communities should sell hunts to outfitters and outfitters then sell hunts to hunters) and the appropriate procedures for auctioning hunts to optimize community benefits. Such a workshop might be combined with the discussions to determine the needs of international hunters

(see **The Role of NGOs - Workshops and Training**). Prior to the workshop, a number of respected outfitters could be contracted to provide a background report on marketing procedures to facilitate the workshop discussion.

Conservation Management Plans

Each CTHP needs a detailed CMP that addresses the specific concerns necessary for the conservation of the species being hunted. CMPs could be species-specific or, where more than one is hunted, the plans could be combined. A CMP must address a wide range of issues related to biodiversity conservation and not be restricted to the most obvious issues related to conserving the target species and its habitat. Depending on area, issues relating to biodiversity conservation that can be addressed by the communities include:

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|---|--|
| <ul style="list-style-type: none">• fuelwood• grazing and the implications of decreasing sheep/goats while increasing cattle numbers | <ul style="list-style-type: none">• agroforestry and alternative energy sources• irrigation and fodder production• livestock predation prevention measures |
|---|--|

For example, fuelwood was identified as a major problem in some communities in NWFP CTHPs and is probably the case in other areas like Hushe, where agroforestry is either not practised or is difficult due to ecological conditions. Alternative sources of power such as small scale hydro-electric generators (micro-hydels) and more fuel-efficient stoves need to be explored, recognizing the problems of siltation and abrasion of generators in silt-laden glacial streams. Resistance to non-traditional technologies in some communities is another constraint.

Where the CMP calls for reductions in livestock numbers and/or grazing pressure in wildlife habitats, there should be both written agreements and a method/procedure for monitoring to ensure compliance. Where livestock are to be brought to lower elevations earlier at the end of summer, it will be worthwhile exploring appropriate fencing technology to help keep livestock from damaging crops (R. Garstang, WWF - Pakistan, pers comm.).

Enforcement and monitoring might best be achieved through provincial government field personnel who report to the DCC, as well as to their government department. The GoP is required by CITES to monitor community management plans.

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| <ul style="list-style-type: none">• It is vital that a CMP includes measurable goals so that the success of the CTHP can be evaluated in terms of wildlife and habitat conservation, and by the benefits to the community. For example, if one goal is the reduction of domestic livestock grazing, the amount of reduction, and the dates by which it is to be achieved, should be stated. At the same time, vegetation plots should be laid out in the pastures to monitor range response. Sampling should begin at the start of the program and be continued at predetermined periods to assess the effects of the changes. This data will be useful in assessing any responses of wildlife to the conservation management actions.• Annual monitoring of the effectiveness of CMPs should be done by NGO biologists in co-operation with VWGs, with periodic evaluation (e.g. 5-year intervals) of the results by an independent body such as the IUCN Caprinae Specialist Group. Travel costs for the 5-year conservation audits could be covered by the central CTHP fund suggested elsewhere in this review (see CTHP Conservation Fund) or by the MACP Trust Fund. |
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Milestones and measurable goals will be vital for conservation auditing of CMPs. For several reasons, however, we must expect that goals will not always be met. In such cases the independent body, in co-operation with the NGO and government biologists, should first determine why the goals were not achieved. It should then assess whether the obstacles can be overcome by, for example, using a new

approach, modifying the original procedures, setting new goals, or extending the time period. This would be a first step towards an adaptive management approach (Walters 1986, Nyberg 1998).

Where appropriate, VOs should be encouraged to broaden their CMPs to consider additional species that could be hunted, and whether other compatible activities for visitors could be included. In some areas, conservation efforts have been directed towards native game bird populations, and limited hunting has taken place. The population of blue sheep in the Shimshal Valley should be surveyed with a view to possibly including this species in a CTHP, to broaden the area's appeal to foreign hunters. Such actions also expand the benefits of a community's conservation activities to a wider range of wildlife species and their habitats, further strengthening Pakistan's biodiversity conservation program.

Some communities mentioned the possibility of ecotourism when discussing their CMPs. Although I was there for only a brief period, it appeared to me that ecotourism might have only limited potential in the near future, and only in some areas. I base this conclusion in part on the remoteness of many communities, and also because facilities might only be suitable for adventure-style ecotourism ventures.

Village Conservation Funds

The intended purpose of VCFs is to pay for conservation actions and social benefits that foster community support for conservation. VCFs are to be used to pay VWGs, and in most communities this is the case. One exception noted was KVO. Its CTHP had been established with funds from UNDP and these were used to pay for VWGs. Perhaps as a result of this initial funding arrangement, KVO representatives seemed to consider that their VCF should not pay for VWGs. Similarly, some VOs indicated that they had not yet spent any of the VCF (other than for VWGs) because they were "waiting for the fund to become large enough".

The purpose of VCFs should be made clear to VOs not only at the time the CTHP is established but periodically during the monitoring process. The success of CTHPs depends on appropriate use of VCFs. Expenditures for conservation are part of this use. It is also vital that expenditures on community benefits are determined by the whole community through discussions in the VO. Expenditures from VCFs must be monitored to ensure community compliance with the terms of VCF ToPs developed to ensure the purposes of the CTHP are met.

The Role of NGOs

In NAs, the NGOs have taken the primary role in CTHPs, whereas in NWFP the Wildlife Department has been much more actively involved, in some cases in co-operation with NGOs. In NAs, NGOs have organised the communities, trained the VWGs, helped organise and market the hunts, working with outfitters or hunters. Full details of IUCN-Pakistan's involvement are presented by Gloekler (1999).

NGOs have an understandable propensity to continuously develop new programs because they are often necessary to attract donors. This can be detrimental to community development because the life of NGO conservation programs is often short, whereas communities often are conservative and resist change. It usually takes much effort on the part of NGO personnel to convince communities to buy into projects. When an NGO's involvement ends, but where a community is expected to continue the program, the NGO must ensure that there is sufficient community capacity and/or ongoing support. This might be achieved by involving and training government staff, as well as ensuring that the community has the capacity to work independently. During this review, I encountered examples of where communities had been left without adequate capacity and/or support from NGOs/government to continue CTHPs effectively. It is recommended that every effort be made, when introducing a new program, to consider how it can be directly linked to existing or previous programs. This will help ensure that a sense of continuity and a level of trust develops within the affected communities. Similar exit strategies are being considered in MACP with a role for the MACP Trust Fund in helping maintain program funding to communities.

Workshops and Training

Both WWF - Pakistan and IUCN-Pakistan have a proven track record of offering effective workshops for communities. Despite work to date, most communities still require outside help with operating their CTHPs. Many provincial wildlife personnel would also benefit from professional upgrading.

Targeting government personnel will be especially valuable in the NAs. In NWFP, training workshops could be offered in partnership with the NWFPWD. Such initiatives will help ensure that local government field staff are able to carry out their duties regarding CTHPs. At the same time, it will strengthen links amongst NGOs, communities and government.

Community hunting guides, who are usually the VWGs, should be trained to meet international hunters' needs. This can be achieved by developing a training workshop for VCCs and VWGs to upgrade their services for foreign clients. This task should be undertaken by IUCN-Pakistan and WWF - Pakistan. Two or three reputable, well established outfitters, representing North America and Europe, should provide input on what international hunters expect from the hunt, the facilities, and the level of guiding expertise. This information would be used to develop the training program.

- I recommend that NGOs expand their program of training workshops to further increase community capacity to operate their CTHPs. IUCN-Pakistan and WWF - Pakistan should jointly offer workshops on census techniques and data collection for NAFD. If desired, workshops could also be held for NWFPWD staff, VWGs and other provincial government WD employees working with CTHPs. These workshops would not only be for participants to learn techniques, but also to provide them with adequate skills to instruct co-workers. In other words, trainers need to be trained. Initial workshop participants should be individuals who will be making the surveys. They should be provided with materials, techniques and support to help them organise and run workshops themselves (Shackleton 1997:332).

Marketing

I suggest that CTHPs will be most sustainable and function most effectively when communities can market their own hunts (see ***The Role of Communities - Marketing***).

- While I strongly advise that governments avoid direct involvement with marketing hunts, there is at least an initial role for Pakistan's two main conservation NGOs. This should be in the form of a joint effort by IUCN-Pakistan and WWF - Pakistan, to both market hunts, and build the capacity of VOs to negotiate with outfitters and market their own hunts. This would involve at least two components:
 - Provide training workshops or other guidance to VOs on meeting hunter needs, marketing hunts, and negotiating with outfitters.
 - Develop a web site covering all CTHPs in Pakistan (C. Shank, IUCN-Pakistan, pers. comm.) as part of the marketing strategy. The site would provide illustrations and contact addresses, a review of license requirements and procedures, and a link to WWF's web site. It could be updated annually, and would be more efficient and cost effective than each VO creating their own web page.

Results of Existing Programs on the Status of Subject Populations

Statistics for markhor and Himalayan ibex hunts from 1995 to 2000 are summarized in Table 3. A total of 7 markhor and 15 ibex have been taken, with a success rate of 7 markhor out of 7 permits issued, and 15 ibex out of 30 issued. Of the licenses issued for ibex, 11 were to domestic hunters and 17 to foreign hunters. All markhor hunts were by foreign hunters.

Table 3. Hunting statistics for Community-Based Trophy Hunting Programs in Pakistan between 1995 and 2001. (Data compiled by A.T. Virk, IUCN-Pakistan)

Himalayan Ibex

Hunting season	Province	No. of ibex allocated	No. of ibex permits issued	No. of successful hunts	Domestic/ Foreign hunter
1995 -96	NAs	5	5	2	2D/3F
	NWFP	-	-	-	-
1996 -97	NAs	5	-	-	-
	NWFP	-	-	-	-
1997-98	NAs	15	4	3	1D/3F
	NWFP	-	-	-	-
1998-99	NAs	15	14	6	5D/9F
	NWFP	-	-	-	-
1999-00	NAs	15	5	3	3D/0F
	NWFP	-	2	1	0D/2F
2000-01	NAs	20	?		
	NWFP	10	?		

Markhor

Hunting season	Province	No. of markhor allocated	No. of markhor permits issued	No. of successful hunts	Domestic/ Foreign hunter
1991 - 98		There was no allocation, therefore no hunting			
1998-99	NAs	0	0	-	-
	NWFP	4	3	3	0D/3F
	Balochistan	2	0	-	-
1999-00	NAs	1	0	-	-
	NWFP	3	2	2	0D/2F
	Balochistan	2	2	2	0D/2F
2000-01	NAs	1	?		
	NWFP	3	?		
	Balochistan	2	?		

For NWFP and NAs, there is not yet enough quantitative data available to allow a confident ruling on the success of CTHPs on Caprinae populations, although most indications are positive (see also Virk 1999a). Three factors are responsible for the uncertainty:

- relatively short period over which most CTHPs have operated,
- lack of population estimates, as opposed to counts for trophy animals,
- degree of difficulty in carrying out surveys and censuses due to the extremely rugged topography and the low animal densities.

Survey techniques appear adequate for determining available trophy males because they consist of direct counts of animals that can be used for allocating trophy hunting quotas. The survey teams make every effort to avoid double counting. However, using this count data to estimate populations is more problematic, as has been discussed by Virk (1999a, b). Certainly the method suggested by Habibi (1997, cited in Anon 1998) provides only a very rough rule of thumb and should be used with caution, especially with threatened species such as markhor. Monitoring statistically reliable trends in survey data is vital. To do this, survey techniques must be consistent. New techniques need to be developed that supply reliable data. Until this is available, total counts probably can be used as indices for tracking population trends. Significant year-to-year variation is to be expected in total counts, however. To be meaningful, trends must be evaluated using counts from several consecutive years, collected using the same survey method.

Despite this lack of systematic population data, it is reasonable to be cautiously optimistic about the impacts of the CTHPs on markhor and ibex conservation in Pakistan. Three factors lead to this optimism:

1. Poaching has been significantly reduced in most, if not all, areas with CTHPs. This was often a major mortality factor and it is reasonable to expect its reduction will result in increased population numbers.
2. Many communities are reducing the number of sheep and goats they keep. As well as being major competitors with wild caprins for food, this livestock has other negative impacts on habitat. A reduction in the number of goat and sheep is often done while increasing cattle numbers, but the impact of this on summer ranges used by wild caprins is not expected to be as great. This is primarily because cattle are not usually taken to the high summer pastures. Improved irrigation systems, financed as CTHP start-up incentives, will lead to improved fodder production that can be stall-fed to cattle and other livestock, and further decrease high pasture grazing.
3. Community attitudes towards wildlife and biodiversity conservation are changing (see also Virk 1999a). Primarily as a result of the activities of NGOs (IUCN-Pakistan, WWF - Pakistan, AKRSP), and in some cases by government wildlife officials in NWFP, most communities I visited reported genuine changes in how they viewed wildlife. These were primarily in the form of increasingly positive attitudes and acceptance of the need for biodiversity conservation.

These attitudes are supported by community actions reported to us by independent sources. For example, a hunter with a license to shoot an ibex in the conservation area belonging to the remote village of Hushe, brought a friend who also wanted to hunt. The Hushe VCC refused the friend permission to hunt and even stopped him from accompanying the legal hunter. In another case, an army general approached his own tribe to hunt markhor on their land west of Torghar, but the tribe refused him permission because of their conservation agreement with STEP. Similarly, the Ghulkin VCC stopped a senior government official from hunting waterfowl on Borrit Lake.

In the Torghar Hills of Balochistan, conditions are somewhat different. Here one can be confident that the CTHP has led to significant increases in both markhor and urial populations. Despite this, the Torghar program continues to face many challenges, and requires ongoing effort for it to continue and develop further (N. Tareen, STEP, pers. comm.). The increased numbers are demonstrated by population data from three surveys carried out between 1993 and 2000, by independent professional wildlife biologists

(Johnson 1994, Frisina et al. 1998, Frisina 2000). Another reason for the confidence in this CTHP's success, is that the Torghar program has been in existence for 15 years, compared to 5 years or less for most areas. Some of the success is also undoubtedly due to the Torghar Hills falling in the Tribal Areas of Balochistan. This creates a unique socio-political environment resulting in fewer organisations and agencies being involved. It is also recognized, however, that its success is largely the result of the individual efforts of Sardar Naseer Tareen.

Illegal Hunting

In almost all communities, poaching appears to be relatively well controlled as a result of the CTHPs. The recent situation reported by SKB Conservation Committee might be one exception. Poaching by locals and outsiders is reported to be a regular occurrence. The poaching of a trophy markhor last year by government officials just outside the community conservation area, is well known and is reported to have taken place with the co-operation of some of the local residents (Anon. 2000). The Chief Secretary has been notified by both the SKB Conservation Committee and a local guide outfitter, Mr. Asif Khan, but no one has been apprehended (Anon. 2000).

If the relevant governments are unable to pursue this case, senior government officials in both the Northern Areas and Federal government must send a clear public message of condemnation. If not, the lack of action will seriously undermine not only the SKB CTHP, but the lack of trust will spread to other CTHPs. Inaction will also send an extremely negative message to the international hunting and conservation communities (e.g. USFWS, CITES, German Scientific Authority, SCI, CIC) with serious consequences for trophy hunting programs throughout Pakistan. Conversely, strong action in this matter will reassure everyone of Pakistan's real commitment to local and international conservation agreements.

Several communities reported that they are sometimes pressured by local government officials to be allowed to hunt in a community's area. In some cases, this problem can be alleviated simply by regular publicised visits by NGO personnel to each VCC. The VOs have noted that pressure is reduced or non-existent when such regular visits take place. Unless this type of poaching, including what is referred to as "paid hunting" is dealt with clearly and openly, it will create significant problems in establishing or maintaining community confidence, and lead to wider problems for CTHPs in Pakistan.

¹ Paid hunting is illegal and involves individuals (local residents or outsiders) who poach animals at the request of a government official. The illegal hunting is carried out or facilitated by a subordinate underling for his superior. Such activities are reported to take place in the SKB conservation areas (Anon 2000).

Program Operation

The following sections review the marketing and conduct of past hunts, together with comments on major obstacles to the success and sustainability of CTHPs in Pakistan.

Data Collection, Record Keeping and Reporting

The success of CTHPs can only be determined if suitable data is systematically collected and accurately recorded, if results are analyzed, and if reports are produced and made available.

Population Data

Hunting quota allocations are supposed to be based on current population data. Certainly this is the CITES requirement for markhor. Allocating quotas when population data is lacking, out of date or inadequate must not occur.

- Allocation of quotas for markhor or any other species in a CTHP should be based first on population data, and second on community capacity and the quality of its CMP. If allocation is not demonstrably based on population data, it will be highly unlikely that CITES will continue to allow Pakistan to export markhor, and import restrictions for markhor through the US Endangered Species Act will remain in place. To ensure confidence in data, it might be necessary to periodically have population data analysed by a group of independent (3rd party) professional wildlife biologists. These could be representatives of NGOs, government agencies, and foreign biologists who are CSG members with appropriate expertise. Site visits are not always necessary in the case of foreign wildlife biologists because data can be sent to them for review by other members of the independent assessment group.

Reliable population estimates can be extremely difficult to obtain in mountain areas due to logistic constraints imposed by extreme topography. Instead, the allocation of quotas can be based on actual counts of trophy animals in a population, as is done in NAs. This approach is acceptable because there is little chance for underestimating the number of trophy animals available in an area if proper survey procedures are followed (see Virk 1999a). The main source of error is if the same animals are counted more than once during multi-day surveys.

The NCCW allocates quotas for ibex and 6 markhors amongst the CTHPs. The provincial governments are then supposed to be responsible for allocating ibex quotas amongst CTHPs. In NAs, ibex quotas, based on survey results and other criteria (Table 2), are distributed at consultative meetings chaired by the Conservator of Forests. From my observations of this meeting in May, this procedure was effective and might serve as a useful model. In NWFP, ibex quotas are allocated differently. It appears that no formal censuses are made for ibex. As long as there is at least one trophy-sized animal seen, a hunt is considered allowable. This is based on the pragmatic view that it is better to use that animal to encourage community interest, rather than conserve it, only to have it and others poached. While this might be an initial short-term solution, once a community is supportive of a CTHP, future harvest should be based on surveys. Between 1995 and 2000, no ibex quotas were allocated in NWFP and no animals were legally hunted. In the 2000/01 hunting season, 10 ibex permits were allocated to NWFP.

To date, there has been no retrospective analysis to determine if past allocations were based upon appropriate population data. Such an analysis is needed to establish the legitimacy of the current trophy hunting program. I suggest that past quota allocations be analysed and evaluated for each CTHP in Pakistan. They should be assessed for adequacy of survey methods and the value of the data, especially for allocating quota. Based on this analysis, recommendations should be made for improving the system.

Censuses and Surveys

- Standard census data should be collected in all areas. Techniques used to gather the information might be modified according to local topography and other logistic constraints. In all cases, classified counts to estimate the population age-sex structure need to be made. Procedures to assess populations in mountain areas such as in Pakistan are discussed by Virk (1999a).
- The results of censuses will be more readily accepted by international conservation agencies and organisations if they result from surveys conducted periodically (e.g. every third year) and made together with, or by independent parties.
- Before a new hunting program begins, and especially in the case of a threatened taxon, the surveys on which the program and quota are based should be made in conjunction with, or by, an independent party. The same protocol should apply when there is a request for a quota to be increased.

For each of the above recommendations, the independent party can be any professional biologist familiar with the census/survey techniques for Caprinae in mountain regions. Where the proponents of a CTHP are a VCC and an NGO, the third party could be a wildlife biologist from a provincial government (preferably from a different province) or from another NGO, or a biologist from another country, as in the case of STEP in Balochistan. Whatever the situation, there must be a guarantee that the individuals selected, or their organization, do not benefit in any way from the trophy allocation or other aspects of the CTHP.

- Peer review of population data and trophy hunting plans should be sought from professional wildlife biologists within and outside Pakistan. A mechanism to expedite this should be developed (see also following recommendation).

As suggested by Mr. Faiz Ali (IUCN-Pakistan, pers. comm.), a census/survey working group should be established in Pakistan to:

- share ideas and techniques
- develop or modify new procedures
- work towards standardisation
- build the capacity of technical staff of provincial wildlife departments, NGOs, and VWGs.

The working group should be established as quickly as possible, probably through a combined initiative between WWF - Pakistan and IUCN-Pakistan. These NGOs would also be able to raise funds needed for the working group to function.

- Establish a National Survey Working Group to build technical capacity to support the operation of CTHPs.

Mr. Richard Garstang (WWF - Pakistan, pers. comm.) recommended that by developing a centralised GIS data base, we can gain a critical understanding of how trophy hunting and related conservation actions fit into a taxon's distribution range. Consequently, trophy hunting programs can be placed in the broader context of the species' conservation strategy. This approach can also be used to determine how trophy hunting fits into the larger picture of biodiversity conservation and protected areas, as well as strengthening or extending existing biodiversity conservation approaches.

- WWF - Pakistan should be asked to develop a centralised GIS database to place CTHPs within a broader conservation perspective.

Defining Trophies

Standardised criteria should be used for defining “trophy” males, within a taxon. Currently there is no consistency across CTHPs in Pakistan. In NAs, a male markhor must have horns at least 102 cm (40”) long to be considered a trophy. There is no size minimum in NWFP, where a trophy is defined as a male 9 years or older. It is left up to hunters to decide what sized male they wish to take, so effectively there are no criteria. For ibex the minimum horn length is 90 cm (36”) in NAs. Again, there is no size limit in NWFP.

For most purposes, trophy animals need to be defined objectively so that they can be counted during surveys for establishing quota. To meet the needs of CTHPs, horn length is probably the most useful and practical criterion for defining trophy animals. When selecting a trophy horn length, both biological significance and hunter requirements should be kept in mind.

For biological purposes, male age is important because it is strongly correlated with an individual’s participation in mating. I wish to emphasise that trophy males are not “over-mature” males as some suggest. Rather, they are invariably in their prime breeding years. Where there are natural predators, males past their prime rarely survive. Most mating is by older males, so it is essential that sufficient numbers of these animals are maintained in a hunted population for normal reproductive levels to be maintained. Consequently, when selecting a horn length, it will be necessary to know the average age of males with that length. To ensure there is no long-term loss of population viability and that sufficient mature males are left to mate, only a portion of the available trophy males should be harvested.

CTHP trophy criteria should take into account the interests of trophy hunters who define a trophy by the horn length. It was suggested to me that perhaps hunters should decide whether to use their licence to take a large or a smaller male. I am concerned that such an approach may be counter-productive and lower confidence in Pakistan’s CTHPs within the hunting community. It would also pose a problem if a hunter, having misjudged an animal, were tempted to discard it and take another animal of legal trophy size.

Frequently, I was asked what should be the consequences of a hunter shooting an undersized male. If a population’s quota is not exceeded, and a hunter takes, by choice or poor judgement, a smaller male, the impact is perhaps less than if the prime trophy male were taken. However, if this happens the hunter should not be allowed to take another animal. If VWGs who are to act as hunting guides are properly trained, shooting undersized males should not occur.

Trophy males can be relatively easily recognized at a distance in the field by horn length. VWG need to be trained to accurately estimate horn length under various typical field conditions so that they can carry out surveys and help hunters select only trophy-sized animals. MACP should consider the desirability of developing a long-term data base to allow more detailed monitoring of the impacts of CTHPs on populations. If this is to be done, VWGs should be trained to age and measure the horn lengths of animals found dead or hunted. This data can then be used by NGO biologists to determine population-specific horn lengths for refining trophy definitions.

- Criteria for defining trophy males should be species specific, and be consistent across Pakistan. The most practical criterion is horn length.
- VWGs and others involved in surveys should be trained to accurately estimate horn length. The training workshop should be run by IUCN-Pakistan and involve exercises for recognising trophy sized horns at different distances and at different elevations from the animals. Training workshops should also include techniques for measuring and ageing horns.
- IUCN-Pakistan should consider a research project to examine the relationship between horn length and age in males to ensure that the definition of “trophy” animals meets biologically sound criteria.

Record Keeping

The date, time, place, hunter's name and country, together with other pertinent observations about the hunt, should be recorded for each hunt, whether it is successful or not. This data would be included in an annual report.

Each trophy should be measured using standard techniques on standard forms that are used by all CTHPs throughout Pakistan. Gathered data should be entered into a data base or spreadsheet, and be periodically analysed and summarised to investigate any trends in trophy quality. The same should be done with population data. Such data should be included in a province's annual report to NCCW, who would then compile all the information into a single annual report to meet the CITES requirement (see **Reporting System** next).

A standard questionnaire should be developed to gauge hunter satisfaction with a CTHP. If these forms are sent directly to NCCW, hunters might be more willing to offer candid opinions, than if they handed the questionnaire to the VCC. This information should be analysed by NCCW and included in the annual report.

License Protocols

- To ensure that hunters have the necessary permits, Pakistan should adopt the procedure used in most other countries, and issue metal, self-locking big game tags. Any killed animal is illegal unless it has a tag attached, and hunters know they must have the tag in order to hunt. This should also smooth the export permit process.

Reporting System

There is currently no system of reporting in which CTHPs describe the status of the resource, activities undertaken, and benefits to communities. Such a system would be extremely useful not only to both levels of government but also to NGOs, and the international conservation community. Reporting should be viewed as being both part of normal CTHP operating procedures, and as a key aspect in the transparency of the process (see also **Financial Transparency and Trust**). Because NCCW is ultimately accountable for reporting to CITES, and because it also allocates quotas for all CTHPs, it would be best if NCCW were responsible for a nation-wide reporting system. It would also be in the best position to analyse the data, perhaps in co-operation with IUCN-Pakistan.

The specific format and frequency of such reports needs to be decided upon, along with allocation of responsibility for producing them. Report format and content should be straightforward, although thought needs to be given as to what documentation will be required to verify the actual levels of various components, such as community benefits. A balance needs to be struck between a format where only the community names or animal numbers change, and customized reports which can be difficult to compare and evaluate. Initially, NGOs might be responsible for annual reports.

- NCCW should be given responsibility for co-ordinating a CTHP-reporting system in which the status of resources, activities undertaken, and benefits received are documented. The provinces will need to formally agree to join such an activity. Reporting should be a prerequisite for allocations for the following year.
- IUCN/WWF should contract an appropriate party to develop a suitable reporting format that meets CITES needs and allows the progress of all CTHPs to be monitored.

Conservation Management Plans

Each CTHP should have a formal written CMP. This can be periodically revised or updated, but it is crucial that measures of success be built into CMPs. Only when there are specific conservation targets

can the success of a CTHP program be evaluated. Obviously the targets must be measurable and meaningfully related to the objectives and goals of both wildlife conservation and community development.

Projects must also plan for mistakes, because they will happen. No one is perfect and the science of wildlife management is still developing, especially with regard to CTHPs. Risk management is part of managing for mistakes. The major risk here is loss of a threatened taxon. Planning for possible mistakes is part of any realistic conservation project. There is a body of knowledge available on this topic which looks at such issues as fail-safe and foreclosure of options. An adaptive management approach (e.g. Walters 1986, Nyberg 1998) should also be incorporated into CMPs.

Due to past actions such as livestock overgrazing and deforestation, habitat rehabilitation is often crucial for restoring animal populations. It is especially important to monitor the effects of a CMP because changes in range or habitat quality can often be more readily measured than can changes in animal numbers. Biologists and managers with expertise in habitat management and restoration will have to be involved in these projects.

The process defining or gazetting boundaries for CMPs must consider more than socio-political boundaries. Animal movements and seasonal range use are important factors that must be included, otherwise conflicts between adjacent jurisdictional units will arise.

Subsistence hunting could be a long-term goal of conservation programs where populations grow large enough. However, subsistence hunting programs are likely to be structured very differently than trophy hunting programs.

Financial and Marketing

The following sections discuss financial aspects of CTHPs such as the fee structure, means of increasing revenues, and mechanisms for fee payment. Other issues considered are those relating to marketing hunts; policies governing payment and services to be provided; and the problem of hunters importing their sport hunting weapons into Pakistan.

Hunting Fees

Currently in Pakistan, the total fee paid to CTHPs is fixed. Since 2000, the division has been 80% to the community to be invested in a VCF for conservation and community benefits and 20% to the government (see also **The Role of Provincial Governments -Fees**).

Internationally, fees paid by a hunter taking part in a CTHP typically include a government license fee, a community trophy fee, and often an outfitter's fee. In Pakistan, the current dual fee structure should adopt the same terminology as is used internationally, so that there is a government license fee and a community trophy fee. Currently the outfitters deal directly with their clients for outfitting fees. There is probably no reason to change this system.

Pakistan might wish to decide on the role of outfitters in its community-based programs; particularly whether it wishes them to collect all fees, passing on the license and trophy fees, or just their own fee. This is likely to be important if communities are to be allowed to auction hunts (see below). However, there should be a clear and valid reason to involve outfitters in collecting the fees, otherwise it adds a separate and unnecessary step that is likely to slow down the process and leave it vulnerable to corruption.

Government License Fee

A frequently raised question was whether the government license fee should be fixed, or be a percentage of the total fee.

- I recommend that the provincial government license fee be fixed rather than a percentage. There are at least 3 main reasons for this approach:
 1. The annual costs to administer/issue the license are fixed. If license fees are not fixed, as has occurred elsewhere, governments come to regard CTHPs as an opportunity for generating general revenue, and rarely is the revenue used for conservation purposes.
 2. One benefit of a fixed fee for the license is that most foreign hunters are not keen to see their hunting fees going to general revenue, preferring that they be used for conservation. Government license fees can be revised regularly to reflect realistic administrative and operating costs. Fee revisions should be in consultation with NCCW and the NGOs.
 3. A fixed government license fee can also be seen as an important part of the transparency that is essential in the fee structure.

Based on what has happened so far, there is little justification to support an increase in the government license fee. Government revenues from their license fees have not been used for conservation purposes or to support WD staff. In NAs, the revenue from hunting licenses was held in a current account, but was recently transferred to a tourism endowment fund by the NAs Administration, and so lost to conservation. In NWFP, all proceeds from hunting license fees are in a PLA account pending the formal approval of the provincial government for their use. In Balochistan, license fees go directly into general government revenue.

- I suggest that any revenue above that needed for purely administrative purposes of issuing the hunting license, be used to support WD field staff in areas with CTHPs. For example, it could be used to provide equipment to help field staff to carry out their tasks related to the CTHP. Providing direct support to government field staff, will in turn encourage their support of CTHPs and VOs. A special fund should be created within government into which the license fee is paid and from which the funds are used to support field staff. If this is not possible then a conservation fund similar to that discussed for VCFs (see ***CTHP Conservation Fund***) could be developed.
- The IUCN Law Unit should explore the feasibility of a separate government conservation fund, with legal protections, allowing it to be used only for particular specified government actions that relate to conservation.

If a mechanism can be developed so that the revenue from the license fee is kept separate from general revenue, it is justifiable for the government license fee to cover more than the small administration costs. It is worth stressing once again, that the primary purpose of CTHPs is conservation of wildlife, not generation of revenue either for communities or for government. Further, it should be recognized that just as communities will be held accountable for using the fees for conservation, so will governments.

Community Trophy Fee

A second question, frequently raised by all parties involved in CTHPs, was whether the community trophy fee should be fixed or negotiable between the hunter/outfitter and the VO. I suggest that as long as the government gets its license fee, communities should be allowed to decide the trophy fee they need to meet their conservation goals. Areas that do not traditionally produce large trophies could charge a lower trophy fee and remain competitive.

In many countries, a trophy hunt is a tradable commodity, and in-kind hunting fees can be negotiated by a VO (R. Garstang, WWF - Pakistan, pers. comm.). For example, a VO might wish to donate a hunt to an established outdoor writer in return for favourable publicity in an international hunting magazine, or it might exchange a hunt for equipment such as computers, small-scale hydro plants, etc. In such cases, the government license fee would still be paid, but only if it were fixed and not a percentage of the hunt fee.

As a recent example of the potential of a flexible trophy fee system, Mr. Richard Garstang (WWF - Pakistan, pers. comm.) was approached in November 1999 by a person prepared to bring in five foreign hunters that same hunting season, but for a lower trophy fee. The communities in question were prepared to accept the offer, rather than have no hunts. But, because currently the fee is set and cannot be reduced, the hunters did not come.

Auctions

Another option is for a VCC to auction its hunt to obtain the highest trophy fee that a hunter or outfitter is willing to pay. Auctions usually raise the most money when the hunt being offered is unique, such as when good opportunities to shoot a very large trophy animal are anticipated, or the species is rare and much sought after by hunters.

Auctioning a hunt would not be part of an outfitter's responsibility. Auction programs used in North America could provide examples that could be modified to suit the needs of CTHPs in Pakistan. The IUCN/SSC Caprinae Specialist Group has a position statement on the sale of special auction or raffle hunting permits for trophy males (Appendix 6). Others have discussed this issue (e.g. Erickson 1988).

The ability of auctions to successfully raise large amounts of money is also problematic. It can result in governments first and foremost considering auctions as a means of revenue generation. Auctions should be used only if there are guarantees that the money will be used for community-based conservation. Hence, it is probably most appropriate if auctions are allowed only for community's trophy fee, and only where the government license fee is fixed. Otherwise, there would be a need for an "arms length" party such as the NCCW to collect and disburse the funds.

- A project to examine the feasibility of auctioning the community trophy fee should be initiated. It will need to consider the procedures by which auctions could be held and how the money raised would reach the community VCF.
- If auctions are judged feasible, they should be allowed only when there are ironclad guarantees that the money raised will be used for genuine conservation benefits.

If auctions are to be employed, it will be necessary for an independent third party to hold sealed auction bids. This would be an appropriate role for IUCN/WWF - Pakistan.

Domestic Hunters

To date, the domestic market for trophy hunting has been relegated to a minor role and has not been adequately addressed in Pakistan. The current fee differential is large, and there are no provisions for domestic markhor hunting. Wealthy hunters do exist in Pakistan and it appears that trophy fees for domestic hunters could be gradually increased to lessen the gap, without difficulty. Such an action might be particularly useful in CTHPs for Himalayan ibex where there are problems attracting sufficient numbers of international hunters for the community-based conservation programs to be adequately funded (but see also **The World Market**).

Trophy Fee Payment Mechanism

Currently, the way that trophy fees reach a community differs. In NAs, the community trophy fee is usually paid directly to the community by the hunter. In other cases, the hunter pays the trophy fee to the government of NAs, which keeps the trophy fees in a separate account to be paid to the community later. This latter procedure is also followed in NWFP. However, in Balochistan both the license fee and the trophy fee are paid to the government and put into a general account.

From a community's perspective, the ideal is for the hunter to issue separate payments to the community for its trophy fee share and to the Provincial government for the license. However, this might not always be possible or desired, particularly if a cancellation policy is adopted as recommended above. Instead, the money must be paid before the hunt (see **Community Trophy Fee** above) to the government, which will hold the community's trophy fee in trust until the hunt is successful, or according to the conditions

of the cancellation policy. If this approach is adopted, payment must be made to the community in a timely manner. This has not always been the situation. For example, the CTHP in the Torghar Hills had still not received its hunting fees for the previous hunting season at the time of our visit. By contrast, the NWFP government holds a ceremony to pay the trophy fees to the communities each year following the hunts. While a standardised procedure might appear advantageous, there is room for flexibility and local choice as long as communities receive full payment within an agreed period after the annual hunting season, such as within 3 months of the last day.

CTHP Conservation Fund

There is an ongoing need to finance conservation activities that do not fall readily into the influence or immediate interests of individual CTHPs.

- A conservation fund should be established to support broader, collective goals and activities of CTHPs throughout Pakistan either at the national or provincial level. The purpose of this fund would be to promote conservation activities over a wider area than that covered by active CTHPs and so support conservation actions that affect more than a trophy species and its immediate habitat.

For example, the fund could be used to provide new VCCs with start-up grants to help build community co-operation. Many of the current CTHPs received such support when they first began. It could also support training workshops for VWG, intra- and inter-provincial VCC workshops and symposia, and exchange visits by VCC members to share experiences and expertise. This fund would be similar to the Mountain Areas Conservancy Trust Fund planned to operate only in conservancies.

There are at least two possible sources for a conservation fund. First, Pakistan's two main conservation NGOs should be capable of obtaining funds to support communities initiating CTHPs. The second source could be the communities themselves. If VOs agreed, contributions could be made from all trophy fees. If VOs are allowed to auction hunts, then I recommended that, beyond some minimum value, a fixed percentage of this fee should be paid into a CTHP conservation fund.

Exactly what form the fund should take is not clear and needs to be investigated, but it should be overseen by a small board comprising both government and NGO representatives. Whether it would be advisable to distribute monies from the conservation fund according to conservation needs, or to areas proportional to the amounts their CTHPs contributed, needs further consideration.

Financial Transparency and Trust

Throughout my travels, I heard allegations of various forms of corruption related to the operation of CTHPs. This includes misappropriation of funds, bribes requested to falsify census data, and pressure to allow unlicensed hunting. Unless CTHPs can be undertaken in manner not only free from corruption, but also shown to be free, then CTHPs can be expected to fail in Pakistan simply because of the loss of credibility. Communities will lose faith in the process and abandon their CTHPs, and the international conservation community will withdraw its support. The key to overcoming this obstacle is full transparency in reporting all aspects of CTHPs, not only fiscal but also the conservation and community benefits.

Transparency is essential to build the trust of all parties, and applies to VCC members, government agencies, international conservation and hunting organisations, and individual hunters.

- Official VCF accounts should be kept by all VOs, be audited annually to show where and how funds were used, and be presented annually to the DCC.
- Initially, withdrawals from VCFs should require co-signatures of a VO representative and a designated NGO or government representative, as is done in NAs. However, once community organisation maturity is judged sufficient by, for example, the NGO that initiated the CTHP, then full signing authority could be turned over to the community. This authority would be predicated on it requiring signatures of two VO members elected by the community, and on the community reporting each year to the DCC on audited expenditure from the VCF.

The accounting procedures used by communities we visited in conservancies in NWFP appear practical and appropriate. A similar approach is used by some, but not all, communities in NAs. Accepted accounting procedures should be used and be consistent. The situation in Balochistan is somewhat complicated by the socio-political conditions in the Tribal Areas.

Some government officials we talked to were concerned that some VOs might not make the best use of their conservation funds (VCFs). With proper auditing of VCFs, any fears governments might have over the ability of VOs to manage their VCFs should be eliminated, or at least greatly reduced. For CTHPs to function optimally, VOs need to be able to make their own decisions about spending VCFs, in accordance with any prior agreements they have made.

- An audit system must be in place to make it transparent and verifiable where VCF funds are spent, and that the funds are being spent on community benefits and/or conservation projects. Audits can be made available to agencies such as USFWS who might require them before determining import status.
- A standard accounting protocol would be of great benefit at community and international levels. Dr. A.T. Virk (IUCN-Pakistan, pers. comm.) suggested that the IUCN-Pakistan financial experts could help achieve this goal by holding a workshop to help communities with their accounting procedures. This proposal should be implemented immediately.
- It should be equally transparent what government license fees are used for, because the intent of CTHPs is that all funds are to be used for conservation. Government fees should be used to cover the costs of issuing the hunting license, with the bulk directed to conserving the hunted taxa through logistical support for WD field staff.

The World Market

Experience has already been gained from international hunts. Based on this, some changes have been made to accommodate hunter needs and expectations (Gloekler 1999). There are probably many more such changes that could be implemented to ensure a higher level of hunter satisfaction, and hence the ongoing success of the trophy hunting programs in Pakistan. It would be extremely valuable to have an estimate of the international trophy hunter population to help new VOs planning to develop trophy hunting programs. A most basic question that needs an answer is “Are there enough hunters for the number of VOs that want to have programs?”

- A market research study should be undertaken to determine not only the potential world market for Pakistan’s trophy hunting programs, but also the needs of the hunters and outfitters.

Trophy hunting programs in Pakistan for Asiatic ibex are in direct competition with those in countries to the north, like Uzbekistan and Tadjikistan. There, ibex hunting fees are about 50% lower and trophy animals are generally larger than those in Pakistan. Although the sustainability of these competing programs is questionable, market conditions for ibex hunts in Pakistan need to be improved. To this end, it might be useful to apply an approach that has been used with argali (*Ovis ammon*) in Mongolia. Frisina et al. (2000) reported that trophy hunters are often interested in geographic as opposed to taxonomic divisions for defining trophy types. Hunting organisations such as SCI and CIC should be approached to determine if their members might be interested in hunting a type of Asiatic ibex exclusive to Pakistan. This could be one way to increase international interest in ibex CTHPs in Pakistan (M. Frisina, pers. comm.).

Services and Payment Policies

There are internationally recognised procedures for payment of fees by hunters and outfitters, as well as for hunt cancellations. Some of these internationally accepted standards should be adopted by CTHPs. For example, a clear cancellation policy is necessary because, as has already happened with

CTHP hunts in Pakistan, if a hunter cancels at the last minute, it can be difficult, if not impossible, for a VO to find a replacement. Under these circumstances the community and government lose financially. While the government trophy license fee should be non-refundable, at least part of the cancellation policy should include a percentage of the trophy fee to be paid to the VO in advance. Examples of conditions used elsewhere by outfitters and that could be modified to suit payment of community trophy fees, are:

- A deposit of 50% of the total daily rate is required to confirm a booking.

• No refund of deposit can be made if client cancels hunt within 6 months of contracted starting date, unless the hunt can be rebooked. In all other instances the deposit will be refunded less a 15% administration fee.

• All charges are subject to change.

• All payments must be made in cash, travellers checks, or by certified bank draft. Personal checks are not accepted without prior arrangement.

It is also essential as part of internationally accepted procedures, as well as good business practice, for an outfitter to state all conditions of the hunt. These might include what the hunter can expect, what will be provided, and what costs are and are not covered. Similar expectations of VOs need to be drawn up, so that a hunter or outfitter knows what to expect from a VO, and so the VO knows what it needs to provide a hunter. These conditions need not be identical across all hunts, but there should be common basic standards across all CTHPs in Pakistan.

Adopting a minimum set of internationally acceptable standards and expectations for the fee structure and terms of business will bring the necessary degree of professionalism to the CTHP process in Pakistan. This will increase hunter confidence in the process and should increase their interest. A small study should be contracted to an appropriate individual to review and propose a set of standards for communities within Pakistan that have CTHPs. This would help them to meet the expectations of international hunters. The report should be brought to the DCCs for discussion by the VOs. This should be completed in 2001.

• A standard policy governing services provided by VOs to hunters and outfitters, as well as for payment of fees should be established for CTHPs.

• Consistency is required in the financial and business practices used for CTHPs across Pakistan. To this end a national consultative meeting should be held to establish norms for hunting license and trophy fees, and to explore whether the license fee should be fixed or a percentage. The meeting should also discuss the recommendations of the consultant on business standards and practices. This meeting should be called by NCCW in co-operation with IUCN-Pakistan and WWF - Pakistan.

Import/Export Of Sport-Hunting Weapons

The inconsistent and often arduous procedures for issuing temporary import/export licenses for privately owned hunting weapons of foreign sports hunters are significant obstacles to development of a hunting programme. International hunters generally prefer, and often demand, to use their own rifles. Some hunters have experienced difficulties with the import/re-export of their hunting rifles causing Pakistan's reputation to suffer in the international hunting community.

Previously, under SRO No. 576 issued by the Central Board of Revenue (CBR), the import and export of sport hunting weapons was relatively simple. An outfitter contacted the Pakistan Tourism Development Corporation (PTDC), who in turn forwarded the request to the Ministry of Interior (MoI). However, this SRO was cancelled and under the present Trade Policy, the import of firearms is banned. Recently, some outfitters met with PTDC and other agencies, to suggest a new policy that could be in place by

early 2001. Under this proposed policy, a request from a hunter will be forwarded by PTDC or by an outfitter to Mol and, under their guarantee, permission will be issued for a fee of US \$100. Requests will be considered if submitted at least 4 weeks in advance.

If this proposal is not accepted NCCW should pursue a decision it made in a 1998 meeting when it was decided that:

To facilitate trophy hunting, temporary import of personal firearms and their export, an NOC for export of hunted trophies should be made one window operation in the NCCW Secretariat.

- Procedures for issuing temporary import/export licenses for hunting weapons privately owned by foreign sports hunters must be streamlined so that they are efficient, timely, consistent, and above all, reliable.
- If necessary, NCCW should seek approval to issue temporary import/export permits for sporting rifles belonging to foreign hunters participating in CTHPs.

Consistency

Consistency is required in all steps of a CTHP from the content and goals of conservation management plans, through accounting procedures and post-hunt payment period, to community capacity building. Fundamental principles that apply to conservation, VO benefits, levels of community participation, and operational transparency, should be adopted. However, this is not to say identical approaches must be employed in all areas or in all cases. If a set of common principles is adhered to, it is probable that they can be achieved by different routes. Local adaptations and requirements might be accommodated, as long as they are followed consistently. In other words within any one area or province the rules and procedures should be consistently adhered to, but the specific rules do not need to be identical between jurisdictions.

Governments and their personnel change, as do those in NGOs, and while a VO might be more stable, change is inevitable there too. This only strengthens the call for consistency in the rules and their application. Legislation needs to be sufficiently robust to be immune to changes in government personnel. Legislation also needs to be current and commensurate with the goals of CTHPs so it can serve a supportive role.

A common set of procedures needs to be used for allocating quotas. Quotas must be based first and foremost on survey data confirming that there is an adequate number of trophy animals, but other criteria should also be included. The NAs has adopted a set of conditions (Table 2) that should be followed in other areas in Pakistan.

District Conservation Committees

District Conservation Committees (DCC) play a pivotal role in the success of CTHPs. This is because they provide the opportunity for representatives elected by communities to express their concerns, and to participate in decision making at a common forum with district level government representatives. Currently there are seven DCCs operating in trophy hunting areas of northern Pakistan: Diamer, Ghangche, Ghizer, Gilgit, and Skardu in NAs, and Buner and Chitral in NWFP.

According to a discussion paper by Gloekler (2000), the mandate (ToR) of the DCC should be to support the community's initiatives to conserve their natural resources and to:

- strengthen the resolve of the villagers to manage the wildlife species by themselves
- co-ordinate implementation of the project with working partners, including IUCN, WWF, AKRSP, NAFD, NWFPWD and local communities
- solicit participation of the line departments at the district level
- review and approve conservation plans.

A typical DCC consists of the following members and officers:

- Deputy Commissioner (Chair)
- MACP/IUCN representative (Secretary)
- One elected community representative per valley (Member)
- Divisional Forest Officer (Member)
- WWF representative (Member)
- AKRSP, Field Management Unit Manager (Member)
- Assistant Commissioner Member)
- Deputy Superintendent of Police (Member)

The overall guidelines for objectives and functions outlined in Gloekler's discussion paper could be vital to the success of CTHPs. I suggest that, as part of their mandate, DCCs should take on responsibilities for monitoring CTHPs including: evaluating VCF audits and community benefits; ensuring the CMPs include measurable milestones; and assessing conservation results and how they fit into the broader picture of biodiversity conservation. DCCs represent the most efficient and practical level at which the operation of CTHPs can be monitored. They could also encourage the operational consistency needed within CTHPs.

Currently, DCCs appear limited to areas covered by MACP, but because of the perceived value of DCCs to the sustainability and operation of CTHPs, I recommend that such committees be developed in all areas with CTHPs. If the format and procedures described in the discussion paper are followed, I believe that DCCs will be received favourably by the international conservation and hunting communities. They would also achieve a level of institutionalisation that should serve as a model for other parts of the world.

Capacity Building and Training

In any conservation program, an effort is required to develop and maintain direct personal contacts between the key people on the ground. Contact needs to be frequent and inclusive, involving VOs, government, and NGOs. Effective functioning of conservation programs, particularly CTHPs, requires regular ongoing contact with VCCs by representatives of the government departments and NGOs involved. Problems have arisen when a pilot program ends and contact with the VCC ceases. Most VOs do not yet have the capacity to be self-sufficient, and most will not be so for some time. Hence, if post-pilot program conservation is to continue, VOs require continued interaction with NGO and/or government wildlife staff at least 2-3 times per year. Capacity building is a long-term process, similar to that required to build trust within the VOs.

One way to help build community capacity in the CTHP process is to hold regular (e.g. biennial) community symposia or workshops. Such meetings would allow VCC representatives from across Pakistan to meet and to exchange information and approaches to CTHPs. Along similar lines, Mr. Faiz Ali (IUCN-Pakistan, pers. comm.) suggested that exchange visits between members of neighbouring VCCs would also be valuable. It would allow expertise and experience to be shared amongst VCCs, and build community confidence. Workshops for community interactions could perhaps be operated under the aegis of the SUSG Central Asia, which would have the advantage of opening potential contacts with Central Asian communities that border Pakistan.

- A program of "model" communities, similar in intent to Altieri et al.'s (2000) "lighthouse" communities, should be implemented. In this scheme, communities whose CTHPs are operating well would be identified to serve as models for other VOs. Representatives from the model VOs would exchange visits with other VOs to share their expertise and approaches.

Both NGO and local government personnel might require training in social capacity building to increase their ability to help VOs reach their goals. Developing social capacity-building skills in NGO and government might be a potential role for experienced NGOs such as AKRSP.

The overall approach of NGOs to changing community attitudes and actions should be evolutionary rather than revolutionary. Not only do communities need incentives to support conservation programs, but in most instances, governments and government officials also require encouragement. Incentives must be developed and built into biodiversity programs to address the needs of all partners.

Specific Observations

This section presents observations made on CTHPs visited during the review and on other issues specific to the different regions. It should be borne in mind that community-specific comments were based almost exclusively on brief contacts with the VOs or their representatives, due to the time available for the review.

Northern Areas

A conservation program for Ladakh urial needs to be developed immediately. These animals are in real danger of being extirpated. In areas with urial, surveys are required to estimate numbers and current distributions, and contacts made with communities. The potential for limited CTHPs should also be considered as part of a comprehensive urial conservation program.

The CTHPs of Khyber (SKIDO), Shagarthang-Kachura (SVK) and Ghulkin VO all appear to be operating well. Khyber seems to enjoy an excellent level of community capacity, which they attributed to the full and frank discussion of issues involving all community members, and that there is some level of female involvement. Khyber would appear to be an excellent candidate for a “model” community. Shagarthang-Kachura’s success is in part due to strong leadership, at least in Kachura. This is fine as long as continuity and success is not reliant on one individual. SVK initiated its own conservation program and then joined with IUCN. It too might be a candidate for a “model” community. Ghulkin area has a variety of conservation achievements, as well as community benefits such as a model school. The community hunting area has large trophy ibex, but is not very accessible.

Hushe is a remote community which might need continued NGO support, at least in the form of regular visits to deter some officials who occasionally pressurise the community to allow them to hunt ibex. Fuel supply could be an issue as the potential for agroforestry might be limited at this altitude. Predation on livestock was considered a major problem (see **Predation** below).

Of the VCCs visited, one example of a non-functioning conservation community was SKB (Skoyo-Karabathang-Basingo). Attitudes expressed by members of this VO in the consultative meeting were the least useful of any heard during the trip. Part of the problem might have been limited recent contacts with the NGO, but is likely symptomatic of a broader problem. Poaching is still occurring in this community’s conservation area (see **Illegal hunting**) (Anon 2000).

The SKB VO requires more support from IUCN-Pakistan and NAs DFO Wildlife to strengthen its commitment to the CTHP and to halt poaching by locals and outsiders, including government officials. There is also a problem because the VCC represents communities that are located on both sides of the Indus River. At the consultative meeting it was clear from comments by VCC members that division of trophy fees would lead to major problems because it was said that the total fee should be given to those communities on whichever side of the Indus the hunt took place. The obvious solution is that this VO be divided into at least two separate units, based on which bank of the Indus River the community is situated. When this is done, it will also require reassessment of the quota allocation, because markhor population size used for quota allocation was based on herds on both sides of the Indus. This is clearly not appropriate given the effectiveness of the Indus as a barrier to animal movements.

KVO is also problematic. It does not yet have a satisfactory CMP. The legal issue between KVO and the government regarding KNP must be sorted out and concluded quickly. It appeared that KVO is

supposed to share in KNP gate receipts in return for active conservation protection within KNP, but neither side seems to be living up to the original agreement. As well, the issue of a buffer zone around KNP and KVO's role must be clarified. This is important because most, if not all, animals being hunted through the KVO program are likely to also use KNP.

I formed the impression that the KVO village leaders might not be totally receptive to input from other community members. The function of the VCF and responsibility of the VO for such issues as payment of VWGs, surveys, etc, might need to be clarified for KVO. It is possible that because KVO received UNDP funding, the VCC now believes that they are not responsible for such conservation costs. We were informed that KVO has not spent any of their VCF because they were waiting for it to become "large enough". KVO should be encouraged to develop clear goals for using its VCF and to have an open accounting process. These actions must also have input from, and be approved by, the whole community.

In KNP, there is an ongoing and serious problem of illegal hunting. All reports point to Khunjerab Security Force (KSF) personnel as the culprits. Concrete action must be taken to stop all illegal hunting in the park. In the case of KSF, determining whether they are hunting for food or to sell the heads might help direct solutions to this problem.

Reports that herders from the Wakhan Corridor in Afghanistan are bringing Marco Polo heads to local markets to trade for food must be investigated and addressed immediately. Joint actions by the NA's Forest Department and IUCN-Pakistan would probably be most fruitful. Similarly, recent reports of diseased and dying blue sheep in the Shimshal Valley need to be investigated. This species has the potential to become an important addition to KVOs CMP.

NWFP

The markhor population in the Tooshi Community Hunting Area is very accessible, but has suffered recently from disease transmitted by domestic goats brought in from Afghanistan. The CTHP seems to be operating quite well but has problems with the distribution of markhor trophy fees. Perhaps the accessibility of markhor could be capitalised upon for wildlife viewing opportunities as part of a broader ecotourist program in Chitral.

Gehrait CTHP is still facing problems that impede its proper functioning. In part this might be because of problems with markhor trophy fee distribution in NWFP, and because of disagreements with and within the ex-Mehtar's family. We were also told of problems with livestock grazing by Gujars in some areas. Firewood was becoming very scarce in some communities (e.g. Goleen Gol).

The CMPs for the two Chitral Markhor Conservancies are identical except for the maps and community names. They contain sound policy statements, but these are not community-specific, or even species-specific, conservation plans. Conditions do differ between the two Community Hunting Areas and these differences must be incorporated into their CMPs. While there is a specific target of increasing markhor numbers to approximately 400 in each of the two CMPs (although the two hunting areas are of significantly different aerial extent), the means by which these targets and the other objectives are to be achieved are not described (Anon. 1998:2).

It is recommended that community-specific markhor conservation action plans be drawn up by each community with the help or co-operation of the provincial government and NGO (IUCN-Pakistan, WWF - Pakistan) staff. These species-specific plans should start by developing specific projects and actions that directly address the conservation problems presented in the CMPs. The actions must be: directed to sound conservation goals, specific, realistic, measurable and achievable within a reasonable time period. For Gehrait in particular, there are potential complicating factors. One that must be addressed is that the community hunting area is large and encompasses many communities. A second is that community capacity varies markedly between communities, in part because only some have received support from AKRSP. Both these factors make it difficult to reach workable agreements. These issues will require input and direction from both NWFPWD and the NGOs.

Apart from a minor amount for administration, the NWFP government's 25% license fee should be used to support local government wildlife activities. For example, purchasing equipment such as binoculars, tripods, and vehicles will encourage local government staff to participate even further in conservation programs. Mechanisms should be put in place to earmark these monies so they do not end up in general revenues.

Land tenure is an issue that complicates CTHP effectiveness in NWFP (Dr. Mumtaz Malik, pers. comm.). In 1972, the government land reform decided who was and who was not a landowner. Change has been rapid since the early 1970s, when rule was by a Mehtar, to the current mode of operating in a community-based system. This has required strong government interventions. Complicating this is that absentee landlords often have sufficient money and legal documents to prolong court actions for many years. I suggest that the next step is to encourage the NWFP government to build community capacity in its markhor CTHPs so that the government's role in day-to-day community functioning can be reduced and its efforts directed to broader issues of biodiversity conservation.

Summer grazing of high altitude pastures by domestic livestock owned by the Gujars is a concern in several communities within both of the community-controlled hunting areas (Markhor Conservancies). Part of the complaint is that some communities within the hunting areas believe that the herds being grazed are larger than agreed. It is suspected that flocks belonging to Gujar families, and not part of the original grazing agreements, are being taken to summer pastures.

Summer grazing is a complicated issue, in part because some areas are legally owned by Gujar people. Also, many of the Gujars now live in settled communities within the Chitral area and thus expect similar considerations and application of the law as the rest of the population (H. Mehmood, i/c DC, Chitral Subdivision, pers. comm.). Clearly the question of livestock grazing must be addressed quickly and to the satisfaction of both parties. The representatives of IUCN/WWF - Pakistan might be able to act as mediators to bring the various parties together.

Disease transmission from domestic goats brought in from Afghanistan is a serious threat for some markhor populations. Steps are being taken by the NWFP government, including quarantining the goats as they enter Pakistan, and there is an immunisation program for local animals, although the vaccine has only a temporary effect. Unfortunately, these actions might be limited in effectiveness because of the remoteness of many of the passes used for transboundary movement.

Balochistan

The world's only population of Chiltan wild goats inhabits Hazarganji-Chiltan NP and the immediate environs. Consequently, the idea floated by the Balochistan DoF Wildlife to hunt Chiltan goat in the GR buffer around the NP should not be considered until at least two additional and separate populations are established by re-introductions within its former range. This will take several years to achieve, and will require development of a reintroduction program and appropriate protocols. Suitable areas for reintroduction will have to be surveyed, and discussions held with local communities to reach agreement on poaching, livestock grazing and fuel wood collection, as well as establishment of VCCs. IUCN-Pakistan and/or WWF - Pakistan should also be involved. Guidelines for re-introduction have been drawn up and published by the IUCN/SSC Re-introduction Specialist Group (IUCN 1998a). Verification that reintroduced populations have been successfully re-established should be made by an independent assessment team before a CTHP is instituted.

NGOs should encourage and work with both the Balochistan and Sindh Wildlife Departments to develop a conservation management plan for Sindh ibex and Blanford's urial in the Dureji area. The plan must include means of providing community benefits and a transparent accounting process. IUCN-Pakistan has been approached by the Balochistan government to help establish community conservation areas (A.L. Rao, IUCN-Pakistan, pers. comm.). It is to be hoped that this includes the Dureji area.

STEP's CTHP in the Torghar Hills is working effectively in terms of conservation. The conservation benefits are clear. Both urial and markhor populations have increased significantly since the program's inception. The main benefits to the community appear to be the employment of VWGs, and development

of communal projects such as water holes. STEP obviously has a lot to offer as a “model” CTHP, although it does operate under some unique conditions that might not apply outside this region. However, STEP must receive the trophy fees it is owed by the government of Balochistan for the 1999-2000 markhor hunts. Failure to transfer the community's hunting fees in a timely manner is not only undermining STEP's program, but will also impact negatively on other CTHPs in and outside Balochistan. Non-payment may lead to international repercussions under CITES and the US Endangered Species Act. In addition, I received reports that hunter satisfaction has recently declined. Therefore if the financial benefits are to be maintained, the hunting program must be improved in the Torghar Hills.

Challenges and Questions

The Long-term Outlook

Even if the CTHP process in Pakistan were to run perfectly, it faces several difficult challenges. The first is that Pakistan has a growing human population, and a consequential increased demand for land and other natural resources. Add to this the rapid changes in the global economy that are having an impact on even in the smallest communities, combine it with climate change, and even the most optimistic scenario will predict limited success in conservation of large wild mammals.

Despite, or because of, these challenges it is even more important for Pakistan to conserve its basic natural resources such as water and soil. Here, CTHPs can play a vital role. Most of Pakistan's Caprinae live in mountain regions which are also the headwaters for many of its rivers. Hence, conservation of wild caprins and their habitat will be one means of preserving watersheds, and can be seen as an additional important benefit of CTHPs.

Urial

Although Pakistan is rich in wild caprins, at least 9 of its 12 subspecies are threatened, with 5 classed as Endangered or Critically Endangered (IUCN 2000). Of these, urial are of concern because they have received little conservation attention. In fact, in many parts of Pakistan, these wild sheep populations are probably facing a greater threat than are markhor which are being conserved through CTHPs and protected areas. Consequently, there is an urgent need for conservation actions to be developed for urial, at least on the same scale as is being given to markhor. Urial are a major trophy species for foreign hunters coming to Pakistan, much more so than Himalayan ibex which are more readily and cheaply available elsewhere. It is recommended that urial conservation, and the potential for urial CTHPs, become a greater priority than CTHPs for Asiatic ibex. The potential for CTHPs to make a significant contribution to urial conservation has been demonstrated by STEP in the Torghar Hills. Like many markhor populations, a major problem for urial is that they are generally accessible because most live at low elevations, often near human settlements. Hence, they are especially vulnerable to poachers and competition from livestock grazing. All urial are in CITES Appendix II, or in the case of Ladakh urial, in Appendix I. Because of this internationally recognised threatened status, any conservation action plan for urial involving CTHPs and foreign hunters should follow the same procedures as were necessary for the markhor CTHP.

It is imperative that censuses/surveys of urial populations be made as soon as possible. Immediately following these, conservation action plans must be developed and implemented. These actions will probably require a combined effort on the part of IUCN-Pakistan, WWF - Pakistan and the respective provincial wildlife departments. If funding or personnel limitations require prioritisation of conservation actions, a Ladakh urial conservation program in NAs would be the highest priority.

Predation

Snow leopard predation on livestock is occurring and is a significant issue for some communities. For example, the Hushe VCC reports losing 37 yak x domestic cattle crosses in 1999 to predators and 55 in 2000. Obviously there would be substantial international resistance to a trophy hunting program for snow leopards, but this potential action should not be discounted entirely. It needs to be recognised by all parties that snow leopards are being killed, and will continue to be killed, in areas where they prey on livestock. Some biologists estimate that as many as 10 to 12 snow leopard might be killed each year in the NAs alone. Pressure for predator control is heard in communities which are committed to biodiversity conservation. For them, it is a matter of survival because they have little or no alternative sources of food or income.

Livestock insurance schemes have been introduced in northern Pakistan, but for the most part, community capacity appears insufficient to maintain such programs at this time. A reasoned argument has been made for a quota of one snow leopard per year for the whole of Pakistan. This hunt would be auctioned

internationally, and the proceeds placed in a fund administered by GoP (NCCW) in conjunction with provincial governments and possibly NGO representatives. The fund would be used to provide aid to communities in which predation is significant and has been demonstrated to occur. The aid would be a combination of some level of financial compensation (probably more effective if not 100%), together with technical help for minimizing livestock losses by, for example, changes in herding techniques and building predator-proof housing. It is also possible that individual snow leopards, like most other large cats, might become specialised at feeding on livestock. When this happens, it would be necessary to remove the individual. The problem is compounded because successful Caprinae conservation leads to increased numbers in prey populations. It can also result in increases in snow leopard numbers, and hence more livestock depredation. Therefore, anti-predator techniques and information should be made part of all conservation programs ongoing and future (e.g. MACP).

It is recognized that the idea of allowing even one hunt for snow leopard would be strongly rejected by some members of the international conservation community, despite the fact that illegal killing of snow leopards will continue. Perhaps the only way to move towards a resolution of this problem will be a demonstration that community-based programs for ibex and markhor operate smoothly and successfully in Pakistan. It would also be useful for IUCN-Pakistan and WWF - Pakistan to approach the IUCN/SSC Cat Specialist Group and the International Snow Leopard Trust to discuss practical approaches to reducing snow leopard predation.

Personnel

My observations lead me to suggest that many IUCN-Pakistan staff are overworked. The same might be true of WWF - Pakistan staff as well. This is a potentially serious problem that can reflect negatively on the program, and impact on communities as well as wildlife. A simple example is that of unexpected visitors who are sent to field programs for a "guided tour". These generally result in staff working evenings and weekends to catch up with their workplan targets.

Co-operation & Complementarity

WWF - Pakistan is supported by many donors, some of whom have differing perspectives on conservation. Consequently, WWF might at times have different objectives from IUCN (Q.M. Ahmad, WWF - Pakistan, pers. comm.). Despite this, it would be of obvious mutual benefit to increase significantly the level of co-operation between these NGOs. One area to begin would be to make concerted effort to develop complementarity between the organisations. For example, it was suggested by several people that the strengths of WWF - Pakistan are mainly in environmental education and bio-mapping while those of IUCN-Pakistan are more in policy development and science.

Reducing competition will have obvious benefits. Increasing complementarity and reducing duplication of staff and skills will benefit both organisations, as well as biodiversity conservation in Pakistan. It will also be a clear demonstration to communities that co-operation is practised and not merely preached by NGOs. There might also be a need for stronger ties with AKRSP in the area of developing programs that strengthen community capacity.

Concluding Remarks

In answer to the overriding question “Is the Community-based Trophy Hunting Program working in Pakistan?” the answer must be “not yet”. From an optimistic perspective, it is too early to conclude with conviction that Pakistan’s CTHP is meeting its goals, although there are several key indicators that suggest it should be successful. The pessimistic view would say that the level of consistency within and between community programs, that is essential for success, is not present and the reason for this is due to government actions.

I believe it is not entirely coincidence that the CTHP in the Torghar Hills, where government has had the least involvement, has shown the greatest level of conservation success in Pakistan. Currently, it is both levels of government that pose the greatest threat to the viability and sustainability of CTHPs in Pakistan, and not the communities. This is because agreements and regulations are frequently ignored, and decisions changed or made on personal whims, often of government employees. Often these differ or are even contrary to previously agreed decisions, and in some cases corruption rears its head. All parties, including both levels of government, must comply with the laws, regulations and agreements concerning community-based hunting programs.

The Federal government needs to act as a buffer between communities and provincial governments to ensure that the biological principles are adhered to, and that communities are free to go in the directions they wish to meet their conservation goals. Both levels of government must become actively supportive of communities involved in CTHPs.

To be able to function effectively, communities need training in the basic principles of biological conservation, and on how to conduct biologically sound surveys. They also need training on how to deal with outfitters and hunters, marketing hunts and providing services to hunters. Government should remove itself from marketing hunts, and should instead ensure that CTHPs are free of corruption, including that involving their own employees.

It is essential that the basis of the quota decisions be transparent and accountable. The Federal government must allocate quotas for trophy hunting based only on biological data, not on political or economic decisions. Information should consist of reliable population data collected in appropriate professionally conducted surveys, that is open to periodic review by independent professional biologists. Government should ensure that its field personnel are adequately trained before becoming involved in censuses/surveys.

As part of Pakistan’s overall biodiversity program, education must be used to support CTHPs. Education programs must extend far beyond the areas with CTHPs, ideally extending throughout Pakistan. The education goals should be to inform people of the concepts being applied in CTHPs, and to create greater understanding and support for these and other conservation programs.

Pakistan has a unique opportunity to provide leadership to the rest of the world for the development of community-based conservation programs in mountain ecosystems. I believe that whether it succeeds or not will depend almost entirely on both levels of government having the courage to hold back, allow communities to take the lead, and give them greater responsibility for operating the community-based programs and for many of the day-to-day operational decisions. At the same time, NGOs such as IUCN-Pakistan and WWF - Pakistan must continue to play a significant but supportive role in helping communities to develop the capacity necessary to run their own programs.

None of the parties involved in Pakistan’s community-based trophy hunting program must lose sight of the program’s primary goal which is the conservation of biodiversity. This is all too easily forgotten, with the result that CTHPs can come to represent a means of creating hunting opportunities that ultimately generate funds for communities and governments. Conservation benefits must be placed at the forefront at all times.

At least for the first few decades, success will depend almost exclusively on whether desired community benefits can be created and tied directly with conservation benefits. It will also depend on how quickly and efficiently the operational procedures can be put in place. Ultimately, governments and NGOs can and should play only a supportive role, because VOs need to become relatively independent for CTHPs to be sustainable.

Summary of Key Recommendations

The following are some of the key recommendations made in the preceding report. Many of the recommendations below are edited and have been grouped into 4 general categories. The page number is shown at the end of each recommendation so the reader can review the reasons that led to it.

National Council for the Conservation of Wildlife (NCCW)

- To avoid non-compliance with CITES, the government of Pakistan (GoP) should establish, without further delay, a monitoring program for all populations in Community-Based Trophy Hunting Programs (CTHPs). [15]
- To ensure the sustainability of CTHPs, and the success of biodiversity conservation as a whole in Pakistan, the NCCW needs to become a truly federal body. It needs the authority to make decisions dealing with international agreements, and to have the responsibility to co-ordinate internal wildlife issues throughout the country. [15]
- NCCW should develop a mechanism whereby the Council ensures and encourages both Village Organizations (VOs) and provincial governments to meet the conservation commitments entailed in CTHPs. This action addresses one of GoP's key obligations to CITES, and is important for promoting international confidence in the CTHP process in Pakistan, besides providing a means of monitoring changes in the country's program. [15]
- NCCW should take a proactive role in developing common conservation operating principles for CTHPs across Pakistan. This could include development of a standard reporting procedure that ensures all CTHPs adhere to minimum standards of conservation action. [15]
- Criteria for allocating hunting permits need to be based primarily on biological considerations and only secondarily on community benefits. Therefore NCCW should request that provincial governments or NGOs provide them with adequate population data before quotas are allocated. [16]
- Procedures for issuing temporary import/export licenses for the privately owned hunting weapons of foreign sports hunters must be streamlined so that they are efficient, timely, consistent and, above all, reliable. [41, 16]
- Standard census data should be collected in all areas, although the techniques to gather the information might be modified according to topography and other logistic constraints. [29]
- Population data and trophy hunting plans should be peer-reviewed by professional wildlife biologists within and outside Pakistan. [29]
- A National Survey Working Group should be formed to build technical capacity in support of CTHPs. [30]
- Criteria for defining trophy males should be based upon species-specific criteria, be consistent across Pakistan, and based on horn size. [31]
- To ensure that hunters have the necessary permits, Pakistan should adopt the procedure used in most other countries, of issuing metal, self-locking big game tags. This should also smooth the export permit process. [32]

- NCCW should be given responsibility to co-ordinate a CTHP reporting system in which the status of resources, activities undertaken, and benefits received are documented. The provinces will need to formally agree to join in such an activity. Reporting should be a prerequisite for quota allocations for a following year. [32]
- Consistency is required across the country in the financial and business practices used for CTHPs. To this end there needs to be a national consultative meeting to establish norms for hunting license and trophy fees, and to explore whether the license fee should be fixed or a percentage. [40]

Provincial Governments

- Government should not be involved directly in the operation of CTHPs, except perhaps as a temporary measure in the early stages of CTHP development until a necessary level of community capacity is achieved. The overriding roles of both levels of government in CTHPs should be in monitoring 1) that wildlife populations within community managed hunting areas are benefiting as a result of the CTHP, and 2) that the communities are able to maintain the CTHP. [19]
- The provincial government license fee should be fixed rather than a percentage. There are at least 3 important reasons for taking this approach. [34]
- Revenue from the government license fee should be used for administering the licenses and for directly supporting Wildlife Department field staff working in areas with CTHPs. [34]
- It should be transparent what government license fees are used for. They should be used to cover the costs of issuing the hunting license, with any excess being used to support the conservation the hunted taxa through logistical support for Provincial Wildlife Department field staff. [38]

Communities

- A community's management plan must include measurable goals so that the success of the CTHP can be evaluated in terms of wildlife and habitat conservation, and by the benefits to the community. [21]
- Annual monitoring of the effectiveness of CMPs should be done by NGO and/or government biologists in co-operation with Village Wildlife Guards (VWG), with periodic evaluation (e.g. 5-year intervals) of the results by an independent body. [21]
- Official VCF accounts should be kept by all VOs, be audited annually to show where and how funds were used, and be presented annually to the District Conservation Committee (DCC). [38]
- A standard accounting protocol should be instituted. [38]
- The marketing of hunts, collection of fees and financial management of each CTHP, should have transparency through an annual audit of each programme. [38]
- A program of "model" communities, similar in intent to Altieri et al.'s (2000) "lighthouse" communities, should be implemented. [43]

NGOs

- NGOs should expand their program of training workshops to increase community capacity to operate their CTHPs. The workshops should also be open to personnel from government wildlife departments. [23]

- Governments should avoid direct involvement with marketing of hunts. At least initially, Pakistan's two main conservation NGOs do have a role. This should be in the form of a joint effort by IUCN-Pakistan and WWF - Pakistan to both market hunts, and build the capacity of VOs to negotiate with outfitters and market their own hunts. [24]
- IUCN/WWF should contract an appropriate party to develop a suitable reporting format that meets both CITES needs and that allows the progress of all CTHPs to be monitored with respect to conservation goals. [32]
- The IUCN Law Unit should explore the feasibility of a separate government conservation fund, with legal protections which allow it to be used only for particular specified government actions that relate to conservation. [35]
- Consistency is required in the financial and business practices used for CTHPs across Pakistan. A national consultative meeting should be held to establish norms for hunting license and trophy fees, and to explore whether the license fee should be fixed or a percentage. It should also discuss the recommendations of the consultant on business standards and practices. This meeting should be called by NCCW in co-operation with IUCN-Pakistan and WWF - Pakistan. [40]

Other

- Initiate a project to examine the feasibility of auctioning the community trophy fee. It will need to consider the procedures by which auctions could be held and how the money raised would reach the community VCF. [36]
- A conservation fund should be established to support broader, collective goals and activities of CTHPs throughout Pakistan either at the national or provincial level. The fund would be to promote conservation beyond the areas covered by active CTHPs, and so support conservation actions that affect more than a trophy species. [37]
- A market research study should be undertaken to determine not only the potential world market for Pakistan's trophy hunting programs, but also the needs of the hunters and outfitters. [39]
- A standard policy governing services provided by VOs to hunters and outfitters, as well as for payment of fees should be established for CTHPs. [40]

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Appendix 1 - CITES Conference of the Parties 10

CONVENTION ON INTERNATIONAL TRADE IN ENDANGERED SPECIES OF WILD FAUNA AND FLORA

10th Meeting of the Conference of the Parties
Harare (Zimbabwe), 9 to 20 June 1997

RESOLUTION OF THE CONFERENCE OF THE PARTIES

Conf. 10.15

Establishment of Quotas for Markhor Hunting Trophies

RECALLING that, with the exception of the rare cases of exemptions granted under Article VII of the Convention, commercial trade in Appendix-I species is prohibited;

RECALLING that the markhor *Capra falconeri* was included in Appendix II at the plenipotentiary conference held in Washington D.C. (1973) and transferred to Appendix I at the ninth meeting of the Conference of the Parties (Fort Lauderdale, 1994);

RECOGNISING also that the markhor is threatened by illegal hunting, fragmentation and loss of its habitat and competition with domestic livestock;

RECOGNISING further that conservation of the species will depend on the capacity of the State to regulate use and on local people having sufficient incentives to maintain the species in preference to their domestic livestock;

RECOGNISING that Pakistan is actively promoting community-based management of wild resources as a conservation tool and has approved management plans for ibex that ensure the financial benefits derived from trophy hunting of a limited number of specimens go direct to the managing communities and that the communities use an equitable share of such financial benefits to sustain the management programme for the species;

RECALLING that countries of export may authorize trade in such dead specimens in accordance with Resolution Conf.2.11(Rev.), adopted at the second meeting of the Conference of the Parties (San José, 1979) and amended at the ninth meeting (Fort Lauderdale, 1994), and may grant export permits in accordance with paragraph 2 of Article III of the Convention;

RECALLING that paragraph 3(c) of Article III of the Convention provides that an import permit shall be granted only when a Management Authority of the State of import is satisfied that the specimen is not to be used for primarily commercial purposes, and that paragraph 2(a) of Article III of the Convention provides that an export permit shall be granted only when a Scientific Authority of the State of export has advised that the export will not be detrimental to the survival of the species;

RECOGNISING that, because of the importance of monitoring the utilization of quotas granted under this Resolution, Pakistan will implement a rigorous programme to monitor community-based management plans, including annual surveys of the wild population;

THE CONFERENCE OF THE PARTIES TO THE CONVENTION

APPROVES an export quota of six hunting trophies of markhor *Capra falconeri* from Pakistan per calendar year;

RECOMMENDS that:

a) in reviewing applications for permits to import markhor hunting trophies, in accordance with paragraph 3(a) of Article III of the Convention, the Scientific Authority of the State of import approve permits if it

is satisfied that the trophies being considered are from Pakistan and will be traded in accordance with the provisions of this Resolution;

b) in reviewing applications for permits to import markhor hunting trophies, in accordance with paragraph 3(c) of Article III of the Convention, the Management Authority of the State of import be satisfied that the said trophies are not to be used for primarily commercial purposes if:

- i) the trophies are acquired by the owners in the country of export and are being imported as personal items that will not be sold in the country of import; and
- ii) each owner imports no more than one trophy in any calendar year and export is authorized by the legislation of the country of origin;

c) the Management Authority of the State of import permit the import of markhor hunting trophies in accordance with this Resolution only if each trophy has a self-locking tag attached which indicates the State of export, the number of the specimen in relation to the annual quota and the calendar year to which the quota applies, and if the same information as is on the tag is given on the export document;

d) in the case of trophies traded according to the terms of this Resolution, the words "has been granted" in paragraph 2(d) of Article III of the Convention be deemed to have been satisfied upon the written assurance of the Management Authority of the State of import that an import permit* will be granted; and

e) Pakistan submit to the Secretariat, by 31 March of each year, a special report on the status of *Capra falconeri* including its population status and the number of hunting trophies exported during the previous quota year; as optional information, that Pakistan include details of the permit numbers, the identification numbers of the tags attached to the trophies, the countries of destination and the numbers of the import permits; that the Secretariat submit a report to each regular meeting of the Conference of the Parties; and that the system adopted in this Resolution be continued, with any increase in the quota or any new quota (i.e. for another State not previously having one) requiring the consent of the Conference of the Parties, in accordance with Resolution Conf. 9.21 adopted at the ninth meeting of the Conference of the Parties (Fort Lauderdale, 1994); and

DIRECTS the Secretariat to recommend to the Parties to suspend imports of markhor hunting trophies if Pakistan, or any other country subsequently approved for an export quota, has not met the reporting requirement in accordance with recommendation e) of this Resolution, but only after first checking with Pakistan (or any other range State concerned) to ascertain why the special report has not been submitted.

Appendix 2 - CITES Conference of the Parties 11

CONVENTION ON INTERNATIONAL TRADE IN ENDANGERED SPECIES OF WILD FAUNA AND FLORA

Eleventh meeting of the Conference of the Parties
Gigiri (Kenya), 10-20 April 2000

Interpretation and implementation of the Convention

Quotas for species in Appendix I

MARKHOR

1. This document has been prepared by the Secretariat.

Introduction

2. This report covers the use of annual export quotas for *Capra falconeri* (markhor) granted to Pakistan at the 10th meeting of the Conference of the Parties (Harare, 1997) under the provisions of Resolution Conf. 10.15.

Marking of hunting trophies exported under quota

3. In paragraph c) of Resolution Conf. 10.15 the Conference of the Parties recommends that the Management Authority of a State of import allow the import of markhor hunting trophies in accordance with this resolution only if each trophy has a self-locking tag attached, which indicates the State of export, the number of the specimen in relation to the annual quota and the calendar year to which the quota applies, and if the same information as is on the tag is given on the export document. The Secretariat is not aware that any problems have been experienced in the implementation of this recommendation.

Reported exports

4. In paragraph e) of Resolution Conf. 10.15, the Conference of the Parties recommends that the Management Authority of Pakistan submit to the Secretariat, by 31 March of each year, a special report on the status of *Capra falconeri*. This report should include the population status and the number of hunting trophies exported during the previous quota year. Pakistan may also include details of the permit numbers, the identification numbers of the tags attached to the trophies, the countries of destination and the numbers of the import permits.
5. Resolution Conf. 10.15 also directs the Secretariat to recommend to the Parties to suspend imports of markhor hunting trophies if Pakistan does not comply with this reporting requirement, but only after having ascertained why the special report has not been submitted.

Annual report for 1997

6. The Management Authority of Pakistan informed the Secretariat that no trophy hunting of markhor was allowed in 1997 and provided a report on the population status of markhor in Pakistan prepared by the IUCN/SSC Sustainable Use Specialist Group (Central Asia). This report indicates: a population increase in Chitral Gol National Park (population estimated in excess of 400); a state of over-population in Tushi Game Reserve (population estimated at 220); and an estimate of a further 681 individuals elsewhere in the Chitral region. A further 1296 markhor, representing a considerable population increase, was estimated in the Torghar Conservation Project area. Notwithstanding these favourable results, concern was expressed about ongoing markhor habitat conversion and illegal Doc. 11.28.2 – p. 2 hunting in other regions. The Secretariat notes that considerable resources and efforts were required to complete these surveys and expresses its appreciation to all concerned.

7. The status report for 1997 contains a recommendation and a request for clarification addressed to the Secretariat.
 - a) The author of the report recommends that the date of submission of survey reports be postponed to 31 May instead of 31 March because of persistent heavy snow cover in some areas to be surveyed.
 - b) The author of the report has requested clarification concerning the management of revenues resulting from trophy hunting of markhor within community-based conservation programme areas.

Annual report for 1998

8. After a reminder was sent by the Secretariat, the Management Authority of Pakistan reported that the three animals were hunted in 1998 (out of a maximum quota of 6). The Secretariat is also grateful that information was provided concerning tag and permit numbers.
9. Pakistan reported that an amount of USD 45,000 was earned from the hunting of the three markhors and that this revenue was shared with local communities, and indicated that the minimum trophy fee will be increased to USD 25,000 in the 1999-2000 hunting season. Village communities participating in markhor conservation will receive 80% of the revenue from hunting.

Recommendations

10. Regarding the recommendation in paragraph 7. a) above, the Secretariat considers that this request should be accepted in view of the considerable commitment that conservationists in Pakistan are making to survey markhor populations i.e. that status reports may be submitted later than required in Resolution Conf. 10.15 if prevailing climatic conditions have delayed the completion of surveys. In such instances, the Management Authority should however, inform the Secretariat that the report would be submitted after the deadline.
11. Regarding the request in paragraph b), the Secretariat notes that no reference is made to the management of revenues in Resolution Conf. 10.15 and that this matter should be addressed at national level.
12. Regarding the report for 1998, the Secretariat commends Pakistan for reporting the first successful hunts since a markhor quota was approved and the implementation of its community-based conservation programme for markhor.
13. The Secretariat nevertheless notes that no information was provided on the status of markhor as recommended in paragraph e) of Resolution Conf. 10.15. The Secretariat considers that a recommendation to report on population status every year for a national population of wild animals occurring in remote and difficult mountainous terrain may not be implementable in practice and places an unnecessary burden on the range State. The Secretariat therefore suggests that Pakistan should provide information to the Conference of the Parties on a sustainable monitoring programme at an appropriate frequency that would cover all important subpopulations of markhor, for consideration of a possible refinement of the recommendation in paragraph e) of Resolution Conf. 10.15.

Appendix 3 - Terms of Reference

IUCN-The World Conservation Union implemented a Pre-Investment Feasibility (PRIF) project namely "Maintaining Pakistan with Rural Community Development" between January 1995 and April 1999 in collaboration with the Government of Pakistan, Northern Areas Forestry, Parks, and Wildlife Department, and NWFP Wildlife Department. This project has led to a full-scale conservation project, the Mountain Areas Conservancy Project (MACP), funded by the Global Environment Facility (GEF) through United Nation's Development Program (UNDP). One of the objectives of the PRIF was to promote sustainable use of wild resources, particularly the interventions that encourage conservation of wild species and contribute to local community development. To fulfil this objective, a community-based trophy hunting program for Caprinae species (e.g. markhor and Himalayan ibex) was introduced to provide an economic incentive to the local communities for their efforts in conserving biological diversity, especially for maintaining healthy populations of wild Caprins and their habitats. During the last three years a number of markhor and ibex trophy hunts (both by the foreign and Pakistani hunters) took place in NAs and NWFP under this program. In addition, World Wide Fund for Nature (WWF), Pakistan has also facilitated ibex trophy hunts at their conservation project sites in Northern Areas. Similarly, trophy hunting has been used as tool for conserving Caprinae species and providing incentives to the local tribes in Torghar Mountains of Balochistan Province since the early 1990s.

It has been recognized that wild Caprins can be harvested sustainably provided certain biological and sociological conditions are met. One of the harvesting options identified is properly planned and controlled trophy hunting program that could generate substantial revenues that benefit both local communities and conservation objectives. Having such an efficient program requires some prerequisites, for example demographic information, conservation plans, population monitoring systems, community involvement, enabling government policies etc.

Before the community-based trophy-hunting program is further refined under the MACP, it is important to conduct a detailed analysis of the existing programs in the country, and seek recommendations for developing comprehensive guidelines for institutionalizing an effective community-based trophy hunting program in Pakistan.

The overall objectives are to:

- Conduct a detailed analysis of existing trophy hunting programs in Pakistan, in particular in NAs and NWFP, to determine whether these programs are contributing to conservation of wild Caprins and local community development.
- Identify hurdles in institutionalizing a sound community-based trophy-hunting program in the country including at international (e.g. marketing of hunts, CITES, US Endangered Species Act etc.) national, provincial, and local levels.
- Seek recommendations for developing guidelines to promote community-managed trophy hunting programs in Pakistan.

3.3 Activities and duties

The consultant will provide his own laptop and software, with the connections necessary to operate in Pakistan. However, desktop-computing facilities would be available only at IUCN offices at Islamabad, Gilgit, and Chitral, if needed.

Step 1

Assisted by a Pakistani counterpart (Mr. Umeed Khalid, Deputy Conservator Wildlife (NCCW), Ministry of Environment, Local Government and Rural Development, Government of Pakistan), the consultant will examine and describe:

- 1) The role of the National Council for the Conservation of Wildlife (NCCW) in regulating trophy hunting of Caprinae species, in particular of species listed under CITES Appendix I.

- 2) The role of NAFD and NWFPWD in trophy hunting programs (i.e., data collection, permit allocation, marketing and conduct of hunts, fees, permits, etc.).
- 3) The role played by communities in trophy hunting programs in NAs and NWFP with respect to data collection, determining annual harvest level, allocation of quotas, marketing and conduct of hunts, benefits received, and conservation efforts undertaken.
- 4) The role played by NGOs in the conduct of trophy hunts.
- 5) The manner in which past hunts have been marketed and conducted.
- 6) The degree to which past allocations have been based upon adequate population data and assessed through a credible process.
- 7) Results of existing programs on the status of subject populations.
- 8) Obstacles to institutionalizing efficient, transparent, and biologically effective trophy hunting programs.
- 9) The laws, rules, regulations and practices governing trophy hunting in NWFP and NAs.
- 10) The extent of the world market for Pakistan's trophy hunting programs.

Step 2

In coordination with IUCN's Biodiversity Unit (Dr. Christopher Shank and Dr. Amjad Virk) and with assistance from Mr. Umeed Khalid, the consultant will recommend:

- 1) Improvements in the manner in which NCCW manages the allocation and issuance of export permits for trophies, particularly for CITES listed species.
- 2) Improvements in the role and responsibilities of NAFD and NWFP Wildlife Department the conduct of trophy hunting.
- 3) Improvements in the roles and responsibilities of communities in the conduct of trophy hunting and related conservation activities.
- 4) Improvements in the roles and responsibilities of NGOs with respect to trophy hunting.
- 5) An appropriate system of reporting that fully describes, at the national scale, status of the resource, activities undertaken, and benefits to communities.
- 6) Improvements in maintaining records on hunted animals e.g. trophy sizes and hunters' assessment of the programme.
- 7) An appropriate mechanism for setting of hunt costs/permit fees, documentation of monetary transfers, and allocation of financial benefits to government and the community.
- 8) An appropriate mechanism for marketing the hunts so as to receive the optimal monetary benefit.
- 9) Necessary changes to existing laws and regulations to support community-based trophy hunting both at the federal and provincial levels.

Step 3

- 1) The consultant will prepare a preliminary report on the review and will present his findings and recommendations in a consultative meeting of the stakeholders to be organized jointly by IUCN and NCCW at Islamabad.
- 2) The consultant will review the additional relevant publications and will draft a final report on the Technical Assistance. The draft report may be prepared in Canada.

Appendix 4 - Summary of meetings held during the review process

18-19 May	Briefing meetings with A.T. Virk and C. Shank at IUCN-Pakistan, Islamabad
19 May	Secretary of the Environment, GoP, Islamabad
20 May	Mr. Ghulam Tahir, Conservator of Forests, & Mr. Ismail Zafar, Divisional Forest Officer, NAs, Gilgit
21 May	Khunjerab Village Organization
21 May	Khyber VCC (SKIDO)
21 May	Col. Shahan, Gulmet
22 May	Ms. Zohra Batool, AKRSP, Karimabad
23 May	Trophy Hunting Review & Planning Workshop, Gilgit
23 May	Mr. Noor Ghulam, Community Representative, Ghulkin Village Organization, Gojal
23 May	Mr. Qurban Mohammad (General Secretary) & Mr. Muhabat Karim (Member), Khunjerab Village Organization (KVO), Gojal
23 May	Mr. Asif Khan, Hunting Outfitter, Gilgit
24 May	Mr. Ghulam Rasool, General Secretary, BASDO, Gilgit
24 May	Mr. Qasim Mahmood Ahmad, Project Manager, WWF - Pakistan, Gilgit
25 May	Hushe VCC, Hushe
26 May	Skoyo-Krabathang-Basingo VCC (SKB)
26 May	Shagarathang-Kachura VCC
29 May	Dr. M. Mumtaz Malik (Conservator of Wildlife NWFP), Peshawar
29 May	Conservator of Forests (NWFP Government), Peshawar
29 May	Col. (retd.) Alam Zeb Khan, Secretary of Forests, Peshawar
29 May	Mr. Shujar-ur-Rheman, Manager, IUCN-Pakistan, Peshawar
29 May	Mr. Iftikar Ahmad (WWF-P) Peshawar
29 May	Mr. Ashiq Ahmed Khan (Chief Technical Advisor, WWF - Pakistan) Peshawar
30 May	Mr. Safdar Hussain Shah (DFO Wildlife), & Mr. Imtiaz Hussain (Range Officer, Wildlife), Mr. Buzurg (Range Officer), Chitral
30 May	Tooshi Shasha Supra VCC
31 May	Goleen Gol Cluster Organization (Uzghor), Gehrait Conservancy, Chitral
31 May	Denan Lasht VCC, Gehrait Conservancy, Chitral
31 May	Jughor VCC, Gehrait Conservancy, Chitral
1 June	Mr. Hassan Mehmood (Incharge Deputy Commissioner, Chitral Subdivision)
1 June	Mr. Inayat Ullah Faizi, IUCN-Pakistan, Chitral.
1 June	Chitral Gol National Park, Chitral
4 June	Hazarganji-Chiltan National Park, Balochistan
5 June	Mr. A.L. Rao, Head, IUCN-Pakistan, Quetta
5 June	Mr. Rasool Hasni (Secretary of the Environment, Forests & Wildlife), Mr. Yousaf Khan (DFO Wildlife) & Mr. Manzoor Ahmad (Conservator of Forests), Govt. of Balochistan
6 June	Torghar Conservation Area (Sardar Naseer Tareen, Naeem Ashraf Raja, Paind Khan - Central Asia Sustainable Use Specialist Group)
8 June	Mr. Yousaf Khan, DFO Wildlife, Quetta
8 June	Mr. Ali Hassan Habib (Director General WWF - Pakistan), Mr. Richard Garstang (WWF - Pakistan), Lahore
9 June	Consultative meeting: Review of Trophy Hunting Programs in Pakistan, IUCN-Pakistan, Islamabad
10 June	Consultative Meeting on the Management of National Parks in Pakistan, IUCN Pakistan, Islamabad

Appendix 5 - Checklist of questions used in the review process

A - VCC interviews

- 1) Program description (current **and** past) – name, location, etc.
- 2) How are population data collected & how often?
- 3) What data are collected & who collects data?
- 4) How are data analysed and How is annual quota determined?
- 5) Who allocates annual harvest level?
- 6) What records are kept & by whom?
- 7) Problems/Key components/Comments?

B - VCC interviews

- 1) What are specific conservation benefits for caprins - **both realised &** projected?
- 2) Any non-Caprin conservation benefits (habitat, other species, etc.) both realised & projected?
- 3) What are the community development benefits (realised & projected)?
- 4) What is current level of community satisfaction?
- 5) What role(s)/responsibilities does community have in program **&** in deciding on benefits?
- 6) What is community structure/characteristics/organisation?
- 7) Who else benefits (besides Govt. & Community)?
- 8) Problems/Key components/Comments?

C - Provincial government and NGO interviews

- 1) What are the role(s)/responsibilities of government?
- 2) What level of government (specify which govt. agencies, not just acronyms)?
- 3) What are existing laws, rules, regulations re. trophy hunting?
- 4) How are permits issued & by whom?
- 5) How are fees managed – how get to community?
- 6) How transparent is the process – especially fee disbursement - explain?
- 7) What are role(s)/responsibilities of NCCW in the program [specify program(s)/actions]?
- 8) Are other organisation involved (e.g. NGOs, companies, individuals)?
- 9) Problems/Key components/Comments?

D - All interviews

- 1) What marketing takes place and by whom?
- 2) What is relationship between community and outfitter (note any problems)?
- 3) Where do the hunters come from?
- 4) What is the level of hunter satisfaction if assessed?
- 5) What is hunter demand?
- 6) Problems/Key components/Comments?

E - All interviews

- 1) Are there any other major hurdles to a programs success?
- 2) Other comments/observations/key components?

Appendix 6 - Auctions

IUCN/SSC Caprinae Specialist Group's Position statement on the sale of "special" auction or raffle hunting permits for trophy males

HISTORY AND DEFINITION OF SPECIAL PERMITS

Beginning in the early 1980's, several US states with huntable populations of bighorn sheep (*Ovis canadensis*) have each auctioned one or more special hunting permits each year. At least one state, Colorado, has auctioned a special mountain goat (*Oreamnos americanus*) permit. These permits are sold to the highest bidder. Special permits (often referred to as "Governor's permits" in the USA) have been offered by Montana, Wyoming, Utah, Idaho, Arizona, Nevada, North Dakota, Oregon, California. The practice extended to the Canadian Province of Alberta in 1995 and to Mongolia in 1996. Most auctions are organised by the Foundation for North American Wild Sheep, a non-government group that then either directly administers the funds obtained through the auction, or keeps a percentage while handing over the rest to state or provincial wildlife management agencies. An alternative type of special permit is a raffle, where interested individuals buy one or more of a limited number of tickets sold at a fixed price. A single ticket is then drawn in a lottery. The owner of the winning ticket obtains the special permit.

In this statement, "special permit" refers to hunting permits sold through an auction (the number of permits is fixed but their price is not known until the auction) or through a raffle (the total number and unit price of tickets are set). The **explicit** goal of special permits is to raise large amounts of funds. Therefore, special permits are distinct from the 'normal' game licenses that are sold at a fixed price as part of regular management programs. Special permits are usually made available in addition to hunting opportunities provided through regular seasons, draws etc., and can include special privileges, such as extended seasons or a wide choice of hunting areas. Some recent special permits for bighorn sheep have fetched over US\$ 200,000, and the revenue generated by these permits may increase in the future. Special permits bear some resemblance to hunting permits for caprins that are sold at very high prices by several countries to foreign hunters. In both cases, obtaining the highest possible revenue appears to be the goal of the permit.

A very informative discussion of the advantages and disadvantages of special permits was presented by G.L. Erickson in 1988 in the Proceedings of the Northern Wild Sheep and Goat Council. The Council published its recommendations in the same Proceedings. Those recommendations provided guidelines for how the system should be run and for how the money generated by the auctions should be allocated.

Particularly in view of the increasing international scope of this activity, it is opportune for the IUCN/SSC Caprin Specialist Group to express its opinion on special permits. The objective of this position statement is to briefly consider the positive and negative aspects of special permits, and to issue guidelines to ensure that this practice has a positive effect upon the conservation of wild caprins. Sales of special permits could be of interest as a fund-raising method to IUCN specialist groups concerned with other taxa subject to sport hunting.

POSITION STATEMENT

WHEREAS special permits can provide substantial funds for the conservation, management and study of wild caprins.

WHEREAS special permits illustrate the economic value of live wild caprins, and therefore encourage the protection of their populations and habitat.

WHEREAS the practice of issuing special permits is presently mostly limited to North America but may be of interest to other Caprinae range states.

WHEREAS special permits may contribute to the perception of caprins as "trophy" animals, valued almost exclusively for the size of the males' horns.

WHEREAS properly-publicised raffles could raise substantial amounts of funds.

WHEREAS it is extremely important that the large sums raised by special permits be used only for wildlife management or conservation.

The IUCN Caprinae Specialist Group:

APPLAUDS the involvement of non-governmental organisations in the administration of special permits.

CONDEMNS the use of funds generated by such special permits for uses other than conservation (including education on conservation issues), management, and study of wild caprins and their habitat or, within reasonable limits, administration of the special permit program.

RECOMMENDS AGAINST the auctioning of special permits to hunt caprins whenever raffles are a viable alternative.

SUPPORTS the use of raffles to draw single special permits to hunt caprins to raise funds for conservation, **provided** such raffles are conducted according to the following guidelines:

THE NUMBER of special permits must be limited to one per species per jurisdiction (a geographical area under the control of a wildlife management agency, such as a country, state, province or territory) per year, and must not have adverse impacts on the species or on the availability of huntable animals to other hunters.

CRITERIA used for setting the number of special permits must be based exclusively on scientific principles and conservation objectives. The authority responsible for setting regulations pertaining to special permits must seek the input of wildlife managers and scientists, as well as of interested parties such as local hunter and conservation groups, landowners, indigenous groups and any traditional users of the species concerned.

REGULATIONS detailing the area and season of the hunt must be clearly specified and must be enforced. Holders of special permits **should not** be given hunting privileges not allowed to other hunters, such as permission to hunt in protected areas, special hunting seasons during the rut, or permission to use weapons, vehicles, bait stations or other hunting techniques that are normally not permitted.

ALL FUNDS from the raffle, other than reasonable amounts needed for administration and publicity, must be used for conservation activities such as research, habitat protection, land purchase for conservation, censuses, enforcement of wildlife law and educational programs.

CRITERIA for awarding of funds, or for use of funds by government agencies, must be made public before special permits are sold, and must be respected. These criteria must include ways to assess whether conservation objectives will have been met by the programs that will be funded. If funds are awarded through competition to non-government groups or researchers, competitions rules must be clear, based on scientific and conservation priorities, and must be respected.

FINANCIAL STATEMENTS accounting for the use of all funds generated by the raffle must be available to the public.

PUBLICITY on the use of funds must be made available to prospective raffle ticket buyers and to the general public.

