

Site Inspection Report of Govind Sanctuary and National Park, Uttarakhand State

1.0 Background:

1.1 Meeting of the Committee on Boundary Rationalization

At the first meeting of the Committee on Rationalization of Boundaries of National Parks and Sanctuaries (in short the Committee) held on 9th April, 2009 the Conservator of Forests and Field Director of Rajaji National Park and Govind National Park and Sanctuary Shri S.S.Rasaily briefed the members on the issue of rationalization of boundaries of Govind NP/Sanctuary. The NP comprises the habitat of the endangered species like the Snow leopard, Musk deer etc. The Committee decided to carry out a site inspection of the area.

1.2 Broad guidelines on Boundary Rationalization

At the said meeting the Chairman welcomed the suggestion of Shri Mahendra Vyas, Member on consideration of rationalization proposals based on the draft guidelines circulated and stated that this was followed in the normal course. The points discussed *inter alia* include –

- i. The term rationalization means deletion as well as inclusion and not deletion alone;
- ii. The criteria for deletion to exclude areas that are heavily populated and as far as possible in the fringes;
- iii. Proposals should disclose projects of commercial nature that are in the pipeline and subsequently located in the area proposed for deletion;

1.3 Site inspection team, dates and locations inspected

Pursuant to the decision of the Committee, Praveen Bhargav, Member of the Committee and Dr. G S Rawat of the Wildlife Institute of India (WII) completed the Site Inspection and related meetings along with senior officials of the Uttarakhand Forest Department including Shri Srikant Chandola IFS, Additional Principal Chief Conservator of Forests and Chief Wildlife Warden, Shri S S Rasaily IFS, Conservator of Forests and Field Director, Deputy Director, Shri Yadav and other field officers. The team received full co-operation and support from the officers and staff of the Uttarakhand Forest department in carrying out the site inspection.

Dates and Locations are as under:

4th July, 2009: Team reaches Govind NP

5th July, 2009: Meeting with stakeholders at Forest I B, Taluka; inspection of areas proposed for deletion in the forest blocks of Giyangad, Pustragad, Dhatmir, Siyagad, Batgar, Maidrala (part). The team trekked a distance of

16 km from Taluka and reached the Seema Forest IB. An interaction with people of Gangar was also held enroute.

6th July, 2009: Inspection of compartment 1, 2a and 3a of Maidrala block; Meeting with people in Osla village, discussions with Deputy Director, Range Officer and jurisdictional staff on field issues during the return trek back to Taluka IB. Camp at Sankri.

7th July, 2009: Interaction with leaders of Phitadi village and Navdhanya Trust at Sankri; inspection of compartments in the forest blocks of Sankri, Sirga, Sauni and Jakhol; Inspection of the area demarcated for the Jakhol- Sankri HEP; Meeting with stakeholders in Jakhol village and return to Sankri. CWLW and Dr Rawat return to Dehradun. Discussions with CF, Deputy Director and staff at Netwad Forest IB on human presence, impact of fragmentation and possible consolidation measures; prevailing land prices and related park management issues.

8th July, 2009: Commenced inspection of the western parts of the Sanctuary in Rupin Range including the forest blocks of Pujeli, Rupin, Samror, Istragad, Doni and Hadwari. Viewed the Kapragad ridge/block across the valley; Interaction with a leader/people of Doni and Dhowla at the Forest Chowki; Returned to Netwad IB and perused the Tons Forest Division Working Plan of 1975-76 to 84-85, collated details of potential areas abutting the Sanctuary which are free of human presence for possible addition.

9th July, 2009: Received an application for resettlement; collected official figures of number of vehicles entering Supin Range HQ gate; Visited Tons Forest Division office; perused and collected notification copies, recorded privileges granted; returned to Dehradun. Informal discussions with Dr Rawat at WII guest house.

10th July 2009: Final wrap up meeting with the CWLW, CF and WII member. Viewed the lay of the land (Govind NP and Sanctuary) as a 3D image. Site inspection team members sought a formal proposal with 3D maps with altitudinal range, justification for deletion of areas, proposed additions, mitigation measures, details of hydro-electric projects in the pipeline (if any) and other relevant details on receipt of which the final report and recommendations would be submitted to the Committee.

2.0 About the Govind landscape:

2.1 Area, location, legal status...

The 957.96 sq km Govind Sanctuary & National Park ($31^{\circ} 00' 00''$, $78^{\circ} 00' 00''$ E to $31^{\circ} 15' 00''$ N, $78^{\circ} 35' 00''$ E) is located in the revenue district of Uttarakashi in the State of Uttarakhand. The PA is contiguous with the forest division of Uttarakashi to the east, the Upper Yamuna to the South, the Tons to the West, all within the State of Uttarakhand. The Northern limits of the PA is contiguous with forests of Himachal Pradesh.

The area comprises the Reserved Forests blocks of the Tons Forest Division in the erstwhile Tehri Garhwal district. The Reserved Forest Notification No. 2852/XIV-199/51 dated September 4, 1952 has been issued under the Indian Forest Act, 1927. A copy of the said notification obtained from the Tons Forest Division office is at **ANNEXURE-A**. A copy of the concessions granted to people recorded in Tehri State Darbar Circular No 21 of 1930 is at **ANNEXURE-B**.

A map of the PA which provides area details also tabulates the area of the Govind National Park as 472.08 sq km and of the Govind Sanctuary as 485.88 sq km. The said Map is at **ANNEXURE-C**. A 3D iteration with altitudinal range is at **ANNEXURE-C1**.

Out of 957.96 sq km an area of 472.08 sq km comprising the Govind National Park has been notified under Section 35 of the Wildlife (Protection) Act, 1972 vide Notification No. 394/14-3-137/86 dated 26th February, 1990 which is at **ANNEXURE-D**.

Vide proposal No. 281/24-1 dated July 03, 2009, the total annual admitted rights and privileges over timber is also provided and is at **ANNEXURE-E**.

2.2 Ecological value – flora, fauna, and species list

The Govind Sanctuary/NP falls in the Biotic Province 2 B (Western Himalaya) as per the Bio-geographic Classification by Rodgers & Panwar (1988). The tract harbors a rich array of habitats, vegetation types and floral and faunal communities typical of temperate – alpine regions. Depending upon the terrain, altitude, aspect, proximity to human habitation and history of anthropogenic pressures a number of vegetation types can be recognized in the area. The major groups and subgroups as per classification by Champion and Seth (1968) are Himalayan Chir Pine Forest (9/C1b); Himalayan Moist Temperate Forests which include various sub-groups such as Banj oak (*Quercus leucotrichophora*) forest (12/C1a); Moru oak (*Quercus dilatata*) forest (12/C1b); Moist deodar (*Cedrus deodara*) forest (12/C1c); Western mixed (Spruce, blue pine, silver fir) conifer forest (12/C1d); Kharsu oak (*Quercus semecarpifolia*) forest (12/C2a); West Himalayan upper oak/fir forest (12/C2b); Moist temperate deciduous forest (12/C2c); Montane bamboo brakes (C2/DS1); Alder forest (C2/E2); West Himalayan Sub-alpine Birch/Fir (*Betula/Abies*) Forest (13/C2); Birch-Rhododendron Scrub Forest (15/C1); Dwarf rhododendron scrub (15/E1); Dwarf juniper scrub (15/E2) and Alpine Pastures (15/C3). In addition, several stages of succession and retrogression can be noticed at a local level. One of the major biotic formations in the area is the temperate grassy glades on steep south / south-eastern slopes which have been derived as a result of recurrent fire over several decades. These grassy slopes are used for collection of fodder grasses as well as livestock grazing by the local communities. **Similarly, a considerable area falls under the secondary scrub especially around the villages which represents the stages of retrogression as a result of anthropogenic pressures.**

It is noteworthy that primary forests representing climax communities can be seen only in the steeper and less accessible slopes within the Govind Sanctuary/NP. The upper catchments comprising the sub-watersheds of Harkidoon Gad and Ruinsara Gad represent mostly sub-alpine and alpine vegetation. On the other hand the lower parts especially the sub-watersheds of Rupin and Supin along with intervening areas have several categories of temperate conifer and broadleaf forests, anthropogenic grasslands

and secondary scrub. In the temperate belt most important category include moist temperate deciduous forest dominated by maples (*Acer* spp.), hazel nut (*Corylus jacquemontii*), horse chestnut (*Aesculus indica*), hornbeam (*Carpinus viminea*), Himalyan mulberry (*Morus laevigata*), elm (*Ulmus wallichiana*) among others. These forests support a rich understory vegetation. The riverine area between Taluka and Osla supports patches of mixed conifer forests, moist deodar forests, two species of oak (*Q. leucotrichophora* and *Q. dilatata*) and *Rhododendron arboreum*. The stream banks and alluvial fans support riverine forests characterized by gregarious growth of alder (*Alnus nepalensis*), low altitude birch (*Betula alnoides*) and associates. The stretch between Gangar and Seema have open woodland of *Hippophae salicifolia* and *Populus ciliata*.

The natural treeline in the area, as in other parts of Western Himalaya lies around 3500 ±200 m asl. The treeline vegetation is represented by patches of birch - rhododendron (*Betula utilis* - *Rhododendron campanulatum*), high altitude fir (*Abies spectabilis*) and brown oak (*Quercus semecarpifolia*). At places, owing to recurrent fire there is virtual absence of sub-alpine forest and timberline e.g., the south-facing slope near Kalkatti Dhar. The alpine scrub and meadows within the National Park exhibit a great profusion of herbaceous plants, tussock forming grasses, sedges, and matted shrubs. The alpine meadows, frequently termed as *Bugyals* are rich in attractive herbs such as species of *Ranunculus*, *Anemone*, *Corydalis*, *Cardamine*, *Arenaria*, *Potentilla*, *Geranium*, *Senecio*, *Silene*, *Primula*, *Gentiana*, *Pedicularis* and *Impatiens* among others. In addition, the alpine zone (both scrub and meadows) harbor a large number of high value medicinal plants, notably, Gandrayan (*Angelica glauca*), Salam Panja (*Dactylorhiza hatagirea*), Kutki (*Picrorhiza kurrooa*), Dhoop (*Jurinea macrocephala*) and Atis (*Aconitum heterophyllum*). It is noteworthy that systematic enumeration of the flora and inventory of lower plants (fungi, mosses, lichens and algae) have not been made for this tract so far.

The Govind Sanctuary/NP is home of a diverse faunal assemblages typical of Western Himalaya. Rapid surveys of mammalian and avi-fauna conducted by the Wildlife Institute of India and Zoological Survey of India (Sathyakumar 1994; Kumar et al., 2004) reveals that this tract has at least 32 species of mammals and over 150 species of birds. Inventory of other faunal groups including invertebrates is far from complete.

The prominent mammalian fauna in the tract include Snow Leopard (*Uncia uncia*), Yellow Throated Marten (*Martes flavigula*), Mountain Weasel (*Mustela altaica*), Brown Bear (*Ursus arctos*), Asiatic Black Bear (*Selenarctos thibetanus*), Wild pig (*Sus scrofa*), Himalayan musk deer (*Moschus chrysogaster*), Sambar (*Cervus unicolor*), Barking deer (*Muntiacus muntjak*), Himalayan Tahr (*Hemitragus jemlahicus*), Goral (*Nemorhaedus goral*), Serow (*N. sumatraensis*), Bharal or Blue Sheep (*Pseudois nayaur*) and Royale's Pika (*Ochotona roylei*). Among avifauna Himalayan monal (*Lophophorus impejanus*), Koklass pheasant (*Pucrasia macrolopha*), Kalij pheasant (*Lophura leucomelanos*) and Cheer pheasant (*Catreus wallichii*) are prominent, albeit with low densities. It is also believed that distribution range of two other rare pheasants of Himalaya i.e., Western tragopan (*Tragopan melanocephalus*) and Satyr tragopan (*Tragopan satyra*) overlaps in Govind NP. Their population status and habitat occupancy have not been scientifically investigated as yet.

2.3 Hydrological value – Rivers, streams, catchments

The Govind landscape is an extremely important catchment for the Tons River, a major tributary of the Yamuna River. Supin and Rupin, the other two rivers, merge into Tons River which then joins the Yamuna at Kalsi, around 50 kms north of Dehradun. Keeping in view the conservation significance of Tons catchment, the Ministry of Environment & Forests has commissioned the National Institute of Ecology (NIE), New Delhi, and the Indian Institute of Remote Sensing (IIRS), Dehradun to conduct studies that will cover biological, hydrological, and ecological aspects of both the terrestrial and aquatic systems that lies in the Himalaya at an altitude of 2000 to 4000m. *Source: http://www.nieindia.org/activities/projects_undertaken.asp*

Relatively minor disturbances near the origin of a river may result in major changes of the geological and hydrological features of the surrounding areas. This would have major repercussions on the river itself. In addition, this may cause enhanced erosion rates in the mountains, fluctuations in the hydrologic regimes in downstream, silt accumulation rates, flooding water in the low lands and natural system of recharge, all of which can result in serious ecological damage in surrounding areas (*Report of the committee on identifying parameters for designating ecologically sensitive areas in India, MoEF (2000)*)

2.4 Human presence and livestock

The sanctuary area is badly fragmented by 42 villages located in three valleys along the Supin, Tons and Rupin rivers which run south-east, north-south and south-west. Of the three, the Supin valley that runs south-east has just four villages with an estimated population of 1900 people (475 families). The remaining 38 villages with an estimated population of 18,000 people (4500 families) are located along the Tons and Rupin river valleys within the limits of the sanctuary and the National Park. It is estimated that around 1.5 lakh sheep and goat and an about seventy thousand cattle, mules and horses belonging to the local inhabitants as well as migratory pastoral communities graze during summer season within the limits of these PAs.

3.0 Boundary Rationalization Proposal under purview:

3.1 Area sought for de-notification

Vide proposal 282/24-1 dated July 03, 2009 received by registered post on August 03, 2009 (*ANNEXURE-F*), a total of 16.06 sq km of area is sought to be deleted from the Govind National Park. If approved, this will reduce the area of the notified NP from 472.08 sq km to 456.02 sq km.

Likewise the area sought to be deleted from the Govind Sanctuary is 110.54 sq km which, if approved, will reduce the area of the notified Sanctuary from 485.88 sq km to 375.34 sq km.

The total area of the notified Govind Sanctuary/NP at present is 957.96 sq km. The total area sought for deletion is 126.60 sq km.

3.2 Legal rights within PA

Vide proposal 281-24-1 dated July 03, 2009, the admitted rights (*Hak Hakuk*) of timber for *bona fide* house construction, firewood and fodder are outlined including a detailed statement of admitted rights of timber including dead, wind fallen and drift wood. The total quantity of timber as admitted in 1955 but curtailed since the 14-02-2000 orders of the Hon Supreme Court in IA 548/2000 in WP 202/1995 is **336.20 cubic metres**.

All the 42 villages including agricultural land is within the enclosures comprising private land and government revenue land (civil/Nap Land) located in the valleys which is depicted in the map in yellow colour (*ANNEXURE-C*). **These lands do not form part of the notified Govind NP/Sanctuary.**

3.3 Justification of Forest Department to seek de-notification

As per the proposal at *ANNEXURE-F*, the entire 126.60 sq km proposed for deletion from both the NP and Sanctuary portions respectively is not for provision of land for villagers or for legalizing encroachments.

All the compartments proposed for deletion about the legal enclosures where the 42 villages are located. Here, the earlier admitted rights over dead, wind fallen timber and driftwood have been curtailed after the 14-02-2000 orders of the Hon Supreme Court in IA 548/2000. This has created a situation where park administration is increasingly losing the support of local people which is vital for protection of the park which is located in hilly, inaccessible terrain.

The justification outlined in the said proposal for deletion of 126.60 sq km is as under:

- 3.3.1: Forest compartments/blocks proposed for deletion about the legal enclosures comprising Civil/Nap lands of 42 villages that are required for providing rights over timber and firewood;
- 3.3.2: Forest compartments/blocks proposed for deletion abutting the 42 villages are required to open up areas for grazing cattle and fodder requirements;
- 3.3.2: Area proposed for deletion is required to construct roads, bridges, horse tracks for the benefit of people living in 42 villages and tourists including movement of park staff;
- 3.3.4: Area proposed for deletion is to provide for electricity lines, communication lines, water pipeline keeping in view the employment and development needs of people living in 42 villages;
- 3.3.5: For meeting the bona fide requirements of building material like stone boulders, sand for their personal house construction and repair.

3.4 Mitigation measures proposed

The proposal 282/24-1 dated July 03, 2009 (*ANNEXURE-F*) does not outline any mitigation measure either by way of addition of new areas to the Govind Sanctuary/NP or to other PAs in Uttarakhand State.

3.5 Summary of the important demands

The summary of the important demands of the people that has led to the proposal of the Uttarakhand Forest department to delete 126.60 sq km from the NP/Sanctuary in order to allow the following:

- 3.5.1: Admitted rights to collect dead, wind fallen trees, drift wood and firewood
- 3.5.2: Construction of roads, bridges and horse tracks to improve connectivity
- 3.5.3: Establishment of power, communication lines and water pipelines
- 3.5.4: Opening up of new areas for grazing and fodder

4.0 Assessments and Observations of the team

4.1 Impact of human presence and other biotic pressures

The tract, like other parts of Western Himalaya, has been occupied by human beings since several centuries. The very fact that this area was notified as Wildlife Sanctuary way back in 1955 reveals that the status of forests and wildlife in this area was much better compared to other parts of Garhwal Himalaya at that time. In the absence of any baseline information on the forest cover and populations of key floral and faunal species it is difficult to ascertain the overall impact of human presence in the area. The local communities are mostly agro-pastoral, having distinct culture and traditions of their own. Undoubtedly, there has been a steady increase in human and livestock populations in the area in past few decades. Besides the livestock of local people, over 100 families of Gujjars, a semi-nomadic tribe of buffalo graziers, have been entering the sanctuary areas for summer grazing. The Gujjars keep buffalo herds that freely graze in the forest, and they themselves live in temporary huts in the forest. **Thus the forests, alpine pastures and wildlife have been impacted in various ways. The major negative impacts include:**

4.1.1 Degradation and loss of wildlife habitat:

The gentler warmer aspects in the temperate belt of this tract have either been converted into agriculture and habitation or transformed into secondary scrub / anthropogenic grasslands owing to removal of forests. **The sub-alpine forests in the area have undergone maximum degradation and fragmentation due to anthropogenic activities such as collection of non-timber forest produce such as montane bamboo, mushroom, medicinal and aromatic plants (until recently, before the sanctuary rules were made more stringent), livestock grazing and camping by the herders. Grazing and trampling of saplings by livestock is the biggest threat to regeneration of vegetation in the entire tract.** To meet the fodder demand systematic lopping of various broadleaved tree species, especially moru and Kharsu oaks is done during winter and spring seasons. Owing to high seasonality and low primary productivity, the area supports relatively low ungulate / herbivore biomass. Furthermore, with the increase in the biomass of domestic livestock and resultant degradation of habitat the wild ungulates have suffered competitive exclusion. During the site inspection, wildlife sightings were very low and even tracks and signs were difficult to find. The team also observed extensive lopping and even some instances of tree girdling. These observations lend credence to the assessment on impacts.

4.1.2 Loss of biodiversity due to forest fires:

Uncontrolled fires have caused tremendous damage to the biodiversity in the area. The migratory herders and local people deliberately set fire on the mountain slopes to maximize the growth of grasses. The hill slopes are generally burnt during two seasons – one during winter when shepherds descend from the higher altitudes and second during May-June which is much more damaging. Recurrent fire in the area has led to preponderance of grassy slopes and scattered pine while broadleaf species such as oaks have vanished. **Other impacts of fire in the area include: change in species composition, loss of micro-flora and fauna, loss of regeneration of fire sensitive species, loss of bird/reptile eggs and young ones and loss of insects due to break in their life cycles, soil erosion resulting in landslides and invasion by alien invasive species such as *Eupatorium adenophorum*, soil desiccation and increased run-off and loss of primary productivity.**

4.1.3 Declining productivity and people – wildlife conflicts:

Chronic stress in the habitat leads to decline in primary productivity and failure of regeneration of various timber and multi-purpose species. There are frequent cases of wild animals (e.g., Himalayan black bear, porcupine, wild pigs, langur and macaques) getting into villages to raid orchards and food crops. This is largely due to lack of adequate natural food available to these animals in the forests. There have been increasing complaints about crop damage by wild animals by the local communities. Likewise, many villagers during the site inspection complained that there is shortage of fodder and village grazing lands. This, in our assessment is largely due to conversion of village pastures into agricultural land and lack of regeneration of fodder species.

Traditionally, the local people have been constructing wooden houses and the preferred species for this purpose are deodar and blue pine for the ease of finishing. It was observed that each house has a wooden granary. It is estimated that for the construction of a single house at least 5-6 trees of 2.5 to 4 meters girth are used and the houses have to be renovated every 25 – 30 years. The houses are invariably constructed in dense clusters and any small fire incidence takes the toll of several houses. Recent fire accidents in Dhatmir and Osla villages resulted in the urgent demand of enormous timber and conflicts with the management authorities. Almost all the households in the area use fuel wood for cooking and warming the houses during winter. The crisis for fuelwood is likely to increase in the area resulting in the drudgery of women and children who are largely given the task of collecting the fuel wood and fodder. **With more than two fold increase in population of the area in last 5 decades and shrinkage in forest cover/ areas, the unrecorded use of fuel wood is estimated to be more than 6 times of the recorded exploitation.** It is clear that the local population is heavily dependent on the forests of the region. The dependence increases with remoteness and increasing altitude. This is because of lack of alternate livelihoods in the interiors and higher number of livestock owned by the interior villagers. Fuel wood consumption per household at higher altitudes is more due to cold climate.

4.1.4 Impact of Tourism:

An estimated 2200 tourists visit the PA, particularly the Harkidun valley which is located within the National Park area. At present the Harkidun tourism staging area is Sankri

where the black topped motorable road ends. There exists a 13 km jeep track upto the village of Taluka, beyond which there is no motorable road. A horse trail of 28 km leads to the Harkidun through the National Park. This trail is also the only link for people living in the villages of Dhatmir, Gangar Panwadi and Osla along the route to Harkidun. There are guesthouses of the Garhwal Mandal Vikas Nigam (GMVN) at Seema (next to the Forest IB near Osla village) and Harkidun.

Furthermore, a trail branches off after Osla and heads to Yamnotri which is an arduous 20 km trek. At the moment the impact of tourism is limited due to lack of a motorable road but can dramatically increase if roads are constructed.

4.2 Interaction with various stake holders and their views

During the site inspection several formal and informal interactions were held with people living within the limits of the park. The details are summarized below:

On 5th July, 2009 a meeting with people of Dhatmir, Gangar, Panwadi and Osla villages was held at Forest IB, Taluka. Around 30-40 people including their leaders/panchayat members participated in the meeting who clearly expressed their demands. Leaders representing all the villages categorically stated that either the demand for a motorable road from Taluka to Osla (16 km) through the National Park must be allowed along with admitted rights to timber or provide appropriate compensation and alternate land and all people will voluntarily resettle outside the National Park. The demands were later submitted in the form of a memorandum which is at *ANNEXURE-G*. The team later interacted with other people at Gangar who highlighted their problems like lack of even basic medical facilities and teachers at the primary school. On 6th July, 2009 a meeting was held at Osla village. There was a strong demand for resettlement since sustenance from agriculture was difficult and there was no road connectivity. There are the only four villages within the limits of the National Park.

An interaction with people of Phitadi and Liwadi villages was held at Sankri Guest House on 7th July, 2009. They vociferously demanded permission to complete a motorable road from Jakhol Village to Phitadi which is held up due to a 1 km stretch being inside the notified Sanctuary where the Hon'ble Supreme Court's ban is in force. A copy of their memorandum is at *ANNEXURE-H*. A representative of the Navdhanya trust met the team at Sankri guest house who pointed out that while the motor road between Taluka and Osla has been stalled by the Government of Uttarakhand, there is a proposal to build a road between Yamunotri and Saptarishi Kund for the tourists. The member of the trust further appealed not to allow any road construction since the area is already fragile and glaciers are receding fast. However, this could not be verified on the ground.

Another major meeting was held at Jakhol village on 7th July, 2009. More than 100 people participated. Their main demand was to allow collection of fallen timber and drift wood which was part of their admitted rights that have now been curtailed due to the orders of the Hon'ble Supreme Court.

The team also interacted with some people from Doni Village at Dhowla Chowki. They expressed that the ban on timber rights (Hak Hakuk) is causing hardship and wanted it

restored. One leader stated that if proper facilities are provided not near Dehradun but closer in places like Netwad or Mori, people would be willing to resettle.

On 9th July, 2009, a memorandum was handed over in which people of Netwad village have demanded resettlement at a suitable place. A copy of the memorandum is at **ANNEXURE-J**.

Overall, there is a fairly strong demand for resettlement from the people since they want to avail basic services like road, health care and education for their children which already exists outside the park.

4.3 Interaction with forest staff, officials and their views

During the site inspection, the team interacted with local field staff, Rangers and the Deputy Director of the Park to elicit their practical views on various aspects and their assessment of the prevailing on-ground situation and possible solutions. These are summarized as under:

4.3.1: The Park is woefully understaffed with 3 Rangers, 7 Foresters, 12 Forest Guards (as against a sanctioned strength of 39) and 24 watchers to assist the Deputy Director. The shortage of field staff is further aggravated by the hostile terrain which restricts easy movement and patrolling. **There are 109 registered guns within the park limits.**

4.3.2: The staff often faces the hostility of villagers in the process of enforcing the law. Moreover, the staff has limited presence in the area largely due to remote locations. The local people have a track record of indulging in poaching of threatened fauna including musk deer and black bear and illegal collection of medicinal plants and other NTFPs.

4.3.3: In 2005 the people of 4 villages took law into their hands and illegally felled around 600 trees and are now facing prosecution before the Judicial Magistrate First Class, Purola. This incident had increased friction between the PA staff and people.

4.3.4: A majority of the people living in 4 villages – Osla, Panwadi, Gangar and Dhatmir are willing to resettle and with a good package of ten lakh rupees and alternative land near Purola, Barkot in Uttarkashi or in Kalsi area of Dehradun district.

4.3.5: Officials also expressed that some of the isolated “chucks” or cultivations away from the villages which fragment blocks of intact forests could be acquired.

4.3.6: Construction of the 29 km motorable road from Sankri to Osla would not only be useful to villagers but would also help faster movement of forest staff and improve response time during emergencies.

4.4 Potential long term impact of human presence

Under the prevailing socio-economic conditions of local communities residing within the limits of Govind WS and NP, the commercial overexploitation of NTFPs, illegal hunting, livestock grazing and biomass demand from the forests, it would be unrealistic to visualize improved status of forests and wildlife in coming decades. Like every citizen of India, the local people in this tract have fundamental rights to be brought in the

mainstream of development in terms of livelihood, health and education. If these issues are neglected and local people are left with no option but to continue with their unsustainable land use practices, the area is bound to head for ecological disaster in the long run. It is high time that the Government of Uttarakhand and all the conservation agencies work towards formulation of an amicable conservation and development plan for the area so as to ensure ecological security, biodiversity conservation and long term socio-economic development of the local inhabitants.

5.0 Legal Issues involved

5.1 Hon Supreme Court orders and CEC recommendations

5.1.1: IA 548/2000 in WP 202/1995 (14-02-2000) – No removal of dead, diseased, dying or wind fallen trees, drift wood and grass from any area notified under Section 18 or 35 of the Wildlife (Protection) Act, 1972;

5.1.2: IA 1220(Interim Report of the CEC in IA 548) and IA 994 (25-11-2005) – Habitat improvement, fire protection, weed removal, construction of water holes, small bridges, chowkies, improvement of non-tar forest roads for protection and management of PA not involving any type of commercial exploitation permitted provided they are as per approved management plan and consistent with the provisions of the Wildlife (Protection) Act, 1972 and National Wildlife Action Plan;

5.1.3: WP 337/1995 Centre for Environmental Law vs Union of India (13-11-2000) – No dereservation of Sanctuaries and National Parks.

6.0 Conclusions:

Based on the observations of the team during site inspection and after considering the views of all stakeholders including the Uttarakhand Forest Department, relevant records, published data/reports and memoranda received the following are the conclusions:

- 6.1: The Govind Sanctuary is heavily fragmented with 42 villages located along three valleys which is causing severe impacts on the PA and depressing wildlife populations. Unless immediate measures are initiated to de-fragment and consolidate the PA, irreversible damage may be caused which will also seriously affect the upper catchments of the important Yamuna River and its tributaries.
- 6.2: The proposal to delete 126.60 sq km is not for regularization of encroachments or for grant of additional land. It is primarily for allowing the continuation of admitted rights (Hak Hakuk) to timber, dead and fallen wood.
- 6.3: If the proposal to denotify 126.60 sq km is accepted in its entirety based on the justification outlined in the proposal and summarized in paras 3.3.1 to 3.3.5 above, the future of Govind Sanctuary and National Park would be bleak and unviable since the deletion of areas proposed are not based on sound principles of landscape ecology but driven primarily by local socio-economic compulsions.
- 6.4: However, this does not take away the need to address the genuine demands of local people. A win-win solution to the problem of habitat fragmentation of the PA can be

crafted since there is a strong demand for resettlement from people of various villages which was clearly expressed at the meetings during the site visit. This therefore presents an extremely important and valuable opportunity to not only consolidate the PA but also address the genuine development needs of the people.

- 6.5: It would be impractical to shift 42 villages and settle all admitted rights within the PA. However, since the people of four villages located inside the Sanctuary/National Park area viz. Dhatmir, Gangar, Panwadi and Osla have submitted their demand for resettlement in writing, it would be extremely vital to finalize and implement a fair, incentive driven voluntary resettlement project. This would not only eliminate the need to build a 16 km motorable metalled road through the Sanctuary/NP from Taluka upto Osla but also preempt the intrusion of high intensity vehicle borne tourism into the fragile sub-alpine regions of National Park. The threat of the road extending from Osla upto Harkidun and even towards Yamnotri in the coming decades is very real.
- 6.6: The voluntary resettlement of the said 4 villages would ensure that a compact block of around 650 sq km (472 sq km existing NP and around 185 km of the existing Sanctuary) completely free of permanent settlements/villages can be carved out of the existing 957.96 sq km Govind Sanctuary/National Park.. This would form a “**source area**” where an intensive recovery program can be implemented.
- 6.7: As regards the balance area, the proposal to delete compartments 2a, 4 and 5 of the Kapragad block would sever connectivity to the western portions of the PA. It was also gathered from jurisdictional field staff that the said compartments contain fairly intact forests. On inspection it was determined that compartment 1a and 1b of the Istragad block also contains good forest cover.
- 6.8: Unless the human pressure is urgently reduced and a consolidated area is carved out, the future of Govind Sanctuary and National Park appear very bleak and the area is bound to suffer irreversible ecological damage.

7.0 (A): Recommendations (Praveen Bhargav):

In view of the above facts and observations, the following recommendations:

- 7.1(A): Four villages viz Dhatmir, Gangar, Panwadi and Osla should be resettled outside the Govind wildlife sanctuary by providing a suitable compensation package including land, housing and other facilities as early as possible in a time bound manner. All existing buildings and houses (excluding forest department structures) must be dismantled and shifted out of the National Park. If some forest land is required for resettlement, necessary clearance under the Forest (Conservation) Act, 1980 must be granted on an urgent basis. Necessary budgetary support must be provided on priority to the State of Uttarakhand for fast tracking the voluntary resettlement project.
- 7.2(A): On completion of the resettlement process, an additional area of around 185 sq km from the Govind Sanctuary which abuts the National Park must be merged with the existing National Park. This will form a compact, ecologically viable block of around 650 sq km free of all human settlements. The consolidated area to be finally

notified as Govind National Park and designated as a core zone completely free of human presence, NTFP collection and grazing in the alpine meadows (Bugyals) .

- 7.3(A): Other villages within the limits of the existing Sanctuary demanding resettlement must also be offered a similar resettlement package as per the new Government of India package.
- 7.4(A): The proposal to construct a 16 km motorable road upto Osla should not be considered and no motorable road must be constructed beyond Taluka Forest IB.
- 7.5(A): Compartments 2a, 4 and 5 of the Kapragad block and compartments 1a and 1 b of Istragad block must not be considered for deletion as it was found during inspection that these contain fairly intact forests.
- 7.6(A): All isolated “chucks” or cultivated land including Sunni Satudi, Unnani, Karba, Tatka... within a contiguous forest block, some of which were looked at during inspection, must be considered for acquisition to further consolidate forest blocks.
- 7.7(A): The request of people from Phitadi village for granting permission to construct a 1 km stretch of non-black topped road through the Sanctuary may be considered and recommended for seeking permission of the Hon’ble Supreme Court. This will also help better movement of forest department staff. Similarly, the requests of people and the panchayat of Hadwadi (*ANNEXURE-K colly*) for repair of the existing horse trail/track from Dhowla to Chagshil and Dhowla to Salidar appear genuine and may be considered since this does not involve any tree felling or widening.
- 7.8(A): All other compartments proposed for deletion to permit the continuation of admitted rights over timber, grazing and for providing basic infrastructure like power/communication line, primary health centre, motorable roads, horse trails, bridges and other petty demand (PD) can be considered subject to the condition that:
- (i) the said four villages inside the Sanctuary/National park are resettled;
 - (ii) a ~ 650 sq km National Park core zone is constituted by issuing final notifications
 - (iii) the alignment of linear intrusions like transmission lines, pipelines, cables in the balance portion of the Sanctuary outside the core zone of the National Park is planned in a manner that causes least fragmentation and damage.
 - (iv) the deleted portions should continue as Reserved Forests and not be diverted for agriculture, human settlements or other hydel/developmental projects that may be in the planning stage.
- 7.9(A): Since the proposal involves only deletion of around 100 sq km of the Sanctuary portion, additional forest areas free of human presence that are available in the adjoining forest divisions of Uttarakashi, Yamuna and Tons must be identified and included particularly to the National Park area.

8.0 (B): Recommendations (Dr G.S.Rawat):

In full agreement on all the above recommendations except the relocation of villages. Hence, the alternate recommendations are as follows:

8.1(B): In view of practical difficulties in managing the Govind NP and WS due to remoteness and inaccessibility the proposed realignment of the boundaries by the Forest Department may be considered favorably. However, the proposal to de-notify 126.60 sq km cannot be accepted in entirety as a few forest blocks such as Bhatgair 2a, 5a and Dhatmir 2 and 3 will need to be appropriately split and only lower fringes can be de-reserved.

8.2(B): While the proposed revised boundaries can be accepted and finally notified at the earliest, it would be extremely important to settle the rights of pastoral families who have been taking their livestock within the premises of National Park.

8.3(B): Four interior villages (Dhatmir, Gangar, Panwadi and Osla), through their leaders have expressed their willingness to move outside the sanctuary area if the suitable package is offered. This would be an ideal move and would be a win-win situation for the people as well as protected area management. Hence, it is recommended that a separate committee may be set up to negotiate with the local communities as well as state Government. The committee should look into a suitable compensation package including land, housing and other facilities as early as possible in a time bound manner. Necessary budgetary support must be provided on priority to the State of Uttarakhand for fast tracking the voluntary resettlement project. This may be independent of present realignment of Govind NP and WS.

8.4(B): All other compartments proposed for deletion to permit the continuation of admitted rights over timber, grazing and for providing basic infrastructure like power/communication line, primary health centre, motorable roads, horse trails, bridges and other petty demand (PD) can be considered subject to the condition that:

- (i) Rights of livestock grazing and medicinal plant collection from the NP area are settled;
- (ii) The alignment of linear intrusions like transmission lines, pipelines, cables in the balance portion of the Sanctuary outside the core zone of the National Park is planned in a manner that causes least fragmentation and damage; and
- (iii) The deleted portions should continue as Reserved Forests and not be diverted for agriculture, human settlements or other hydel/developmental projects that may be in the planning stage.

The Committee may consider these recommendations and take an appropriate decision on the proposal.

Praveen Bhargav
Wildlife First & Member, National Board for Wildlife
Member Committee on Rationalization of boundaries

Dr. G.S. Rawat
Wildlife Institute of India

Date: 26 August, 2009

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