

**MANAGEMENT PLAN  
FOR  
KATHLOUR-KUSHLIAN  
WILD LIFE SANCTUARY  
(2012-13 TO 2021-22)**

**By**

**Sh. Rajesh Kumar, PFS,  
Divisional Forest Officer (W.L)  
PATHANKOT.**

**Under the able guidance of**

**Sh. R.K.Mishra, IFS  
CF (Wildlife) Shiwalik Hills Circle &  
Sh. Dharendra Singh, IFS  
Chief Wild Life Warden, Punjab**

**Department of Forests and Wildlife  
Preservation, Punjab.**

# **PART-I**

## **THE PROTECTED AREA: EXISTING SITUATION**

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## **CHAPTER-1**

### **1. INTRODUCTION TO THE AREA.**

The area of the sanctuary falls in the river bed of the Ravi river and its tributaries passes through the sanctuary .This area was purchased and transferred to Forest Department in lieu of the land for compensatory afforestation equal to the forest land submerged during the construction of Ranjit Sagar Dam. The area was planted by the forest department and then was handed over to Wildlife Department during the year 2006. Later on it was felt that the area should be declared as Wild life Sanctuary. On the directions of higher officer of the Forest and Wildlife Preservation Department Punjab. The Forest of Villages Kathlour & Kushlian were notified as a Wildlife Sanctuary vide Punjab Government Notification No.34/4/2007Ft-5/6088 dated 22-06-2007.

#### **1.1 NAME, LOCATION, CONSTITUTION AND EXTENT OF AREA.**

The name of Wildlife Sanctuary is Kathlour-Kushlian. The notified area of Kathlour-Kushlian wild life sanctuary is 1896 acre. The whole area of Wild Life Sanctuary falls in five villages named Kathlour, Raipur, Bahadurpur, Jaswa & Kushalian.

## **1.2 APPROACH AND ACCESS.**

The sanctuary is located about 30 km from Gurdaspur and about 15 km from Dinanagar on Dinanagar - Narot Jamal Singh road. There is no direct rail link and the nearest rail head is Dinanagar. The nearest civil airport is Pathankot /Amritsar which is about 100 kms from the sanctuary. The state transport buses ply from Gurdaspur to Dinanagar from where one can go up to Sanctuary by local means.

## **1.3 STATEMENT OF SIGNIFICANCE.**

Kathlour-Kushlian Wildlife Sanctuary is situated in the River bed area of Ravi River. It has special ecological and biological significance. Being located between plains and hills, it provides a habitat to variety of organisms that are found in plains as wells as in hills. The rare species of wild animals and birds like Barking Deer, Pangolin, Python and Khaleej pheasant add further to the significance of the protected area. Sometimes carnivores like leopard also migrate to the area from bordering state of Himachal Pradesh. The area provides ample opportunity to nature lovers for bird watching as the Ravi River during winter months add picturesque beauty to the area. The area has been important from research point of view as it offers a suitable place to study flora & fauna and other micro organisms.

## CHAPTER-2

### **2.0 BACK GROUND INFORMATION AND ATTRIBUTES.**

#### **2.1 BOUNDARIES.**

<b><u>Name of District</u></b>	<b><u>Locality</u></b>	<b><u>Boundaries</u></b>
Pathankot	Government Protected Forests of Kushlian (346 acres) Tehsil, Pathankot, District Pathankot.	East- Village Gajju Bailley North- Village Gajju Khalsa West- Village Akhwara, Chak Kshalian and Dhussi Bandh in the North West. South- Village Bharial, Harchanda and Akhwara.
	Government Protected Forests of Kathlour (1550 acres) Tehsil, Pathankot. District. Pathankot.	East- Village Jaswa North- Village Bahadurpur West- Touching boundary of Village Kohlian and Dhussi Bandh in the North West.
		<b>Total: 1896 acres.</b>

## **2.2 TERRAIN**

The terrain is mainly Plain Riverian tract of Ravi river. The terrain is very suitable for in habitation of species like barking deer, hog deer, wild boar, Sambhar etc.

## **2.3 CLIMATE**

Climate is typical of the foothill ranges of the Shiwalik belt of Distt, Pathankot. The climate can be divided into three seasons namely.

### **2.3.1 WINTER**

Winter is severe and misty. Winter starts from November and after crossing the peak in December ends in mid March. Temperature falls up to 1°C during peak winter.

### **2.3.2 SUMMER**

Summer is hot and harsh. It begins from early April and extends up to October. June is the hottest month. Temperature rises up to 46°C during peak hours.

### **2.3.3 MONSOON**

Monsoon starts from July and extends to mid September. The rainfall data of the Sanctuary for the last five years is given at **Annexure-1**



## **2.4 TEMPERATURE**

Temperature ranges between almost freezing levels to above 46°C.

## **2.5 WATER SOURCES**

As the Habitat is on the river bed, mainly there is no scarcity of water as such.

## **2.6 RANGE OF WILDLIFE, STATUS, DISTRIBUTION AND HABITAT.**

### **2.6.1 VEGETATION.**

### **2.6.1.1 FOREST TYPES.**

The vegetation is mixed deciduous type comprising tree species like Shisham, Khair, Ber, Subabul, Acacia, Dhak, Drek, Siris, Toot, Mango, Arjan, Pipal, Bohr, Sembal, Jaman, Guava, etc. List of species found is given at **Annexure-II**. Most of the area has been covered with lantana. Removal of lantana is immediately required in a scientific and phased manner to ensure the incoming of new soft and palatable grasses for the herbivores.

### **2.6.1.2. PLANTATIONS**

No major plantation works are required in the sanctuary as the area is already under thick crown cover. Plantation work of Shisham, Ficus, mulberry etc is required in a small and phased manner.

### **2.6.1.3 GRASS LANDS**

There are no vast grass lands in the sanctuary due to heavy invasion of lantana. There is good canopy cover of big trees like Shisham, Kikar, Pipal, Ber, Siris, Toot, Simbal, Bamboo, etc. The major grass species are Dhub and Baggar . Most of the area of the Sanctuary has been covered by weeds like Lantana, which can be removed in a phased manner. Already some area is prepared as grass land but more inputs are required.

## **2.6.2 FAUNA**

No census of animals is ever carried out. However in future periodical census exercise had to be taken. Main faunal species are Sambar, Hog deer, Barking deer, Jungle Cat, Jackal, Common Indian Hare, Mongoose, Wild boar, Pangolin, Rat Snake, Cobra, Python, Monitor lizard, Garden lizard, etc. A List of animals is given in **Annexure-III**.

### **2.6.2.1 VERTEBRATES-STATUS:**

The following are the Vertebrates found in the Sanctuary.

- 2.6.2.1.1 Order Choeroptera-Fruit Bats.
- 2.6.2.1.2 Order Pholidata-Indian pangolin.
- 2.6.2.1.3 Order Primates-Rhesus Monkey.
- 2.6.2.1.4 Order Rodentia-Procupine, common squirrel.
- 2.6.2.1.5 Order Carnivora-Jungle Cat, Jackal, Mongoose, Civet.
- 2.6.2.1.6 Order perissodactyla-Barking deer, Sambar.
- 2.6.2.3 Reptilia-Python, rat snake, cobra.
- 2.6.2.4 Amphibian: Common Frog.
- 2.6.2.5 Pisces-Water is flowing. Fish species not found.
- 2.6.2.6 Invertebrates: Butter Flies and moths
- 2.6.2.7 Birds: Khalij Pheasant, Peacock Pheasant, Blue Rock Pigeon, Spotted Dove, Little Brown Dove, Collared Dove, Black Partridge, Grey Partridge, White Breasted Kingfisher, Common Kingfisher, Hoopoe, Grey Hornbill, Golden backed woodpecker, Small sky Lark, Yellow Headed Wagtail, White Wagtail, Red Vented Bulbul, Jungle babbler, Large Grey Babbler, Common myna, Pied myna, Common crow, Quail, Jungle crow, Black Drongo, Crow Pheasant, Black winged kite, Red wattled lapwing.

A systematic Zoological survey is needed.

## **CHAPTER-3**

### **HISTORY OF MANAGEMENT AND PRESENT PRACTICES.**

#### **3.1 GENERAL**

A comprehensive management plan is being prepared for the first time. An annual plan of operations for management and improvement of Wildlife Habitat was prepared. But that plan was not as per the guide lines of MoEF. So this management plan is being prepared.

#### **3.2 HISTORY OF MANAGEMENT.**

This is the first ever management plan to be written as per guidelines of Ministry of Environment & Forests, Govt of India. However there was no planning in the implementation of wild life development works. In order to ensure continuity of planning the sanctuary requires a comprehensive management plan for at least ten years duration. So this is an attempt to prepare a detailed and time bound plan to be adopted during the coming ten years. This plan will encompass the detailed proposals and their mode of implementation with recurring and non-recurring expenditure.

#### **3.3 ILLEGAL ACTIVITIES.**

The sanctuary being open from all sides, it is prone to illegal activities like poaching, grass and wood collection by neighbouring villages.

### **3.3.1 POACHING**

Though every attempt has been made to check hunting yet the openness of the area always keeps the possibility of poaching alive. To check the cases of poaching a continuous trench is dug out all around the sanctuary strengthened with thorny bush fencing. A new check post is being constructed in the sanctuary.

### **3.3.2 ILLEGAL FELLING OF TREES**

The sanctuary is full of woody trees like Shisham, Kikar and Khair. This is a big allurement for people around for wood works in houses. The details of illicit felling cases and their status is given in **Annexure-VIII**

### **3.3.3 ILLEGAL REMOVAL OF FUEL WOOD**

The area is prone to fuel wood collection by all villages around. Adequate protection measures have been adopted which need to be reinforced as a future strategy. More protection through night and day patrolling by Watchers is needed.

### **3.3.4 ENCROACHMENTS**

The Sanctuary area is free from any kind of encroachment. The boundaries are demarcated and boundary pillars enacted and continuous trench is dug out all around the sanctuary for future protection.

### **3.3.5 LIVE STOCK GRAZING.**

The sanctuary is open from all the sides. Grazing is prohibited in sanctuary. There were no check posts on the periphery and mobile patrolling is done to ensure that there is no grazing. Sanctuary is not fenced as yet. Only thorny bush fencing is done recently which is providing a deterrent to grazing.

### **3.4 WILD FIRE**

Most of the sanctuary area is invaded by Kana, Kahi and Lantana. So chances of fire incidents to take place are very high during hot summer season. In addition to paths which are presently being used and maintained as fire lines, an additional 10 k.m. of fire lines are needed to be prepared. In recent past old fire lines which were very narrow were widened upto 7 mtr .

### **3.5 RESEARCH AND MONITORING.**

At present no such activity is being undertaken for want of facilities and staff. But research and monitoring is the dire need. For this purpose additional staff and paraphernalia is required.

The Important aspects of research which can be considered are under as:-

1. Socio Economic impact of Sanctuary on villagers.
2. Man-animal relationship in Sanctuary.
3. Study of Python in Sanctuary.

4. Study regarding Pangolin in Sanctuary.
5. Population of Hog Deer.

### **3.6 TRAINING.**

The staffs posted in the sanctuary is neither trained nor sufficient. The only trained staff for the sanctuary is DFO (Wildlife). More staff training is required at periodic intervals.

### **3.7 CONSERVATION STRATEGY AND EVALUATION**

No coherent management plan or practice has ever been in place and interventions have been few and sporadic.

### **3.8 ADMINISTRATION**

The Sanctuary is under Control of Divisional Forest Officer Wild Life and is being managed as per provision of Wild Life (Protection) Act, 1972 and various guidelines issued from time to time. Presently field officer of rank of Deputy Ranger working as Range Officer is in charge of the sanctuary for the development of the sanctuary. It will require augmentation both in terms of rank and number of staff. The detail of which is given under heading 9.4.1. (Reorganization).

### **3.9.1 ROADS**

The sanctuary is well connected with Gurdaspur and Dinanagar through metalled roads. Presently sanctuary has a small stretch of katcha roads and paths which need to be supplemented to ensure proper management of PA.

### **3.9.2 RAIL LINES**

Rail line comes upto Dinanagar city from Gurdaspur Railway Junction.

### **3.9.3 TELEPHONES**

There is no telephone connection in the sanctuary. But STD/PCO is available nearby.



### **3.10 SUMMARY OF THREATS TO WILDLIFE.**

#### **1. Threat to Habitat:**

The wild life sanctuary is at the base of shiwalik ranges and prone to erosion and exploitation from all sides. The major threats to the habitat are discussed one by one as under:-

#### **2. Poaching:**

The sanctuary is open from all sides and prone to poaching by adjoining population and poachers from out side. Previously reported cases of poaching pertain to large herbivores. To provide enhanced protection to animal's reinforcement of infrastructure with one jeep, motorcycles, wireless network as proposed in 3.11.4, and additional staff as proposed in Chapter 9 under heading 9.4.1 is required. Other proposed measures would be mobile patrolling, temporary nakkas and permanent nakkas at periphery of sanctuary. Temporary nakkas and mobile squads would be used in adjacent areas and approach routes.

#### **3. Illicit Felling:**

Area is prone to illicit felling and theft of wood. Strong protection measure has to be taken to avoid damage to habitat. Shisham and Khair are potential attractions for illicit felling. Fencing of the sanctuary

boundary, mobile patrolling, posting of additional staff with LCV and motorcycles would reduce the incidence of such cases.

4. **Grazing:**

Grazing is prohibited in sanctuary. There are no check posts on the periphery and mobile patrolling is done to ensure that there is no grazing. Sanctuary is not fenced as yet. There is few reported case of grazing in the sanctuary.

5. **Disease:**

Sanctuary is surrounded by villages having domestic cattle, sheep and goats. The wild species are prone to local diseases like black water, foot and mouth disease. Domestic animals falling with in 5 K.M. radius are vaccinated by Animal Husbandry Department and same will be monitored in future also. Villages falling with in 5 K.m. are Kathlour, Gajju Khalsa, Gajju Bailley, Bharial Harchanda, Akhwara, Kohlian, Bahadurpur.

## **PART-II**

# **THE PROPOSED MANAGEMENT**

## **CHAPTER-4**

### **THE VISION, OBJECTIVES, ISSUES AND PROBLEMS**

#### **4. THE VISION**

To prepare a holistic plan to rehabilitate the PA ecologically and biologically taking physical, mechanical and sociological measures and to develop the full potential of the area inclusive of the human interface with the ecosystem. This plan would be flexible to the extent the unforeseen needs emerging with time could be incorporated after due permission from competent authority.

#### **4.1 OBJECTIVES OF MANAGEMENT**

1. To conserve the integrity and biodiversity of the sanctuary.
2. To conserve the endangered, threatened and rare species of flora & Fauna.
3. To mitigate man-animal conflict through ecodevelopment programmes.
4. Capacity building of staff and community and to facilitate research.
5. To involve community in management of PA and to promote ecotourism & conservation awareness.

## **4.2 ISSUES AND PROBLEMS IN ACHIEVING OBJECTIVES.**

Punjab being an agriculture dominant state, it is very difficult to preserve the wilderness of the sanctuary and each objective poses many problems as it is pursued for achievement.

### **4.2.1 OBJECTIVE-1**

Sanctuary area is very small for the unit to be self sufficient and that makes the unfenced boundary of the sanctuary porous both ways.

### **4.2.2 OBJECTIVE-2**

The objectives need to be achieved to preserve the area which is open from all sides and is prone to poaching, felling, grazing, erosion, fires and all kinds of exploitation which need to be tackled. This will be achieved by mobile patrolling, temporary nakkas and permanent nakkas at periphery of sanctuary. Temporary nakkas and mobile squads would be used in adjacent areas and approach routes.

### **4.2.3. OBJECTIVE-3**

Strict vigil will have to be maintained to prevent the deterioration of present status and every effort will have to be made to add to the floral and faunal diversity of the sanctuary.

#### 4.2.4 **OBJECTIVE-4**

The sanctuary is under pressure for fodder, fuel wood and agriculture land. Level of awareness and hostile attitude of the surrounding community remains a challenge which can be met through ecocodevelopment programmes.

#### 4.2.5 **OBJECTIVE-5**

At present there is a dearth of trained and properly oriented staff. The staff needs to be trained by resource persons within the department as well as from places like WII, Dehradun.

#### 4.2.6 **OBJECTIVE-6**

Hostile attitude of the community towards PA and lack of awareness about wild life pose problems in achieving this objective. Lack of roads, paths, tracks, and interpretation centre are main bottlenecks for management. To elicit the cooperation of neighbouring villagers, ecotourism programmes will be arranged and special awareness camps will be organised. An interpretation center with audio video hall will be set up to make people aware about environment conservation. A library on wildlife and environment books will be provided in the sanctuary to promote awareness for nature conservation.

**CHAPTER-5**  
**THE STRATEGIES**

5.1 **BOUNDARIES**

Demarcation of the area will be done and suitable fence will be erected.

5.1.1 **LEGAL**

1. Survey and demarcation.
2. Preparation of detailed geo-referenced Map of Sanctuary.
3. Fencing.
4. Protection.

5.2 **THEMES AND PLANS.**

5.2.1 **MANAGEMENT OF WOOD LANDS**

A balance of various vegetative strata needs to be evolved as the top cover is heavy and middle and ground covers have been suppressed. Phasing out of unwanted trees and introduction of new ones and creation of grass lands will be undertaken.

5.2.2 **GRASS LAND MANAGEMENT**

At present most part of sanctuary has been infested with lantana weed cover. The grasslands are very few. In a phased manner lantana will be cleared and grasslands will be created in place. The present vegetation

cover will be cut and thinned to allow the ground flora to come up. A few works are already under progress.

### 5.2.3 **WATER MANAGEMENT**

In order to ensure round the clock availability of water to wild life renovation of these water holes and creation of new waterholes is of utmost importance. Creation of new artificial water resources is a major thrust area so as to prevent the animals from straying outside in search of water, which makes them prone to external threats. To conserve the water in lean period water retention dams are required to be created.

### 5.2.4 **FIRE MANAGEMENT**

To avoid fires, regular vigil will be maintained and fire-fighting equipments will be made available to the staff. Fire lines will be maintained where necessary. But sanctuary area is small. So fire incidents do occur. However, for better management of the area, anti fire measures such as staff, fire lines, one watch tower are available and three more are required. Despite these measures ten firewatchers are needed to minimize the incidents of fire. Sanctuary has been divided into compartments. A complete set of modern fire fighting equipment need to be procured to meet any eventuality. In addition to paths, which are presently being used and maintained as fire lines, an additional 10 K.m. of fire lines need to be created.



### 5.2.5 PEOPLES PARTICIPATION

Adjoining villager's participation in the conservation process is a must for smooth management. This will be achieved by implementing ecodevelopment programme. Detailed strategy regarding ecodevelopment has been given in chapter 7. An interpretation center with audio video hall will be set up to make people aware about environment conservation. A library on wildlife and environment books will be provided to promote awareness for nature conservation. For enhanced participation of community in management and protection of sanctuary, an advisory Committee vide Punjab Govt. Notification No. 34/4/2007-Ft-V/1102 dated 08.02.2013 has been set up under section 33 B of Wild Life (Protection) Act 1972 with its constitution as under: -

#### 1. **Official Members**

Conservator of Forests (Wildlife) Shiwalik Circle, Punjab Ajitgarh.	Chairman
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#### 2. **Member of State Legislature**

Smt. Seema Devi, M.L.A, Bhoa	Member
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#### 3. **Three Representatives of Panchayati Raj Institution**

(i) Sh. Sudarshan Kumar, Sarpanch Gram Panchayat, Kathlour	Member
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(ii) Smt. Darshana Kumari, Sarpanch Gram Panchayat, Jaswan	Member
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(iii) Smt. Sudesh Kumari, Sarpanch Gram Panchayat, Bahadarpur	Member
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**4. Members from Dept. of Home and Veterinary (One from each)**

- (i) Sh. Prabhjot Singh Virk  
Deputy Superintendent of Police (Rural)  
Pathankot. Member
- (ii) Dr. Vijay Kumar, Veterinary Officer  
Veterinary Hospital, Bhoa. Member

**5. Two Representatives of NGO**

- (i) Sh. Kamaljit Singh (Retd.)  
Lay General Jail road, Gurdaspur  
Chairman N.G.O. Forest Environment  
and Wildlife Foundation. Member
- (ii) Sh. Avtar Singh Randhawa (Retd.)  
Director, Agricultural University, Gurdaspur  
Member N.G.O. Forest Environment  
and Wildlife Foundation. Member

**6 Three individuals Active in field of Wildlife Conservation**

- (i) Dr. Rajan Maini S/o Sh Madan Mohan Maini  
Lane No. 4 , Mission road,  
Pathankot. Member
- (ii) Sh Balram Singh S/o Sh Surinder Singh  
Village Sahorian Tehsil & Distt Pathankot. Member
- (iii) Sh. Sanjeev Singh S/o Sh Kamal Singh  
Village Sahora Tehsil & Distt Pathankot. Member

7. Dr. Sudhir Kumar Mahotra S/o Sh Charanjit Rai  
BX-72 Ishwar Nagar, Dalhousie road, Pathankot.  
(Proposed Honorary Wildlife Warden). Member

8. Divisional Forest Officer (Wildlife)  
Pathankot. Member Secretary

#### 5.2.6 **WILDLIFE HEALTH**

Health of the wild life will be taken care of by providing fresh and clean water, suitable habitat and immunisation of livestock outside the PA against known diseases like black water, foot and mouth diseases.

#### 5.2.7 **INVOLVEMENT OF NGO'S**

Local NGO'S will be involved in the management where desired process to make it two way and more effective.

#### 5.2.8 **ROADS PATHS AND TRACKS.**

Presently sanctuary has a small stretch of katcha roads and paths which needs to be supplemented so as to ensure proper management of PA and to explore potential of ecotourism in sanctuary. Another stretch of 10 km katcha road & 15 km path on the periphery of PA would be required. Out of which 5 Km path on the periphery is already prepared.

#### 5.2.9 **RESOURCE MOBILISATION**

All effort would be made to mobilise financial resources through state, central and international funding for implementing strategies.

## **CHAPTER - 6**

### **A-ECOTOURISM INTERPRETATION AND CONSERVATION EDUCATION**

Awareness camps, quiz and painting competitions for the school children, local community would be arranged to sensitise them about conservation of forest and wild life. Brochures and pamphlets on this theme would be provided free of cost to school children's, local community and tourist so as to spread the message of conservation in a speedy manner. Audio-visuals at interpretation centre would be an effective tool to achieve this objective. Local community would be taken on exposure visit to PA's out side the state and to Chhatbir Zoo to further achieve this objective. Community would be able to see and get first hand information about conservation and ecotoursim so as to replicate here also.

### **B-CONSULTANCY AND INVOLVEMENT OF N.G.O.'s**

In order to maximise the harnessing of ecotoursim potential consultancy services of repute and experience in this field would be hired. At the same time N.G.O's would be involved to achieve in a more meaning full way.

## **CHAPTER - 7**

### **7.0 ECO-DEVELOPMENT.**

#### **7.1 GENERAL**

As mentioned earlier biotic pressure in zone of influence poses a constant problem in management of Protected Area. To ease out this biotic pressure, involvement of community in zone of influence becomes a necessity for a better management and implementation of conservation measures. It becomes essential that management should be receptive to genuine problems of the community towards P.A. and its management. This issue can be effectively tackled through ecodevelopment by taking up developmental activities, which will reduce pressure on PA and alleviate their daily life hardships. This will not only dampen the hostile attitude of community but will also result in building up of mutual trust and rapport with community.

#### **7.2 OBJECTIVES**

1. Mitigating man animal conflict.
- 2 To reduce pressure on wild life habitat by minimising forest resource depletion.
- 3 To elicit participation of the community in conservation and management of PA by adopting participatory approach.

- 4 Organising community into village level Institutions (VLI's) like Self Help Groups (SHG's), user groups and building up their capacity through trainings and exposure visits.
5. Empowerment of community so as to improve their socio economic status by augmenting alternative means of live hood through Income Generating Activities (I.G.A's).
6. To raise awareness level among local community regarding conservation of natural resources and sustainable development approach.

### **7.3 FOREST DEPENDENCY AND CONFLICTS IN ZONE OF INFLUENCE.**

In villages constituting zone of influence there are arable lands adjacent to P.A where agriculture is practised. But boundary of P.A being porous, wild animals like Sambar, Wild Boar and Blue bull stray into these arable lands and badly damage the crops. This not only brings in hostile attitude of community towards wild life, but it also makes wild life susceptible to external threats of poaching. People depend upon forest for grazing their livestock because trend for stall feeding livestock is not very prevalent. The arable chunks of land in periphery increase the risk of encroachment in PA. PA being a considerable patch of forest area and having good vegetal cover becomes an attraction for the region to dump their stray cattle. Community still uses fuel wood for their domestic use thus making them dependent on the

adjacent forests. Due to restrictions on these activities in P.A and damaging of their crops by wild life and encroachments man-animal conflict is prominently visible on ground.

## **7.5 FUTURE STRATEGY**

### **7.5.1 ECO DEVELOPMENT ZONE**

All the villages surrounding P.A namely Makhanpur, Chandigarh, Raji bali, Gaju Jagir, Kathlour, Jaswa, Kiri, Kolian, Bahadurpur, Narot Jamal Singh, falling in zone of influence mainly will be initially taken up for ecodevelopment works. However in case of good results on this front this activity can be further extended to villages falling within 5 Kms of sanctuary.

### **7.5.2 CONSTITUTION OF VILLAGE ECO-DEVELOPMENT COMMITTEES AND THEIR BYELAWS.**

To ensure participation of community in planning execution and monitoring of eco-development interventions Village level Ecodevelopment Committees (E.D.C.s) would be constituted in each target village and their byelaws framed before starting with the preparation of their micro plan so as to ensure need based and prioritised development in a tailor made fashion. EDC's would be sensitised through training and exposure visits regarding their roles and responsibilities.

### **7.5.3. PREPARATION OF ECODEVELOPMENT PLAN.**

An ecocodevelopment plan would be prepared separately for each village. This will be done by the staff and EDC using PRA technique. Each Micro plan will include complete socio-economic village profile, problems prioritised and plans for their redresses. A comprehensive need based micro plan for each village will ensure continuity of planning. While preparing plan it will be ensured that socio-economic condition, gender issues and equity is kept in mind. Negotiations would be done with community regarding possible cost sharing in various ecocodevelopment activities.

### **7.5.4 ENTRY POINT ACTIVITIES.**

Entry point Activities would be carried out as conceived in the micro plan of each village. Probable entry point activities would be.

- (i) Fencing around private arable lands on 50% cost sharing basis, which will be maintained subsequently by the concerned stakeholders.
- (ii) Community asset creation.
- (iii) Development of non-conventional energy resources like solar cooker, Solar lights, Solar pumps, Solar water heater, Gobar gas plants etc.
- (iv) Supply of sport kits to local youth.



- (v) Trainings on income generating Activities.
- (vi) Supply of cattle sheds, mangers and chaff cutters to economically weaker sections.
- (vii) Creation of basic rural infrastructure.

#### **7.5.5 MITIGATING MAN ANIMAL CONFLICT.**

- (i) Bio-fencing with dead & live material using ditch on outer side is preferable solution for fencing and demarcation of sanctuary. This will also help animal movement specially towards river side.
- (ii) As mentioned in entry point activities provision would be made to provide fencing privates around arable lands on 50% cost sharing basis. Small landholders can form group to make this activity cost effective. Solar electric fencing could be a cost effective option. Individuals or user groups would be responsible for maintenance of this fencing.
- (iii) In order to check menace of stray cattle efforts would be made by all EDC's to maintain records of their livestock in respective villages. Existing stray cattle would be rehabilitated in Gaushalas which will be managed by EDC's and concerned panchayats. EDC's with the help of panchayats will ensure that no stray cattle is released in the sanctuary from other villages of the region.

### **7.5.6 AGROFORESTRY**

People living in the surrounding area of the sanctuary will be encouraged to undertake plantation of agro forestry species like popular, Burma Dhek and Clonal eucalyptus to supplement their income so as to reduce biotic pressure on PA. This would also solve their problem of damage to their crops by wild animals. Inter cropping of aromatic grasses like lemon grass, citronella would be encouraged.

### **7.5.7. MEDICAL FACILITY**

Medical facilities are already available in the nearby areas.

### **7.5.8. EMPOWERMENT OF COMMUNITY.**

Community will be organised in to various village Level Institutions like Self Help Groups and User Groups. Existing self help groups would be adopted. Several capacity building measures like trainings, exposure visits and camps would be organised to promote Income Generating Activities [ I.G.A.'s] which would wean away community from their dependency on forests. Though maximum thrust would be on capacity building but these VLI's can be financially supported by department for promotion of group Income generating Activities provided they are ready for cost sharing. Natural resources based I.G.A's like Basket making,

Rope making, Socks making, Tailoring and Embroidery, Amla shredding, Pickle making, Honey bee keeping, Sericulture, Poultry, stall fed dairy units would be encouraged. In order to encourage stall feeding cattle sheds, chaff cutters and mangers would be provided for unprivileged weaker sections of society which would not only reduce pressure on PA but would also improve their economic condition and dampen their hostile attitude towards PA management. Local youth would be taken on exposure visits to other part of country to have first hand information about scope and potential of ecotourism. They will be further motivated and empowered to take up this activity by improving their entrepreneurship skills through Entrepreneurship Development Programmes.

#### **7.5.9 COMPENSATION**

Government of Punjab has already made provisions to give compensation to individuals in case of injury/ death by wild animals including snake bite. There is also provisions for compensation for crop damages by wild animals.

#### **7.5.10 INVOLVEMENT OF N.G.O.'s**

All interested individuals and organisations will be approached to get their assistance in developing the sanctuary.

### **7.5.11 MONITORING AND EVALUATION**

The input of eco-development efforts will be closely monitored and evaluated at the office level and required changes will be effected from time to time Parameters will be evolved for the purpose involving all the stakeholders.

### **7.5.12. KEY POINTS FOR SUCCESS OF THIS PROGRAMME.**

It is essential to keep following key points in mind for effective implementation of eco-development plan.

- i)** Proper byelaws for EDC's should be in place.
- ii)** Regular meeting of EDC's for establishing rapport and mutual trust.
- iii)** Proper Implementation of entry point activities with sufficient accountability and transparency measures.
- iv)** Attitudinal changes in staff through training and exposure visits within and outside state.
- v)** Effective motivation of community and its capacity building through training and exposure visits.
- vi)** Honouring commitments made to community in time bound manner.
- vii)** Acknowledging efforts of good VLI's and individuals contributing in this field.

## **CHAPTER - 8**

### **8.0 RESEARCH, MONITORING AND TRAINING.**

#### **8.1 GENERAL**

So far no such activity has been undertaken in this wildlife sanctuary. But for the scientific management of flora and fauna and for the evaluation of other biotic factors, research and monitoring is direly needed. To execute such duties the training of staff is also essential.

##### **8.1.1 IN HOUSE RESEARCH**

To begin with the staff will be encouraged to take up research. The guidance of trained officers will be solicited for the purpose.

###### **8.1.1.1 DATA COLLECTIONS**

Staff strength will be increased and specific work of data collection regarding census and survey will be entrusted to them. If need be expert help from PAU and GNDU will also be associated.

### **8.1.1.2 MONITORING OF VEGETATION**

The land use pattern will be monitored and addition and deletion of present flora will be undertaken in phases.

### **8.1.1.3 MONITORING OF ANIMAL POPULATION, HEALTH AND DISEASE.**

Animal population shall be continuously monitored for health & diseases.

## **8.2 RESEARCH STRATEGIES.**

Research work will be entrusted to experts from PAU and GNDU. Local data collection such as census, categorisation of habitat, etc will be done by the local staff. Probable subjects which are worth taking for research are enumerated as under: -

8.2.1 Man-animal relationship in Sanctuary.

8.2.2 Study of Python in Sanctuary.

8.2.3 Study regarding of Pangolin in Sanctuary.

8.2.4 Population of Hog Deer.

### **8.3 LIBRARY**

Library on wildlife and environment related books will form a part of interpretation centre.

### **8.4 DATA STORAGE**

To keep the data safe computer facility will be provided.

### **8.5 CHECK LISTS**

Local staff with the help of experts from PAU and GNDU will prepare check lists of flora and fauna.

### **8.6 TRAINING.**

Staff posted in the sanctuary will be duly trained for their job. Capacity building of the community will be taken up for their mainstreaming in the conservation process.

### **8.7 ON THE JOB TRAINING.**

In the beginning staff/community will get training from the seniors who are already trained.

## 8.8 **FORMAL TRAINING.**

Staff/community will be sent for training at WII, Dehradun, Veterinary Institute, Izatnagar, Bareilly (UP) and other places of repute. They will also be taken on exposure tours to some of the prominent PA's of the country.



## **CHAPTER-9**

### **9.0 ORGANISATION AND ADMINISTRATION**

#### **9.1 GENERAL**

At present the sanctuary is one unit attended by one wild life division at Pathankot. The new set up will have staff as incharge, assisted by one Range Officer and Forest Guard's and Peon, Chowkidar and Driver/operator.

#### **9.2 OBJECTIVES**

The new set up aims at managing the PA on scientific lines and envisages all round development of the sanctuary including management of habitat, ecotourism, eco development and research and training.

#### **9.3 PROBLEMS**

The new setup will require addition of posts, vehicles, equipments and buildings involving additional expenditure. All state and central resources will have to be tapped for the purpose.

#### **9.4 STRATEGIES**

For the time being additional charge will be given to other officer but in due course a new set up has to come up.

#### **9.4.1 REORGANISATION**

Following staff is needed at Range level: -

1)	Forest Ranger	-	1
2)	Forester	-	1
3)	Clerk	-	1
4)	Driver/operator	-	2
5)	Forest Guard	-	2
6)	Peon	-	1
7)	Chowkidar	-	1

#### **9.4.2 HUMAN RESOURCES DEVELOPMENT**

Due care will be taken for their living, medical, conveyance and family welfare facilities. Training will form an integral part of this component.

#### **9.4.3 DEVELOPMENT AND UPKEEP OF INFRASTRUCTURE**

To run the new set up more vehicles and paraphernalia need to be added. Pickup Jeep, Motorcycle, TV, Multi Media Projectors, Films and Slides, etc will be purchased and maintained. Fire fighting equipments will be of utmost importance.

#### **9.4.4 PROVISION OF STAFF AMENITIES**

Due attention will be given to staff and their families. Schooling, hospital, recreation, conveyance and emergency facilities will be made available in/near the sanctuary itself.

## CHAPTER – 10

### Budget Proposals Kathlour-Kushlian Wildlife Sanctuary.

Sr. No	Detail of Work	Amount to be spent during 2013-2022
<b>1</b>	<b>Survey and Demarcation</b>	<b><u>In Lacs.</u></b>
	(a) The WLS will be surveyed, mapped, demarcated using boundary Pillars.	4.0
	(b) Rising of bushy hedge along both side of fence.	6.0
	<b>Total-</b>	10.0
<b>2</b>	<b>Infrastructure Development</b>	
	Purchase of Pickup van/Jeep, Fire fighting tools, multimedia projector, Binoculars, Laptop, Computers, Printers, Forensic kits, Tranquilizing gun, Pistil, Mobiles etc.	20.0
<b>3</b>	<b>Transportation</b>	
	Purchase of Tractor, trolley, Water Tankers & other accessories motor cycles.	13.0
<b>4</b>	<b>Miscellaneous</b>	
	Development of solar powered lighting, Toilet facilities, Watch tower, Check Barrios, Transporting cages, Furniture for office and check posts, Electric generator.	30.0
<b>5</b>	<b>Habitat Improvement</b>	
	Removal of invasive weeds, augmenting fodder resources, Plantation of indigenous species, creation & maintenance of fire lines.	70.0
<b>6</b>	<b>Research, Management &amp; Health</b>	
	Wildlife census, making animal shelter cum rescue area with veterinary facility 10m x 10m	20.0
<b>7</b>	<b>Eco-Tourism, Interpretation &amp; Awareness</b>	
	Development of interpretation centre purchase of mobile van, Books slides, Films, Signage's boards, nature camps, publicity material etc.	40.0
<b>8</b>	<b>Construction of Buildings &amp; roads</b>	
	Construction of Guard Quarter, Office Inspection huts, Check Posts, Inspection paths & roads (Kaccha).	35.0
<b>9</b>	<b>Training &amp; Exposure visit.</b>	
	Training & exposure visits of staff & nearby villagers local & national.	5.0
<b>10</b>	<b>Contingency</b>	15.0
	<b>Grand Total</b>	<b>258.0</b>

Note: The above budget document is based on daily wages rate of Rs. 200/- and current market rates. It will take into account inflation factor and the prevalent daily wages rate at the time of execution of works for purposes of budget control.

# **PART - III**

# **ANNEXURE**

## ANNEXURE – I

### Rain Fall data Recorded at Pathankot for the Last five years.

<b>YEAR 2008</b>			
January	13.8	4.9	21
February	17	8.2	5
March	24.5	16.6	2.2
April	28.9	23.3	41.8
May	34.3	27.4	16.4
June	31.8	26.3	215.3
July	30.9	27.3	322.1
August	30.3	28.7	315.6
September	30	26.8	44.8
October	28	21.5	23.4
November	24.4	14.7	0
December	18.3	10.2	5.4
<b>YEAR 2009</b>			
January	14.4	7.1	21.9
February	20	15.5	34.2
March	25.5	17.5	20.4
April	29.4	24.4	33.8
May	37	28.5	4.6
June	38.1	30.6	32
July	32.8	28.9	149.5
August	31.1	28.2	153
September	31.2	24.2	69
October	29.4	17.9	10.5
November	22.1	11.6	16.5
December	18.7	7.5	0
<b>YEAR 2010</b>			
January	13.7	6.6	4
February	20.2	9.6	27
March	27.9	16.1	2.5
April	35.9	22.9	0
May	37.3	26.8	15.5
June	36.1	26.4	53.8
July	31.4	26.8	111.3
August	31.1	25.8	164.6
September	30.8	23.9	98
October	29.7	19.6	21
November	26.2	12.6	4.5
December	19	6.6	53

<b>YEAR 2011</b>			
January	14.5	5.8	2
February	19.2	9.4	54
March	25.7	14.6	8.5
April	30.6	19.1	36.5
May	37.3	26.6	24.5
June	32.4	26.3	198
July	31.4	27.2	162
August	30.3	27.2	341
September	31.1	24.6	121
October	29.4	19	6
November	25.2	13.3	0
December	19.9	5.8	14
<b>YEAR 2012</b>			
January	15.1	5.6	98.5
February	17.4	6.9	13
March	24.5	13	14
April	31	20.3	44
May	37	28.5	4.6
June	38.1	30.6	32
July	32.8	28.9	149.5
August	31.1	28.2	153
September	31.2	24.2	69
October	29.4	17.9	10.5
November	22.1	11.6	16.5
December	18.7	7.5	0

## ANNEXURE - II

### LIST OF FLORA FOUND IN THE SANCTUARY.

<b>(I)</b>	Trees / Shrubs
1.	Shisham ( <i>Dalbergia sissoo</i> )
2.	Kikar ( <i>Acacia nilotica</i> )
3.	Bohr ( <i>Ficus bengalensis</i> )
4.	Sirih ( <i>Albizia lebbeck</i> ).
5.	Khair ( <i>Acacia catechu</i> ).
6.	Toot ( <i>Morus alba</i> )
7.	Amb ( <i>Mangifera indica</i> )
8.	Jamun ( <i>Syzygium cumini</i> )
9.	Amla ( <i>Emblica officinalis</i> )
10.	Simbal ( <i>Bombax ceiba</i> )
11.	Gullar ( <i>Ficus glomurata</i> )
12.	Dek ( <i>Melia azedarach</i> )
13.	Subabul ( <i>Laucaena loucocephala</i> )
14.	Beri ( <i>Ziziphus mauritiana</i> )

<b>(II)</b>	Grasses
1.	Dhub Grass
2.	Baggar Grass



## ANNEXURE -III

### LIST OF ANIMALS FOUND IN THE SANCTUARY

#### 1. Mammals

1.	Jungle Cat	Felis chaus
2.	Jackal	Canis aureus
3.	Sambhar	Cervus unicolor
4.	Barking Deer	Muntiacus muntjak
5.	Common Indian Hare	Lepus nigricollis
6.	Wild Boar	Sus scrofa
7.	Rhesus Monkey	Macaca mulatta
8.	Common Indian Mongoose	Herpestes auropunctatus
9.	Hog Deer	Axis porcinus
10.	Chital	Axis axis
11.	Pangolian	Mains crassicaudata

#### II. Reptiles

1	Rat Snake	Ptyas mvcosus
2.	Python	Genus python
3.	Indian Cobra	Naja Naja

### III. Birds

1.	Bulbuls (pycnonotidae)
2.	Doves including the Emerald Dove (Columbidae)
3.	Flower peckers (Dicaeidae)
4.	Junglefowl (Phasianidae)
5.	Kingfishers (Alcedinidae)
6.	Munias (Estrildinae)
7.	Mynas (Sturnidae)
8.	Owls (Strigidae)
9.	Parakeets (Psittacidae)
10.	Partridges (Phasianidae)
11.	Pheasants (phasianidae)
12.	Pigeons (Columbidae) except Blue Rock Pigeon (Columba livia)
13.	Quails (Phasianidae)
14.	Weaveer Birds or Bayas (Placeidae)
15.	Woodpeckers (Picidae)

## ANNEXURE -IV

### LIST OF EQUIPMENTS

Sr. No.	Name of Equipment	Number	
		Available	Required
1.	Pickup van/jeep	--	1
2.	Water tanker	--	2
3.	Tranquilizing gun	1	1
4.	Wireless sets	4	-
5.	Multi Media Projector	--	1
6.	Slide projector	--	1
7.	LED set	--	1
8.	DVD Player	--	1
9.	Fire engine	--	2
10.	Binoculars	2	4
11.	Motor cycles	--	2
12.	Mobiles	--	5
13.	Fire fighting equipment	1 set	10 Modern set of fire fighting equipments

## ANNEXURE V

### REQUIREMENT OF WATCH TOWERS

<b>Sr. No.</b>	<b>Locations</b>	<b>Range</b>	<b>Avai lable</b>	<b>Requi red</b>	<b>Height</b>	<b>Kind</b>	<b>Remarks</b>
1.	Kushlian	Pathankot	-	2	30'	Steel	For vigil
2.	Kathlour	-do-	1	5	30'	Steel	For vigil & wild life sighting

## **ANNEXURE - VI**

### **DETAIL OF FOREST ROADS.**

<b>Sr. No.</b>	<b>Location</b>	<b>Length</b>	<b>Name of road</b>	<b>Forest road</b>	<b>Maintenance</b>	<b>Utility</b>
1.	Kathlour	3 km	Kathlour to Jaswan	Passes through sanctuary	Maintained kacha	Approach road

## **ANNEXURE-VII**

### **LIST OF TUBEWELL, BOARING, PUMPING SETS AND WATER SOURCES.**

Diesel Engine Pump = 01

Water Sources : Ravi river water & Sum pounded rain water.

## ANNEXURE VIII

### LIST OF ILLICIT FELLING CASES AND THEIR STATUS.

Sr. No.	Year	No. of cases	No of Tree Felled	Volume Cubic Metre	Compensation Recovered
1.	2006-07	-	-	-	-
2.	2007-08	-	-	-	-
3.	2008-09	-	-	-	-
4.	2009-10	-	-	-	-
5.	2010-11	1	18	V	Court Case
6.	2011-12	4	43 + 11 (Branches)	V	Court Case
7.	2012-13	1	-	V	Court Case

## ANNEXURE IX

### LIST OF PROTECTED AREA VALUES

<u>No.</u>	<u>Category</u>		<u>Value</u>
1.	Global Conservation	*	Biodiversity
		*	Species specific conservation -Barking deer
2.	National	:	*
		*	Foot Hill terrain ecosystem conservation
		*	Barking deer habitat
		*	Kalij Pheasant Conservation
3.	Regional	:	*
		*	Foot hill varied ecosystem
4.	State	:	*
		*	Ecosystem Conservation
			➤ Catchment area
			➤ Shiwalik area
			➤ Eco Tourism & Wild life awareness
			➤ Ecotourism activities
			➤ Non wood produce
			➤ Wild-socio cultural religious values.



**ANNEXURE – X**

**LIST OF VILLAGES FALLING WITH IN 10 km of KATHLOUR  
KUSHLIAN WILDLIFE SANCTUARY AS UNDER .**

Sr.No	Name of Village	Sr.No	Name of Village
1	Sakhupur Maziri	30	Gol Datial
2	Farwal	31	Kathlour
3	Paharipur	32	Chandigarh
4	Akhwara	33	Chunti
5	Barmal	34	Jaswa
6	Makhanpur	35	Malpur
7	Tass	36	Nangal Kothe
8	Kajle	37	Kiri
9	Tur	38	Sharif Chack
10	Chebe	39	Anup Sahir
11	Lamana	40	Nangal Farida
12	Mamia	41	Kothi
13	Makora	42	Miran
14	Chabkara	43	Kolian
15	Mararra	44	Jainpur
16	Chandigarh	45	Barma
17	Datiyal	46	Jatpur
18	Talpur	47	Kilpur
19	Habit Pindi	48	Aima
20	Jagar	49	Jeitpur
21	Sanpur	50	Bahadurpur
22	Raji bali	51	Chunti
23	Gaju Jagir	52	Narot Jamal Singh
24	Niku Gaju	53	Fatihpur
25	Baknor	54	Gagran
26	Narianpur	55	Talur
27	Darsopur	56	Naki Naruli
28	Chela Gurdaspur	57	Chandar chack
29	Chela Chakargarh		

## ANNEXURE - XI

### List of Problem in Wildlife Sanctuary Kathlour-Kushlian.

1. There are a lot of complications due to non existence of boundary wall of the sanctuary such as infiltrations of un-owned animals into the sanctuary wandering of un-owned hard of dogs into the sanctuary not only run after the animals but to bite even members of the staff.
  
2. Most of the residential areas of the Gurjjar community are near the border of the sanctuary and due to no fencing they leave their pet animals for grazing openly in sanctuary. Many times damages reports were filled in the court but rejected on the plea that any animals had entered the sanctuary not human beings. Residential area of the Gurjjar should not be constructed less than 5 Km from the sanctuary.
  
3. Sanctuary is inhabited by poor people who cook their food on earthen pots. Women enter the sanctuary to house fuel wood for cooking. Concerned staff is afraid off in taking action against such type of women due to flaws of laws.
  
- 4 Many a times wild animals wonder on roads taking risk of their life's so it very important to fence the boundary wall.
  
- 5 Stone crushers installed near the sanctuary cause noise and environment pollution which harm wild animals.

## ANNEXURE - XII

### List of Arms Licenses of the Village within the limits of 10 Kms in Wildlife

#### Sanctuary Kathlour-Kushlian.

Sr. No	Name & Address of Licenses	License No & Issued date	Gun No.	Remarks
1.	Sh. Sagar Singh S/o Sh. Sansar Chand, Village Palah.	1215 DM-Ptk 21.09.1977	SBBL-12-5221	-
2	Sh Satnam Singh S/o Sh. Parkash Singh Village Narot Jamal Singh.	-	-	Defence Person
3	Sh. Tilak Raj S/o Sh Nanad Lal Village Siunti via Narot Jamal Singh.	JPR 5820-81	SBBL-1101-89	-
4	Sh. Jugal Kishor S/o Sh Ram Chand Village Siunti via Narot Jamal Singh.	21 DM/Gsp	SBBL-8797-A/07	-
5	Sh. Dev Raj S/o Sh Karam Chand Village Siunti via Narot Jamal Singh.	3039	SBBL-6629	-
6	Sh. Rakesh Kumar S/o Sh Bhukha Ram Village Siunti via Narot Jamal Singh.	23 DM/Gsp	SBBL-8808-A	-
7	Sh. Daleep Singh S/o Sh Raghuvir Singh Village Siunti via Narot Jamal Singh.	5081 DM/Gsp	SBBL-986	-
8	Sh. Ranvijay Singh S/o Sh Raghuvir Singh Village Siunti via Narot Jamal Singh.	101-P-89	DBBL-457-62	-
9	Sh. Onkar Singh S/o Sh Kirpal Singh Village Siunti via Narot Jamal Singh.	01-P	SBBL-3484	-
10	Sh. Sukhdev Singh S/o Sh Rattan Singh Village Siunti via Narot Jamal Singh.	30-DM/Gsp	SBBL-8794- A/07	-
11	Sh. Surinder Singh S/o Sh Nanad Singh Village Siunti via Narot Jamal Singh.	1-DM/Gsp	SBBL-241057	-
12	Sh. Bhagwant Singh S/o Sh Ram Singh Village Siunti via Narot Jamal Singh.	199/P 79	SBBL-9811	-
13	Sh. Karan Singh S/o Sh Gobinder Singh Village Siunti via Narot Jamal Singh.	3 DM/Gsp 03	SBBL-15944-85	-

14	Sh. Varinder Singh S/o Sh Dev Raj Village Siunti via Narot Jamal Singh.	2 DM/Gsp 03	Revolver FG-37299	-
15	Sh. Jaswant Singh S/o Sh Ramal Singh Village Siunti via Narot Jamal Singh.	1418-DM/Gsp	SBBL-12488-84	-
16	Sh. Gaganjeet Singh S/o Sh Ajit Singh Village Siunti via Narot Jamal Singh.	-	-	-
17	Sh. Jatinder Pal S/o Sh Ram Rattan Village Siunti via Narot Jamal Singh.	5499-DM	SBBL-12488-84	-
18	Sh. Ajay Singh S/o Sh Prithi Singh Village Siunti via Narot Jamal Singh.	DMK 1672 KTH	DBBL-17593	-
19	Sh. Harbhajan Singh S/o Sh Randhir Singh Village Bhagwal	128-DM/KTH	SBBL-47785	-
20	Sh. Jarnal Singh S/o Sh Balbant Singh Village Kohlian.	5131-DM/Gsp 1986	SBBL-5236-86	-
21	Sh. Dalbir Singh S/o Sh Balbant Singh Village Kohlian.	11-P-1976	DBBL-5295	-
22	Sh. Hans Raj S/o Sh Gian Chand Village Pamma	8 DM/Gsp	SBBL	-
23	Sh. Rashpal Singh S/o Sh Punjab Singh Village Shekhpur Majiri	24-DM/Gsp	SBBL-8505-A07	-
24	Sh. Rashpal Singh S/o Sh Punjab Singh Village Phiroja.	-	DBBL 17573-89	-
25	Sh. Swaran Singh S/o Sh Ajit Singh Village Shekhpur Majiri	32 DM/Gsp	DBBL 24617-10	-
26	Sh. Karan Singh S/o Sh Gian Singh Village Shekhpur Majiri	-	DBBL	-
27	Sh. Karan Singh S/o Sh Gian Singh Village Shekhpur Majiri	-	305 Raiphil	-
28	Sh. Kuldeep Singh S/o Sh Mohinder Singh Village Farwal.	131-D-DM/J	DBBL-68909	-
29	Sh. Amarjeet Singh S/o Sh Tarlok Singh Village Farwal.	29-DM/Gsp	DBBL-68328	-
30	Sh. Amarjeet Singh S/o Sh Tarlok Singh Village Farwal.	-	Revolver 32 Bore 23727 Kanpur 2010	-
31	Sh. Jodh Raj S/o Sh Chuni Singh Village Chhota Talur.	115 DM/Ptk	DBBL	-
32	Sh. Jaswant Singh S/o Sh Parkash Singh Village Chhota Talur.	4294-DM/Gsp	DBBL 82680	-

33	Sh. Varinder Singh S/o Sh Mehar Singh Village Chhota Talur.	2 DM/Gsp	DBBL 11256193	-
34	Sh. Varinder Singh S/o Sh Mehar Singh Village Chhota Talur.	36 DM/Gsp	SBBL	-
35	Sh. Deray Singh S/o Sh Varinder Singh Village Chhota Talur.	5380 DM/Gsp	506	-
36	Sh. Jatinder Singh S/o Sh Heera Singh Village Chhota Talur.	551 DM/Gsp	SBBL-186468	-
37	Sh. Jatinder Singh S/o Sh Heera Singh Village Chhota Talur.	8 DM/Gsp	DBBL 211961	-
38	Sh. Jatinder Singh S/o Sh Heera Singh Village Chhota Talur.	8 DM/Gsp	Revolver 32 Bore	-
39	Sh. Rashpal Singh S/o Sh Tek Singh Village Chhota Talur.	2511-DM/Gsp	DBBL 549688	-
40	Sh. Surjeet Singh S/o Sh Tek Singh Village Chhota Talur.	2 DM/Gsp	DBBL 22344	-
41	Sh. Darshan Kumar S/o Sh Karam Chand Village Chhota Talur.	35 DM/Gsp	DBBL 24783	-
42	Sh. Narinder Singh S/o Sh Punjab Singh Village Chhota Talur.	-	DBBL	-
43	Sh. Ajay Singh S/o Sh Sohan Singh Village Chhota Talur.	-	SBBL	-
44	Sh. Sohan Singh S/o Sh Punjab Singh Village Chhota Talur.	60-P-1967	Revolver 32	-
45	Sh. Parminder Singh S/o Sh Balwant Singh Village Chhota Talur.	06/ DM/Gsp/ 93 PSNJ Singh	SBBL 7812	-
46	Sh. Sapuran Singh S/o Sh Basant Singh Village Gugran.	DM/Gsp 90	DBBL 7220-80	-
47	Sh. Daleep Singh S/o Sh Kabal Singh Village Gugran.	40-DM/Gsp	DBBL	-
48	Sh. Karan Singh S/o Sh Yodh Singh Village Gugran.	-	DBBL 4875	-
49	Sh. Kulveer Singh S/o Sh Najinder Singh Village Gugran.	-	Revolver	-
50	Sh. Sangram Singh S/o Sh Onkar Singh Village Gugran.	-	Revolver	-
51	Sh. Daljeet Singh S/o Sh Kapur Singh Village Nadholy.	2337	SBBL 25615	-
52	Sh. Nath Singh S/o Sh Karnal Singh Village Nadholy.	2739-DM	SBBL 2540/91	-

53	Sh. Man Singh S/o Sh Romail Singh Village Nakyia.	4167-DM/Gsp 1990	DBBL 10533/88- A/2	-
54	Sh. Raguvhir Singh S/o Sh Avtar Singh Village Tuthowal Kharklan.	11 DM/Gsp	DBBL 15375	-
55	Sh. Parthvi Singh S/o Sh Tasvir Singh Village Fathepur.	SO-3069-SDM/ Ptk	SBBL 15053	-
56	Sh. Hardeep Singh S/o Sh Ajit Singh Village Attor.	242/DM/ Rojri/ 96	DBBL 14516	-
57	Sh. Hardeep Singh S/o Sh Ajit Singh Village Attor.	-	Revolver 32 ° 28839	-
58	Sh. Sukhwant Singh S/o Sh Balwant Singh Village Ratharwa.	22- DM/Gsp	DBBL 22610/9	-
59	Sh. Chatur Singh S/o Sh Bali Singh Village Amma.	1472 DM/KTH	SBBL 41136/61	-
60	Sh. Des Raj S/o Sh Diwan Chand Village Ratharwa.	23 DM/Gsp	DBBL 22590-4	-
61	Sh. Gurnam Singh S/o Sh Bawa Singh Village Ratharwa.	24 DM/Gsp	DBBL 29835-9	-
62	Sh. Jasvir Singh S/o Sh Nishan Singh Village Ratharwa.	27 DM/Gsp	Revolver 32 ° 153955	-
63	Sh. Sohan Lal S/o Sh Dharam Pal Village Rumkalwan.	173- DM	DBBL 14808-06	-
64	Sh. Suresh Kumar S/o Sh Bansi Lal Village Rumkalwan.	4209 DM/Gsp	DBBL 37179	-
65	Sh. Joginder Singh S/o Sh Mehar Singh Village Basu Barma.	4460 DM/Gsp	DBBL	-
66	Sh. Angraj Singh S/o Sh Chhaju Ram Village Basu Barma.	31 DM/Gsp/ 2011	DBBL 24065-10	-
67	Sh. Ravinder Singh S/o Sh Balkar Singh Village Hazi Barma.	3 DM/Gsp	SBBL 40185	-
68	Sh. Ranvijay Singh S/o Sh Bhurri Singh Village Bhimyal	25 DM/Gsp	DBBL 594810	-
69	Sh. Nanad Singh S/o Sh Rattan Singh Village Bhimyal	7 DM/Gsp	SBBL 11048	-
70	Sh. Sukhdev Singh S/o Sh Harminder Singh Village Bhimyal	28 DM/Gsp	DBBL 288880/09	-
71	Sh. Tarsem Singh S/o Sh Milkhi Chand Village Bhimyal	2281 Army 8687	SBBL 30390	-
72	Sh. Ramesh Pal S/o Sh Darshan Singh Village Muthi.	1 DM/Gsp	SBBL 89538	-

73	Sh Mohan Singh S/o Sh Sagar Singh Village Muthi.	94/ MDMA-96	DBBL 8904-06	-
74	Sh Ramesh Singh S/o Sh Rangunath Singh Village Chak Ameer.	18 /DM/Gsp/ 1991	DBBL 86799	-
75	Sh Ashok Kumar S/o Sh Karam Chand Village Samralla.	7 DM/Gsp	DBBL 5076-93	-
76	Sh Ashok Kumar S/o Sh Karam Chand Village Samralla.	-	Revolver 32 ° Bore	-
77	Rama Kumari W/o Sh Daljit Singh Village Samralla.	14-09-1976	DBBL 88583	-
78	Sh Suraj Dev Singh S/o Sh Daljit Singh Village Samralla.	6 DM/Gsp/ 05	DBBL 28871	-
79	Sh Hans Raj S/o Sh Jagdish Raj Village Samralla.	20 DM/Gsp	Point to-to	-
80	Sh Hans Raj S/o Sh Jagdish Raj Village Samralla.	20 DM/Gsp	Revolver 32 ° 13500.32	-
81	Sh Sudarshan Singh S/o Sh Kashmir Singh Village Chhapari.	32 DM/Gsp	SBBL 10870-80	-
82	Sh Kuldeep Singh S/o Sh Babu Ram Village Janial.	81 DM/Gsp	DBBL 315 Bore 13560	-
83	Sh Bant Ram S/o Sh Gokklu Ram Village Janial.	1264 DM/Gsp	SBBL 4574 /83	-
84	Sh Gandhrev Singh S/o Sh Parveen Singh Village Janial.	-	SBBL 43760	-
85	Sh Bodh Raj S/o Sh Chaman lal Village Janial.	3387 DM/Gsp	SBBL 9198	-
86	Sh. Jarnal Singh S/o Sh Sai Dass Village Dostpur.	-	-	-
87	Sh Dilawar Singh S/o Sh wishwa Singh Village Danwal	277-Ladakh 27181	SBBL 77869-2000	-
88	Sh Santokh Singh S/o Sh Manga Ram Village Danwal	5-P 1999	SBBL 2916- 08	-
89	Sh Jagdish Singh S/o Sh Sardhu Singh Village Sarota.	1025- DMIC KTH	SBBL -13617	-
90	Sh Baldev Singh S/o Sh Rattan Singh Village Sarota.	DM/Gsp	SBBL – 5302	-
91	Sh Kashmir Singh S/o Sh Saran Singh Village Sarota.	36- DM/Gsp	SBBL	-
92	Sh Gandhrav Singh S/o Sh Chhajju Singh Village Kot Bhatia	10 m-71	SBBL 34354	-
93	Sh Manoj Kumar S/o Sh Yodh Singh Village Kot Bhatia	5/523- 13 ARMS01/DMS/ 09	DBBL 34060-10	-

94	Sh Preem Singh S/o Sh Buaditta Village Tidda.	4448/Army	SBBL 10989	-
95	Sh Preetam Singh S/o Sh Kirpa Ram Village Tidda.	-	-	-
96	Sh Des Raj S/o Sh Seva Ram Village Balotr	1610-DM/Gsp	SBBL 7072/83	-
97	Sh Sagar Singh S/o Sh Sansar Singh Village Palah.	1215.5 DM/Ptk	SBBL 08221-70	-
98	Sh Jasveer Singh S/o Sh Daljit Singh Village Palah.	14- DM/Gsp	Revolver 32 ° F 623213	-
99	Sh Sarbjeet Singh S/o Sh Sansar Singh Village Datial.	2- DM/Ptk PSNJ Singh	DBBL 10053 B/08 4-2011	-
100	Sh Sarbjeet Singh S/o Sh Sansar Singh Village Datial.	2- DM/Ptk PSNJ Singh	315 Bore No AB 03- 3756	-
101	Sh Kulchander Singh S/o Sh Gurdit Singh Village Siunti via Narot Jamal Singh.	2 C.No 3491 CHD	SBBL -12 No 55096	-
102	Sh Savinder Singh S/o Sh Beant Singh Village Amma.	176- DM/ DODA J&K	DBBL 30353-11	-
103	Sh. Satnam Singh S/o Sh Preetam Singh, Smt. Sukhvinder Kaur W/o Sh Satnam Singh Village Bhagwal.	5-680-B Arms / DMS 12011 DT 6-3-12	DBBL 23110-2011	-
104	Sh Vijay Kumar S/o Sh Des Raj Village Simbal Kullian.	1 DM/Gsp	SBBL 3224	-
105	Sh Jank Raj S/o Sh Jathu Ram Village Khojiki chak.	-	-	-
106	Sh Jamez Singh S/o Sh Veer vikram Singh Village Ratrawa.	3 DM/Gsp	DBBL 207	-
107	Sh Dere Singh S/o Sh Verinder Singh Village Chhota Tallur.	5830- DM/Gsp.	506	-
108	Sh. Sulkhan Singh S/o Sh. Dilp Singh Village Jagar.	DM/Patiala.	SBBL-12/ 3282-76	-
109	Sh. Vikram Singh S/o Sh. Sukhdev Singh Village Habit Pindi.	DM/Amritsar.	DBBL-12/ 43905-89	-
110	Sh. Tarsem S/o Sh. Tara Singh Village Habit Pindi.	DM/Ram Bon J&K.	DBBL-12/ 18568-90	-
111	Sh. Dev Raj S/o Sh. Milkhi Ram Village Baknor.	DM/Gsp.	SBBL-12/ 1503	-
112	Sh. Raj S/o Sh. Harnam Das Village Baknor.	DM/Nurpur (HP).	SBBL-12/ HIM - 22707	-
113	Sh. Rakvir Singh S/o Sh. Dharm Ram Village Baknor.	DM/Meerut	SBBL-12/ 2945-GS	-
114	Sh. Major Singh S/o Sh. Bachitar Singh Village Narianpur.	DM/Gsp.	SBBL-12/ 2705	-



115	Sh. Balkar Singh S/o Sh. Chajju Ram Village Darshopur.	DM/Gsp.	SBBL-12/ GA 12290 423960	-
116	Sh. Jarnal Singh S/o Sh. Rai Singh Village Darshopur..	Joint Collected ADM.	SBBL-12/ 312	-
117	Manager Punjab & Sindh Bank Village Kathlour.	DM/Gsp.	DBBL-12/ 24028-92	-
118	Sh. Lal Singh S/o Sh. Narinder Singh Village Kathlour.	DM/Gsp.	DBBL-12	-
119	Sh. Vinod Singh S/o Sh. Bhupinder Singh Village Kathlour.	DM/Gsp.	DBBL-12/ 14358	-
120	Sh. Narinder Singh S/o Sh. Ram Singh Village Kathlour.	DM/Gsp.	DBBL-12	-
121	Sh. Rakesh Singh S/o Sh. Fateh Singh Village Kathlour.	DM/Gsp.	DBBL-12/ 34394	-
122	Sh.Rajeshwar Singh S/o Sh. Janak Singh Village Kathlour.	DM/Gsp.	Pistol 32 / 835286	-
123	Sh. Kuldip S/o Sh. Rai Singh Village Kathlour.	DM/Gsp.	Revolver/ 4738	-
124	Sh. Sant Singh S/o Sh. Tarlok Singh Village Kathlour.	DM/Gsp.	DBBL-12/ 48850	-
125	Sh. Preetam Singh S/o Sh. Sant Singh Village Kathlour.	DM/Gsp.	SBBL-12/ 417	-
126	Sh. Mohan Singh S/o Sh. Sudarshan Singh Village Kathlour.	DM/Gsp.	DBBL-12/ 16162	-
127	Sh. Vikram Singh S/o Sh. Sudarshan Singh Village Kathlour.	DM/Gsp.	DBBL-12/ 7209-98	-
128	Sh. Jagdish Raj S/o Sh. Manju Ram Village Jaswa.	DM/Gsp.	SBBL-12/ 1791-87	-
129	Sh. Baldev Singh S/o Sh. Sardar Singh Village Jaswa.	DM/Gsp.	DBBL-12/19223-87	-
130	Sh. Pawan Singh S/o Sh. Chatur Singh Village Jaswa.	DM/Gsp.	DBBL-12/ 7088-88	-
131	Sh. Karan Singh S/o Sh. Avtar Singh Village Jaswa.	DM/Gsp.	SBBL-12/30830-6	-
132	Sh. Sawar Singh S/o Sh. Hari Singh Village Jaswa.	DM/Gsp.	SBBL-12/ 6530-86	-
133	Sh. Dalbir Singh S/o Sh. Sawran Singh Village Nagal Kothe.	DM/Gsp.	DBBL-12/ 20332-87	-
134	Sh. Sawran Singh S/o Sh.Deeya Singh Village Nagal Kothe.	DM/Gsp.	DBBL-12	-
135	Sh. Sukhdev Singh S/o Sh. Kartar Singh Village Nagal Kothe.	DM/Gsp.	DBBL-12/ 17321	-

136	Sh. Bikramjeet Singh S/o Sh. Sardool Singh Village Nagal Kothe.	DM/Gsp.	DBBL-12	-
137	Sh. Amarnath S/o Sh. Poonu nath Village Nagal Kothe.	DM/Gsp.	SBBL-12/ 5601-097	-
138	Sh. Subash chander S/o Sh. Rattan chand Village Nagal Kothe.	DM/Punch J&K	DBBL-12/ 22228-10	-
139	Sh. Guljar Singh S/o Sh. Man Singh Village Nagal Farida.	DM/Gsp.	DBBL-12/ 267434	-
140	Sh. Ram lal S/o Sh. Munshi Ram Village Nagal Farida.	DM/Gsp.	SBBL-12/ 3145-86	-
141	Sh. Rajinder Singh S/o Sh. Mehar Singh Village Kiri Khurd.	DM/Gsp.	DBBL-12/ 146-87	-
142	Sh. Dalbir Singh S/o Sh. Preem Singh Village Kiri Khurd.	DM/Manipur	DBBL-12/ 7557	-
143	Sh. Amardeep S/o Sh. Ajit Singh Village Kiri Khurd.	DM/Gsp.	DBBL-12/	-
144	Sh. Karan veer Singh S/o Sh. Chakardhar Singh Village Kiri Khurd.	DM/Gsp.	DBBL-12/ 0213 SBBL – 7640	-
145	Sh. Uydishter Singh S/o Sh. Digambar Singh Village Kiri Khurd.	DM/Gsp.	DBBL-12/ 22917-83	-
146	Sh. Kumar Singh S/o Sh. Sham Singh Village Kiri Khurd.	DM/Gsp.	DBBL-12/ 2909	-
147	Sh. Jay Dev Singh S/o Sh. Onkar Singh Village Kiri Khurd.	DM/Gsp.	SBBL-12/ 1300	-
148	Sh. Shawar Singh S/o Sh. Dhian Singh Village Kiri Khurd.	DM/Ptk.	DBBL-12/ 7881	-
149	Sh. Narinder Singh S/o Sh. Rai Singh Village Kiri Khurd.	DM/Rajori J&K	DBBL-12/ 11938	-
150	Sh. Sahib Singh S/o Sh. Janak Singh Village Kiri Khurd.	DM/Dehradun	DBBL-12/ 79256	-
151	Sh. Surinder Singh S/o Sh. Raj Singh Village Kiri Khurd.	DM	DBBL-12	-
152	Sh. Surinder Parkash Saini S/o Sh. Lajpatrai Village Sharif chack	DM/Gsp.	DBML-820	-
153	Sh. Surinder Parkash Saini S/o Sh. Lajpatrai Village Sharif chack	DM/Gsp.	SBBL-12/E-61885	-
154	Sh. Balwinder Pal S/o Sh. Jagdish chander Village Sharif chack	DM/Gsp.	DBBL-12/B-472544	-

155	Sh. Bomi Saini S/o Sh. Balbir Singh Village Sharif chack	DM/Gsp.	DBBL-12/ 17442-94	-
156	Sh. Raj Kumar S/o Sh. Jaswant Rai Village Sharif chack	DM/Gsp.	DBBL-12/23438	-
157	Sh. Raj Kumar S/o Sh. Jaswant Rai Village Sharif chack	DM/Gsp.	N.P. Bore SBBL-12/8523	-