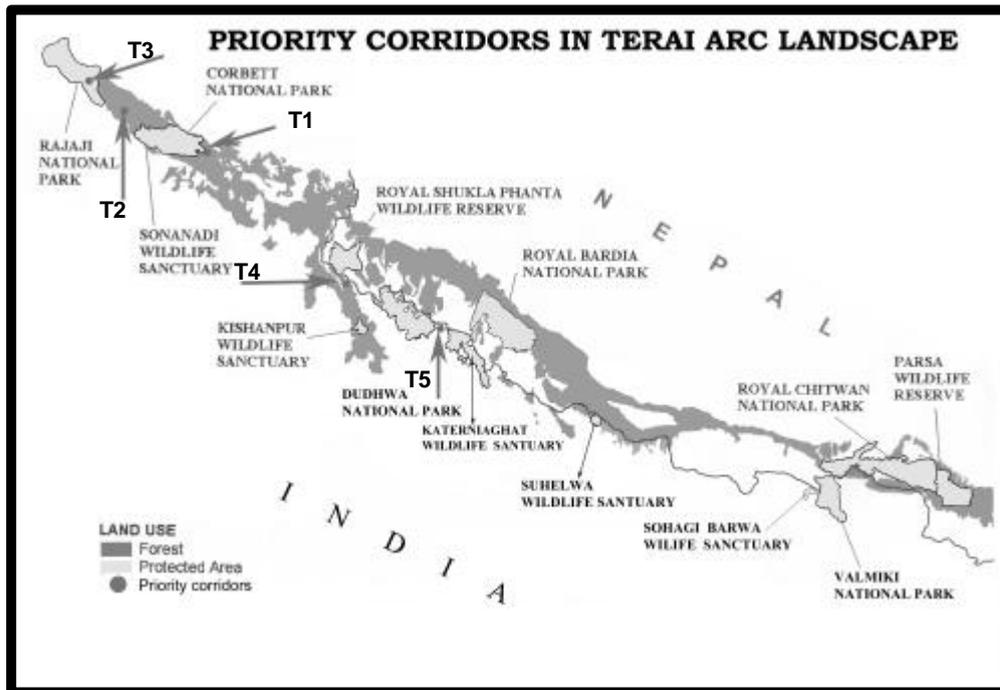


THE TERAI ARC LANDSCAPE IN INDIA

Introduction:

The Terai Arc Landscape (TAL) has been identified as priority landscape by the WWF Tiger Action Plan¹ and the WWF AREAS² programs. 'The Terai-Duar Savannas and Grasslands' are also a Global 200 Ecoregion.



The total area of the landscape is about 49,500 sq. km of which 30,000 sq. km lies in India. There are 13 Protected Areas in the landscape, from eastern most Parsa Wildlife Reserve in Nepal to Rajaji National Park in India in the west catering to the need of protection of 3 of the 5 terrestrial flagship species viz., tiger (*Panthera tigris*), Asian elephant (*Elephas maximus*) and the Greater one-horned rhinoceros (*Rhinoceros unicornis*) identified by WWF. The TAL represents one of the densest populations of Tiger in the world. The TAL represents the upper gangetic plain biogeographic zone and vegetation is mainly tropical moist and dry deciduous type. The forests are made up of many economically important species such as *Shorea robusta*, *Dalbergia sissoo*, *Terminalia tomentosa*, and *Acacia catechu* with other associated tree species like *Butea monosperma*, *Bombax ceiba*, *Sterculia urens*, *Aegle marmelos*, *Terminalia alata*, *T. arjuna*, *Adina cordifolia*, *Syzygium cumini*, *Azadirachta indica*, *Mallotus philippensis*, *Lagerstroemia parviflora* etc. The Gangetic plain is also characterized by tall grasses like

¹ Conserving Tigers in the Wild: A WWF Strategy for Action

² WWF's Asian Rhino and Elephant Action Strategy

Themeda, Saccharum, Phragmites, Vetiveria and several others. Both these elements (fauna and flora) of the TAL are of global ecological and local economic significance.

This ecologically important region of the subcontinent is faced with loss of habitat and its fragmentation due to a variety of threats. Chief among these threats are population pressure on natural resources and erratic developmental activities in the region. Both have resulted in the decline of forest cover and loss of biodiversity in the TAL. While parts of the Terai are reduced to tenuous linkages that connect relatively large remaining wildernesses, in some places these linkages are being lost and need restoration to halt further degradation of these natural habitats.

WWF aims to maintain the integrity of the Terai Arc Landscape, secure future of globally endangered mammals that live in it along with economic benefits to people of the region.

THE TERAJ ARC LANDSCAPE'S CONSERVATION VISION³

To conserve the Terai Arc Landscape, one of the most dramatic ecosystems in Asia where large, wide-ranging species such as tiger, rhinos, and elephant will thrive while bringing economic benefits to the local people.

THE LANDSCAPE'S CONSERVATION GOAL⁴

To conserve ecological and socio-economic integrity in selected areas critical for maintaining the integrity of the landscape.

The overall goal of WWF India is to integrate species conservation and development of socio-economic condition of the local communities using JFM as a tool and initiating activities like sustainable forestry enterprises.

Towards this conservation goal WWF India organized several stake holders meetings and identified five critical linkages in the TAL. WWF India has been strengthening the PAs through out the landscape by providing infrastructure support which is aimed at reducing poaching, reducing forest fires and improving over all management of the these tiger areas. It has also selected one critical linkage, Sukla Phanta – Kishanpur- Dudwa Linkage, for intensive inputs.

Project Location 1:

The Sukla Phanta-Kishanpur-Dudhwa Corridor of the TAL:

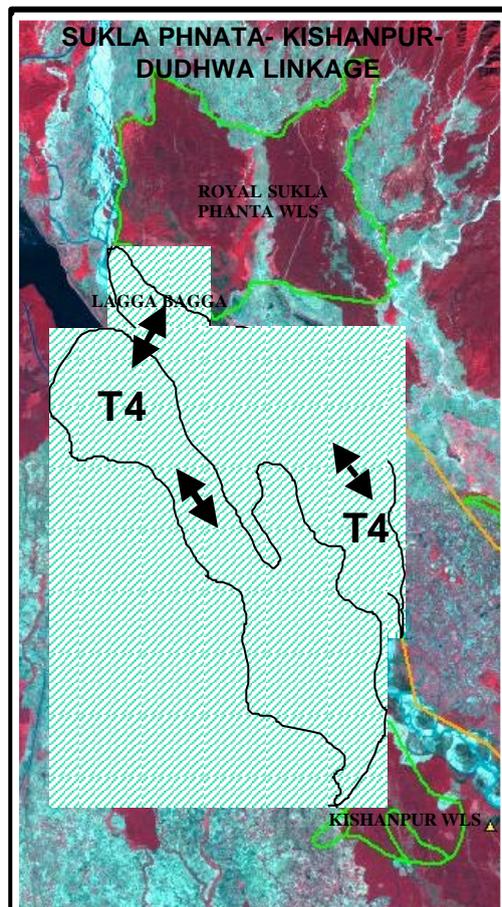
The objective in this linkage is to stop further loss of tiger habitat in the linkage and to secure animal movement between Lagga Bagga Forest Block and Dudhwa Tiger Reserve and to get Lagga Bagga declared as a protected area. Both the Tiger and Wildlife Division and the Forests & Biodiversity Conservation Division of WWF India are working in this linkage towards achieving this objective.

³ A proposal for Conservation of the Tiger at landscape level in the *Terai Bhabhar* tracts of India

⁴ A proposal for Conservation of the Tiger at landscape level in the *Terai Bhabhar* tracts of India

A. The Tiger and Wildlife Division is already working in the linkage. (The project activities are commensurate with the level of available funding). The project is working with the following objectives:

1. To have Lagga Bagga declared as a Protected Area.
2. To strengthen anti-poaching capability, create necessary infrastructure and protective measures of the Forest Divisions.
3. To improve habitat for better wildlife management.
4. To promote alternate employment leading to reduced human-wildlife conflict and development of forest resources.
5. To curb intrusive developmental activities (Roads, Railway, Canals and land use change).



6. To develop a co-ordination and network of local institutions and development of human resource.
7. To continue transborder co-operation.
8. To promote environmental awareness and education in key areas.
9. To establish research and monitoring programme

Achievements :

- Infrastructure and equipment support to FD for law enforcement (comms, mobility, watch towers)
- Provided alternative (LPG) for fuel wood to the high user groups and poorest groups.
- Assessed impacts and trends to develop a grazing management strategy
- Trained Forest Department and Protected Area staff for effective census and anti-poaching measures
- Continued with compensation scheme for livestock loss due to tigers.
- Provided alternative sources for income generation to reduce conflict on resource use by the local people.
- Held awareness campaigns to mitigate the man animal conflict.
- Capacity building of local field staff for immediate intervention for conflict animal (tigers)
- Field level trans boundary (interstate and international) cooperation to minimize man animal conflict
- Lobbying for declaring Laggabagga as a protected area/ conservation reserve
- Trans boundary cooperation for better wildlife management (trade in wildlife parts and timber, minimize wildlife killing)

B. The Forests & Biodiversity Conservation Division has conducted ground work in the linkage with a view to develop stakes for people living in the linkage and to involve them in the conservation programme of WWF India. As an outcome of the project development phase⁵ (supported by WWF World Bank Alliance) it has identified 12 villages in the linkage for intensive conservation interventions. WWF-India aims to evolve a model adopting JFM approach where communities gain incentives and technical skills to conserve critical habitats of local, national and global significance while managing the resource base in a manner that meets their subsistence needs on the one hand and strengthens the household economy on the other.

The objectives are:

1. To under take habitat restoration activities in selected locations under the Joint Forest Management Programmes.
2. To promote awareness on habitat restoration with community participation and its relevance to **ecological services** and **livelihood**.

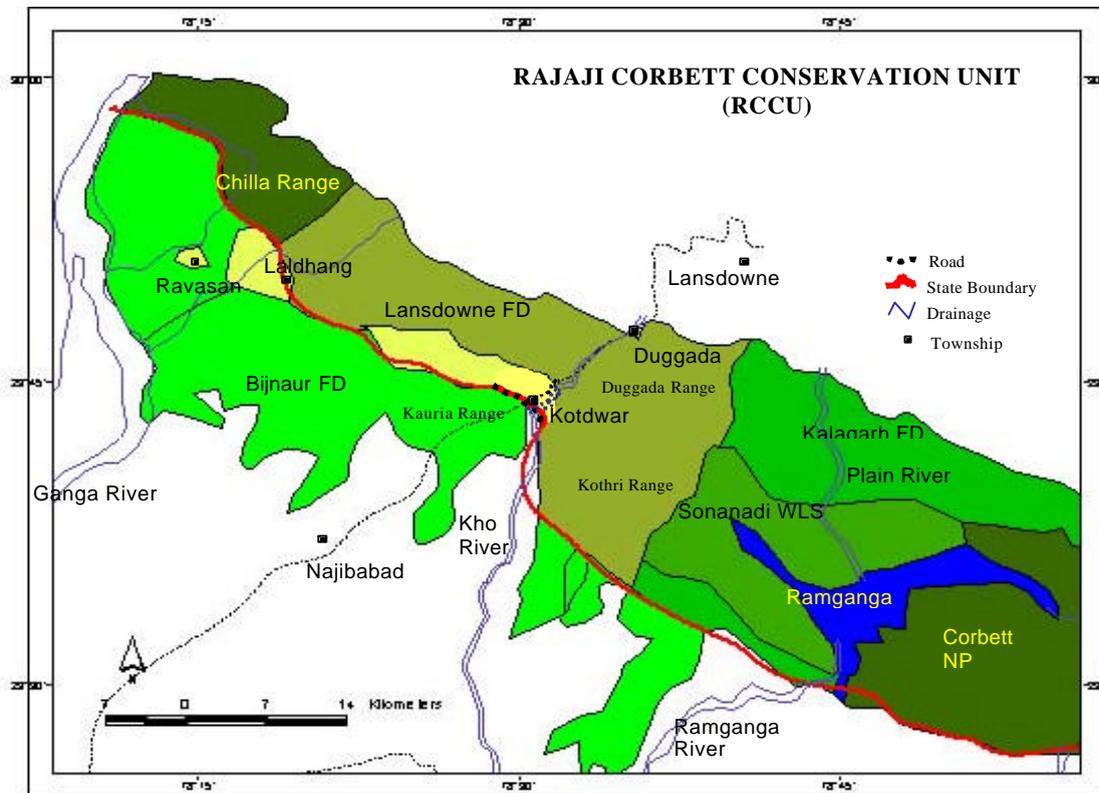
Project Location 2:

The Rajaji Corbett Conservation Unit (Kotdwar Corridor and Ramnagar Corridor of the TAL)

The Tiger and Wildlife Division is already working in the linkage through the funding received from the AREAS Programme. (The project activities are commensurate with the level of available funding). The project is working with the following objectives:

⁵ Planning and Proposal Preparation for the TAL in India (WWF-WB Alliance)

1. To curb poaching in the PAs of RCCU.
2. To strengthen anti-poaching capability, create necessary infrastructure and protective measures of the Forest Divisions.
3. To improve habitat for better wildlife management.



4. To promote alternate employment leading to reduced human-wildlife conflict and development of forest resources.
5. To curb intrusive developmental activities (Roads, Railway, Canals and landuse).
6. To develop a co-ordination and network of local institutions and development of human resource.
7. To promote environmental awareness and education in key areas.
8. To establish research and monitoring programme.

Achievements:

- Identified areas in need of anti poaching investments in RCCU
- Supported antipoaching infrastructure in priority PA, linkages and adjoining forests
- Created databases for cases of illegal trade poaching/poisoning, human-animal conflict and compensations for critical bottleneck.
- Established TAL field office unit between Rajaji and Corbett, to operate as central Elephant monitoring unit.

- Created monitoring camps with elephant/tiger trackers at bottle necks in migratory routes of elephants.
- Creating public awareness through workshops about wildlife issues
- Regular interaction and meetings with the local communities and forest department to win their trust and confidence.
- Formation of people - park interface institution
- Periodic meetings of the office bearers about causes of conflict and mitigation measures.
- Workshops with the local stakeholders for effective co-ordination
- Design and implement research study on resource use, particularly grazing pattern to determine root cause of conflict.
- Create public awareness through workshops, camps, print and audio-visual medium about causes of conflict and their mitigation methods.
- Conducting health camps as an entry point activity to build trust and confidence of the local communities
- Continue to implement cattle compensation scheme and find possibilities of improvement (tiger related) which has proved to be effective in reducing retaliatory killing.
- Carried out studies of fuel-wood consumption pattern and identify the alternatives

Method of Implementation:

The work in these corridors of the TAL is being implemented by WWF India through its Tiger and Wildlife Division and the Forests & Biodiversity Conservation Division. Field Offices and Coordinators in the TAL are already in place at Pilibhit and Kotdwar. The project is being implemented in collaboration with FD, other government agencies and local NGOs.