## **NOTE**

The Ministry of Environment and Forests has proposed the project "Strengthening Regional Cooperation in Wildlife Protection in Asia" for financial assistance from the World Bank under regional IDA window. The Environmental and Social Framework Document for the proposed project is hereby disclosed for the information of general public and interested parties. Any comments or suggestions on the contents of this document may be sent by email to <u>jd-wl@nic.in</u> on or before 30<sup>th</sup> June 2012.

**GOVERNMENT OF INDIA** 

# ENVIRONMENTAL AND SOCIAL MANAGEMENT FRAMEWORK

# THIRD PHASE OF THE ADAPTABLE PROGRAM LOAN ON

# STRENGTHENING REGIONAL COOPERATION FOR WILDLIFE PROTECTION IN ASIA

**APRIL, 2012** 

## ACRONYMS AND ABBREVIATIONS

APL	Adaptive Policy Lending	NRRP	National Rehabilitation and
ASEAN-WEN	Association of South East Asian		Resettlement Plan
	Nations – Wildlife Enforcement	NTFP	Non-Timber Forest Products
	Network	OP	Operational Policy
CBD	Convention of Biological	PA	Protected Area
	Diversity	PAP	Project Affected Person
CBO	Community Based Organization	PDO	Project Development Objective
CITES	Convention on International	PIC	Project Implementation Cell
	Trade in Endangered Species	PMU	Project Management Unit
EA	Environmental Assessment	PSIA	Poverty and Social Impact
EIA	Environmental Impact		Assessment
	Assessment	ROSC	Regional Operational Steering
EMF	Environmental Management	11000	Committee
	Framework	RP	Resettlement Plan
EMP	Environmental Management	SAARC	South Asia Association for
	Plan	binne	Regional Cooperation
ESMF	Environmental and Social	SACEP	South Asia Cooperative
LOWI	Management Framework	brielli	Environment Programme
GAP	Gender Action Plan	SA-WEN	South Asian Wildlife
GOI	Government of India	SIT WEIT	Enforcement Network
GRC	Grievance Resolution	SAWTI	South Asia Wildlife Trade
UKC	Committee	5/10/11	Initiative
GTI	Global Tiger Initiative	SIA	Social Impact Assessment
HH	Household	SMF	Social Management Framework
HWC	Human Wildlife Conflict	TOR	Terms of Reference
ICT	Information Communication	TP	Tribal People
		TRAFFIC	Wildlife Trade Monitoring
IDA	Technology International Development	TRAFFIC	Network
IDA	Association	UNEP	United Nations Environmental
IEE	Initial Environmental	UNEF	
ILL	Examination	UNODC	Programme
INR	Indian Rupee	VRCE	UN Office of Drugs and Crime
INK INTERPOL	International Criminal Police	VKCE	Virtual Regional Center of Excellence
INTERPOL		WCCB	Wildlife Crime Control Bureau
TD	Organization		
IP	Indigenous People	World Bank	International Development
IPP	Indigenous Peoples Plan		Association
IUCN	International Union for the		
Mer	Conservation of Nattier		
M&E	Monitoring and Evaluation		
MDGs MOEE	Millennium Development Goals		
MOEF	Ministry of Environment and		
	Forests		
NBWL	National Board for Wildlife		
NGO	Non-Governmental		
NIDGO	Organization		
NPSC	National Project Steering		

Committee

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## **1. INTRODUCTION**

### 1.1 Project Background

Natural habitats are vital for assuring sustainable development. Wild habitats are the repositories of biological diversity (biodiversity) which are the raw material for natural selection and adaptation.<sup>1</sup> They provide myriad services that enrich and sustain human life with both tangible and intangible economic and social value – including watershed protection, biological control of pests, crop pollination – and life-sustaining environmental services, such as breathable air and usable water. Imbalances in natural environments have been implicated in floods, declining water availability and quality, soil fertility loss, erosion, silting of rivers, poverty, the spread of diseases such as ebola, malaria, and the proliferation of invasive species. Goal 7 of the Millennium Development Goals (MDGs) seeks to reduce biodiversity loss, recognizing the link between poverty and natural resource depletion. Although quantification of economic benefits is difficult, there is strong evidence that conserving natural ecosystems, and the species that sustain it, makes sound economic sense. Moreover, given the scale of destruction in recent decades there are high payoffs to conservation with often increasing returns to the investment.

Recognizing the importance of preserving biological diversity a number of global treaties have been established. They include the Convention on Biological Diversity (CBD, 1992), the Convention on International Trade in Endangered Species (CITES, 1981), the Convention on Wetlands (RAMSAR, 1971) and international institutions have formed around environmental issues such as the United Nations Environmental Program (UNEP), the International Union for the Conservation of Nature (IUCN), the Global Environmental Facility (GEF) and a myriad of national and international Non-Governmental Organizations (NGOs). Most countries of the world have recognized the importance of conservation of both terrestrial and aquatic habitats and have adopted legislation and created institutions for the protection of wildlife and their habitats.

Biodiversity is especially important to South Asia which is home to 13 - 15% of the world's biodiversity and hosts some of the most charismatic and endangered species on Earth. The forests of Gir in India are the last refuge of the world's remaining 250 - 300 Asiatic wild lions. Habitats across Bangladesh, Bhutan, India and Nepal are home to over 65% of the 3,000 or so remaining wild tigers and the Himalayas is the last redoubt of the critically endangered snow leopard, whose numbers are unknown. India is classified as a mega-diverse country and the Eastern Himalayas (encompassing numerous countries) a biodiversity hotspot.<sup>2</sup> Reflecting its rich natural heritage, a conservation ethos is deeply engrained in the culture and history of South Asia. The first recorded conservation edicts in South Asia date to the 4th century BC when the emperor Ashoka issued royal decrees to protect elephants from hunting and capture.

<sup>&</sup>lt;sup>1</sup> Particularly important are the so-called "keystone" species that generate vital ecological services. Disappearance of a keystone can trigger cascading impacts through the habitat, with the loss of one species prompting the loss of still others. An example of keystone species are the top predators who play a vital role in maintaining balance and sustaining the interconnected web of life – vegetation (biomass), herbivores and their predators. They serve as "bellwethers" for the health of the ecosystem that harbor them and their decline is often a clear signal of grave imbalances. Habitats where they thrive are typically the high-value ecosystems that provide economic value through (un-priced but life sustaining) services such as carbon sequestration, maintenance of hydrological balance, crop pollination, protection from natural disasters and soil erosion and preservation of plant genetic diversity. Large predators are thus powerful symbols of all that is irreplaceable and biologically significant in nature.

<sup>&</sup>lt;sup>2</sup>The mega-diverse countries are a group of countries in which less than the 10% of the global land surface has more than the 70% of the land's biodiversity. Most of these countries are located in the tropics. A biodiversity hotspot is a bio- region with a significant reservoir of diversity that is under threat from humans. It was first defined by Myers in 1988 - based on well described criteria.

The charismatic appeal of many species can generate additional economic benefits from conservation. Ecotourism is globally the fastest growing and most profitable segment of the tourist industry.<sup>3</sup> Estimates suggest that the tourism revenues from habitats rich in biodiversity – though still under-priced and far below potential – run into significant sums and contribute significantly to livelihoods of the poorest. A recent valuation study finds that, on average, each hectare of dense forest in India generates a net present value from ecotourism of about INR 65,192 (US\$1,350). With an estimated 390,000 hectares of dense forest remaining in India, studies suggest that this constitutes a total economic contribution of approximately US\$636 million.<sup>4</sup> This figure underestimates the potential value of undisturbed natural habitats because it excludes the myriad other benefits that forests bring – such as timber, fodder, traditional medicines, bio-prospectivity (e.g. new medicines), non-timber forest products and watershed benefits among others – as well as the non-use (preservation) values. The distributional impacts are, perhaps, even more significant. Aside from timber, most of the benefits from forest resources accrue to the poor and account for more than 50% of their (implied) consumption.<sup>5</sup> It is estimated that including these benefits would bring the economic benefits into the high billions of dollars, though more refined calculations are still in progress.<sup>6</sup>

Bhutan, a small Eastern Himalayan country, ranks in the top 10% of countries with the highest species richness per unit area in the world. It has been designated as one of the ten Biodiversity Hotspots in the world and the centre of 221 Global Endemic Bird Areas. The rich biodiversity of Bhutan includes more than 120 species of butterflies, 28 of which are endemic to the Eastern Himalayas, and as many as 750 plant species endemic to the Eastern Himalayas. Bhutan's ecosystems are represented by sub-tropical forests, warm and cool broad-leaved forests, evergreen oak forests, chir pine forests, alpine meadows, and more. To protect its biodiversity, Bhutan has the highest proportion of forest cover and protected areas of any Asian nation. Most Bhutanese still practice subsistence agriculture, but the agricultural system is in the initial phase of modernization. Bhutanese farmers primarily cultivate traditional crop varieties and depend on forest resources for their livelihood. Despite the Royal Government's conservation efforts, threats to biodiversity are emerging with the acceleration of economic development. Protected areas cover 26% of Bhutan's territory whereas 9% of additional land has been declared as biological corridors connecting the protected areas. With the addition of conservation areas, more than 35% of the country's area is under some form of conservation management. To ensure the conservation of ecosystem and habitat biodiversity, the Royal Government has a policy guaranteeing that at least 60 % forest cover will be maintained at all times. In addition, 26% of the total land area representing all climatic and biodiversity zones is under protected area management and an additional 9 % is set aside as biological corridors. In terms of species diversity conservation, the Royal Government is implementing several conservation programmes including the Tiger Conservation Programme and the Social Forestry Programme, which encourages local people to plant trees on private or community land. There is also an anti-poaching programme that has led to regular patrols in all protected areas to prevent poaching of animals and medicinal plants<sup>7</sup>.

South East Asia also covers a remarkable portion of the world's biodiversity with the habitats in the region being among the most diverse in the world. Indonesia, for example, is the world's most biologically diverse country. Laos has a rich biodiversity, particularly in its wildlife, mainly due to the

<sup>&</sup>lt;sup>3</sup>http://www.ecotourism.org/atf/cf/%7B82a87c8d-0b56-4149-8b0a-

c4aaced1cd38%7D/TIES%20GLOBAL%20ECOTOURISM%20FACT%20SHEET.PDF

<sup>&</sup>lt;sup>4</sup>Gundimenda H, S. Sanyal, R Sinha and P Sukhdev, 2009, *The Value of Biodiversity in India's Forests*, Deutsche Bank

<sup>&</sup>lt;sup>5</sup> See for example Gundimenda*et al (op cit)* and also Gundimenda H, S. Sanyal, R Sinha and P Sukhdev, 2009, *The Value of Timber and Non Timber Forest Products in India's Forests*, Deutsche Bank

 $<sup>^{6}</sup>$  These include livelihood benefits as well as the benefits that accrue from conservation (which is a pure public good). A pure public good is one that is non rival in consumption implying that the consumption by one person does not detract from its use by another. It is non-excludable in that its benefits cannot be restricted without cost (e.g. clean air, extinction are examples of a public good and a public bad respectively).

<sup>&</sup>lt;sup>1</sup> http://www.cbd.int/countries/profile.shtml?country=bt#status

low population density, mountainous terrain, and thus, high remaining forest cover. In Laos, the rural poor are highly reliant on forest resources. The country's non-timber forest products (NTFPs) sustain livelihoods and act as a food security net for villagers (especially the lowest income ones) living in and near protected areas. South East Asia is also experiencing a major loss of biodiversity, with primary forest cover declining by 95% and individual countries losing 70-90% of their original wilderness. The key threats to wildlife are shifting cultivation within and on the edges of protected areas, overhunting of prey species to supply domestic trade, international illegal wildlife trade for food, medicines and ornaments smuggled through porous borders to neighboring markets (China, Vietnam), weak wildlife law enforcement capacity, etc.

Beyond Asia, examples abound of conservation generating benefits for the rural poor. Nearly threequarters of the recorded protein consumption in Africa is derived from plant sources and food from the wild, particularly in times of stress, such as drought or floods. More importantly, new models demonstrate that sustainable and (relatively) high incomes are available to poor communities from conservation and profit sharing practices of eco-tourism that prevent excessive migration and overdevelopment. Successful conservation examples include communal areas of Namibia where communities routinely earn in excess of US\$0.5 million each year from eco-tourism. Under the MasaiPorini (Kenya) project, the local community leases out land to a private wildlife conservancy. Benefits in the form of an annual income of about US \$50,000 accrue to the formerly poverty stricken community. The project has helped to build schools for the community, sponsor local children through tertiary education systems, provide watering points for pastoral communities, vehicle transport and enable controllable grazing within the conservancy during times of great need.<sup>8</sup>

Governments in Asia are keenly aware of the benefits that biodiversity brings and the risks of biodiversity loss. The region's countries have been among the world's leaders in adopting legislation and ratifying international conventions for biodiversity conservation. South Asia – especially India – is a center of cutting-edge research on natural resource management and habitat conservation. Asia's countries have adopted legislation for protection of endangered species and their habitats. They have devoted substantial resources to habitat conservation and, more recently, to enforcement of anti-poaching legislation. For example, India has more than doubled the budget available for wildlife protection from about US\$15.3 million in 2008-09 to about US\$38 million in 2009-2010.<sup>9</sup> Laos increased its budget for protected area activities to US\$300,000 in FY2009/2010 from a mere US\$10,000 in earlier years. Despite the investments, Asia faces daunting challenges that are growing more severe. Habitat fragmentation and poaching for illegal wildlife trade are the most significant threats to biodiversity.

*Habitat loss.* Not only do many of the high profile endangered species (such as the top predators and elephants) require large amounts of land, but their habitats need to be connected as well to assure long-term genetic survival. Through much of South Asia, the forest frontier has largely stabilized as a result of past large scale conversions of habitats (though there are notable exceptions in the conflict-prone and forested mineral and plantation belts). Approximately 5% of land in the region has been granted Protected Area (PA) status which confers varying degrees of legal and actual sanctuary to wildlife.<sup>10</sup> But it is the forest corridors linking these PAs that are under constant and unrelenting pressure from intrusive structures, such as new roads and expanding settlements. As a result, many endangered species subsist in

<sup>&</sup>lt;sup>8</sup> http://www.unep.org/GC/GCSS-IX/Documents/Kenya-2C.pdf

<sup>&</sup>lt;sup>9</sup> India Today, July 6, 2009

<sup>&</sup>lt;sup>10</sup> The level of protection accorded legally and in practice varies considerably. In Bhutan, large tracts of land in PAs contain farms, houses a growing number of roads, logging and small industry. In India, however, the land under PA management is small (about 4.8%) and most forms of anthropogenic interference and commerce are legally discouraged from these areas.

isolated population clusters. Small, fragmented breeding populations are especially fragile and at risk of genetic bottlenecks, a condition that reduces the capacity to adapt to changing conditions.<sup>11</sup>

**Poaching.** Though habitat fragmentation is a severe problem, it remains a medium-term threat. The most serious and immediate risk to many species is poaching for wildlife trade. Wildlife are killed for the flourishing illegal international trade in their skins, bones, flesh, fur, used for decoration, clothing, medicine, and unconventional exotic food. The primary market for many of these products is outside South Asia – often in East Asia for items of presumed pharmacological utility.

The wildlife trade is big business. But due to the clandestine nature of the enterprise, reliable estimates of the composition, volume and value of the trade remain elusive. The International Criminal Police Organization (INTERPOL) suggests that the global value of the illegal wildlife related trade exceeds US\$20 billion per year and probably ranks third after narcotics and the illegal weapons trade.<sup>12</sup>

*Illegal trade.* South Asian countries account for 13 to 15% of the world's biodiversity and so remain a lucrative target of the trade. Victims of the trade include the iconic tiger and elephant, the snow leopard, the common leopard, the one-horn rhino, pangolin, brown bear, several species of deer and reptiles, seahorses, star tortoises, butterflies, peacocks, hornbills, parrots, parakeets and birds of prey, and corals. Poaching techniques can be extremely gruesome – the more egregious methods include skinning or dehorning live animals – and transportation of live creatures in inhumane conditions.

Particularly damaging is the banned trade in tiger parts much of which is used for its presumed pharmaceutical benefits. The World Chinese Medicine Society has declared that tiger parts are not necessary in traditional medicines and that alternatives are available and effective. Yet the illegal trade still flourishes. Poaching has become so intense that tigers have disappeared from many parks throughout Asia. Nowhere has the impact been greater than in India and Nepal which remain the bastions of tiger conservation. Nepal has emerged as the transit hub for the trade in illegal wildlife commodities destined for consumption in East China. Laos is recognized as both a source and transit country while Viet Nam is a transit hub for illegal wildlife trade.

The economic value of the illegal wildlife trade is determined primarily by cross-border factors. Wildlife are poached in one country, stockpiled in another, and then traded beyond the South Asia region. Lack of uniformity in enforcement can result in migration of the trade to other countries with less stringent enforcement. The trade is controlled by criminal organizations which have considerable power over the market and the prices paid to poachers and carriers, making control of the trade even more challenging.<sup>13</sup> The UN Office of Drugs and Crime (UNODC) suggest that wildlife traders have links to other organized criminal activities (e.g. narcotics), presumably a reflection of the increasing returns to cross-border criminal activities. By contrast, poaching is often carried out by local or forest dwelling populations who receive only a fraction of the final price of the product. The magnitude and complexity of the problems are such that they now frequently transcend national boundaries and call for knowledge sharing and compatible policies with renewed energy across the supply chain.

*Responses.* Commendable efforts have been made by all the countries in South Asia to protect their wildlife and great strides have been taken and important lessons learned. All the countries are signatories

<sup>&</sup>lt;sup>11</sup> For as science suggests "It is not the strongest of the species that survives, nor the most intelligent that survives. It is the one most adaptable to change."*The Origin of Species* Charles Darwin (1859)

<sup>&</sup>lt;sup>12</sup>Sinha S. 2010. Handbook on Wildlife Law Enforcement in India. TRAFFIC India/WWF India, New Delhi.Natraj Publisher.

<sup>&</sup>lt;sup>13</sup> Technically, this market structure is complex and poses regulatory challenges. The market resembles an inverted wine glass. A large number of potential poachers (forest dwellers) operate under quasi open access conditions. The poached commodity is then sold to traders – the organized gangs – who are few in number and thus operate under oligopolistic conditions (i.e. have market control) and the product is sold via retailers to a large number of consumers. Where controls are optimally applied to cause the greatest disruption is not obvious – given the imperfectly competitive "middle". See Bulte E. H. and R. Damania "The Wildlife Trade" *Ecological Economics*, 2006.

to CITES, which was set up to promote cooperative responses to the effects of trade on endangered species. A number of regional initiatives have also emerged and include SACEP (South Asia Cooperative Environment Programme), SAWTI (South Asia Wildlife Trade Initiative), and SAARC Convention on Cooperation on Environment, but have not been resourced adequately to implement activities. Most recently recognizing the grave threats posed to wildlife from the illegal trade, all countries in South Asia agreed at the First Meeting on Illegal Wildlife Trade in South Asia convened by the Government of Nepal and held in Kathmandu on May 17-19, 2010 to develop institutional mechanisms to promote harmonized and collaborative approaches to common threats. The modalities of this agreement and the ensuing legal structures are still under discussion. Despite investments in conservation and the efforts of stakeholders, illegally traded species are in fast decline.

It is clear that no one country – acting alone – can eliminate the perils to South Asia's wild resources. Improved and more effective patrolling of protected areas (PAs) is one approach for addressing the poaching threat. However, tackling the challenge calls for a regional approach. Close collaboration is needed among nations and regions along the trade route, as well as the centers of consumption (e.g., East Asia and North America).<sup>14</sup> In this context, an opportunity has emerged for East Asia to link or collaborate with its neighboring South Asia region in addressing common national and regional goals and strategies of wildlife protection.

Countries in South and Southeast Asia are committed to the pursuit of collaborative responses to the effects of trade on endangered species. A number of regional initiatives have emerged, such as the South Asia Cooperative Environment Programme (SACEP), South Asia Wildlife Trade Initiative (SAWTI), South Asian Association for Regional Cooperation (SAARC) Convention on Cooperation on Environment and the Association of South East Asian Nations Wildlife Enforcement Network (ASEAN-WEN). However, these organizations have not been resourced adequately to implement activities. Most recently, in recognition of the grave threats to wildlife from illegal trade, all countries in South Asia agreed at the First Meeting on Illegal Wildlife Trade in South Asia – convened by the Government of Nepal in Kathmandu in May 2010 – to develop institutional mechanisms for harmonizing and collaborating against common threats, including setting up the South Asia Wildlife Enforcement Network (SA-WEN).

<sup>&</sup>lt;sup>14</sup> Numerous NGOs focus on demand side management and, through the GTI, the Bank is engaging on this issue. The communications component of this project offers an opportunity to address some of these complex issues.

## **1.2** Need for an Environmental and Social Management Framework

The Environmental and Social Management Framework (ESMF) provides general environmental and social policies, guidelines, codes of practice and procedures to be integrated into the implementation of the World Bank-supported APL on Strengthening Cross-Regional Cooperation for Wildlife Protection in Asia (referred as Wildlife Project from here onwards). The purpose of this document is to outline a Framework for Environmental andSocial Management, giving brief details of potential environmental and social issues typically associated with the planning and implementation of the project activities envisaged under theWildlife Project and provide guidelines on how to carry out Environmental Assessments (EAs), Poverty and Social Impact Assessments (PSIAs), prepare Environmental Management Plans (EMPs), Gender Action Plan (GAP) and Resettlement Plans (RPs) where necessary to mitigate project induced negative environmental and social impacts and enhance positive environmental and social impacts of the project interventions.

An ESMF for the Wildlife Project is essential because sub-project specific environmental and social impacts cannot be precisely identified upfront before sites are selected, detailed site investigations are carried out as part of identifying specific project activities and related designs at the selected locations. The ESMF will provide the necessary background for environmental and social considerations, a checklist of potential environmental and social issues of the project activities to be considered and built into the design of the project so that environmentally and socially sustainable implementation can take place. The ESMF highlights review of relevant environmental and land acquisition legislation and operational guidelines, likely environmental and social issues due to potential activities under the project, strategies and measures to minimize or mitigate these issues, necessary institutional arrangements and mechanisms for monitoring and evaluation to be taken into consideration for integration of environmental and social aspects into the project design and implementation. Adhering to the principles and procedures and using the checklist of potential environmental and social issues laid out in this ESMF will help the implementing agencies to ensure compliance with the World Bank's environmental and social safeguard policies and the relevant provisions under the related policies of India, and associated rules, regulations and procedures. This ESMF will also serve as the guideline for the staff designated by the implementing agencies to oversee and monitor the environmental and social safeguards compliance of the respective project components coming under their implementation responsibility. Therefore this ESMF must be used as the template and guideline to ensure diligent environmental and social compliance of the planning and implementation of the activities envisaged under the project.

Although project as a whole is geared towards better environmental and social management, on the basis that the project will develop various facilities within protected areas, the project is classified as Category "B".

The objective of the ESMF is to ensure that activities under the proposed operations will address the following issues:

- Minimize potential negative environmental and social impacts as a result of either individual subprojects or their cumulative effects;
- Enhance positive environmental and socialoutcomes;
- Provide a mechanism for consultation and disclosure of information;
- Ensure that environmental and related social issues are thoroughly evaluated and necessary interventions are incorporated in planning, decision making, and implementation of project activities ;

- Protect environmentally sensitive areas from additional disturbance from project interventions;
- Protect human health and rights of people if affected; and
- Ensure compliance and due diligence with World Bank environmental and social safeguard policies as well as with related Government policies, regulation, guidelines and procedures as applicable to the type of project activities financed by the project.

All processes described in the ESMF can be adjusted based on implementation experience. The ESMF will be a living document and will be reviewed and updated periodically as needed.

## 2. DESCRIPTION OF THE PROJECT

## 2.1 **Project Development Objective**

The long-term vision of the regional program is to stabilize and, if possible, increase the population and habitats of critically endangered animals in Asia. Since wildlife and habitats cross administrative boundaries and because knowledge and capacity vary widely across and within countries, a regional approach is needed to address cross-border issues, build synergies, share skills, knowledge and experiences and build regional collaboration for the conservation of critical habitats and ecosystems.

The project development objective (PDO) is to assist the India and other participating countries to build or enhance shared capacity, institutions, knowledge and incentives to collaborate in tackling illegal wildlife trade and other selected regional conservation threats to habitats in border areas. The project will focus on a selected set of country-specific initiatives as well as key mutually agreed regional activities that are crucial to attaining the regional strategic goals.

## 2.2 **Project Descriptions**

The third phase of the regional project has two main focal areas: (i) strengthening institutional capacity for India to take a leadership role in regional cooperation in wildlife conservation in South Asia; and (ii) institutional strengthening and capacity building to address the illegal wildlife trade in cooperation with regional countries. The interventions would enhance the capacity of the Wildlife Division (WD) of India's Ministry of Environment and Forests (MOEF) to play a leadership role in wildlife conservation policy and strategic management initiatives to enhance cross border wildlife conservation and management in collaboration with neighboring countries and strengthen institutional capacity of the Wildlife Crime Control Bureau (WCCB) to effectively address wildlife trafficking in the region. The other countries participating in the regional project have common borders with India. Therefore, not only is India's participation in the regional project crucial, India needs to play a leadership role in policies and strategies for cross border cooperation in wildlife conservation and management which would control against the adverse impacts of the illegal trade. A landscape management approach to management of cross border ecosystems between the countries participating in the regional project is needed to ensure the long term conservation of charismatic and flagship species like the Royal Bengal Tiger, Asiatic Lion, Indian Elephant, One Horned Rhino, Asiatic Black Bear and Red Panda, to name a few Since flagship species require vast contiguous habitats for effective, long-term conservation, protected area management policies that are compatible with neighboring countries and operationalization of cross border corridors to ensure landscape level connectivity is essential for the survival of flagship species. It is critical that these species are managed effectively not only in the designated PAs within India but also along the corridors to ensure the connectivity of ecosystems across national boundaries. Conservation of Asia's flagship species would lead to improved natural habitats for all species and, ultimately, healthy ecosystems for South and South East Asia.

India's participation represents the third phase of the regional project with Bangladesh and Nepal participating in the first phase and Bhutan joining in the second phase. At the November 2010 meeting of conservation officials from Bangladesh, Bhutan, India and Nepal, the participants discussed the project's regional issues and agreed to adopt specific mechanisms for collaboration in addressing the threats to wildlife and habitats. Indeed, the officials committed to join the Regional Policy Steering Committee (a regional governance structure under the project) for ensuring regional coordination as soon as the Committee is established and work towards institutionalization of regional cooperation in wildlife conservation in South Asia.

#### 2.2.1 **Project components**

# Component 1: Capacity building for wildlife conservation and cooperation for addressing the illegal trans-boundary wildlife trade (US\$21.6 million)

Component 1 aims to bring about regional harmonization and collaboration in cross border wildlife conservation and management, combating wildlife crime through strengthened legislative and regulatory frameworks, well-equipped specialized agencies and systems, as well as relevant training and awareness programs for staff across the range of agencies that contribute to the enforcement of wildlife laws and regulations. The component will support strengthening WD's capacity for policy development and analysis. Additionally, the project will strengthen MOEF's leadership role and strategic approach to regional coordination in wildlife conservation. This role will be supported by implementing agencies under the jurisdiction of the ministry, such as WCCB. Targeted interventions are envisaged under the project for WCCB which is mandated to control illegal wildlife crime and trade. The interventions under this component are aimed at strengthening WCCBs role as a regional leader in wildlife crime and trade control. Two broad areas are identified for assistance: (i) technical assistance for monitoring, evaluation, policy analysis and the development of WD to play a leadership role in regional cooperation in wildlife crime and trade in cooperation with regional countries; Under these two broad areas, specific activities which enhances India's role in regional capacity building, cooperation and coordination will be supported.

Sub-component 1.1 Institutional strengthening for monitoring, evaluation, policy analysis and research for development of Wildlife Division and implementing agencies under MOEF (US\$ 9.1 million): Activities supported under this sub-component would result in strengthening the ability of WD/MOEF to better discharge its mandate in policy development and regulation and play a leadership role in regional collaboration and cooperation in wildlife conservation and management. This will be achieved through technical assistance for policy studies, development of monitoring and evaluation systems, support for modern field, research and IT equipment, staff training and capacity building including study tours and exchange programs with regional and international conservation agencies and support for institutionalizing regional coordination of wildlife protection and conservation. Key outputs of this sub-component would be:

- Improved institutional capacity in WD/MOEF in the areas of policy analysis, monitoring and evaluation;
- Strengthened capacity of technical staff in select implementing agencies under the jurisdiction of MOEF in effective collaborative wildlife conservation and management;
- Improved technical skills of staff in state agencies in participatory wildlife conservation and management, particularly in cross border areas;
- Effective policy recommendations for mainstreaming conservation in the development process, including landscape approaches to conservation;
- Progress towards institutionalizing regional collaboration and coordination in wildlife protection, conservation and management in South Asia.

Sub-component 1.2 Capacity building and training for Wildlife Crime Control Bureau (US\$12.5 million): The WCCB was established by the Government of India (GOI) as a response to ever increasing incidents of wildlife crime. The mandate of WCCB includes facilitation of coordinated universal action against wildlife crime and fulfillment of relevant international obligations of GOI and coordination with national and regional agencies in controlling wildlife crime. India is well placed to play a prominent role in the South Asian region in this regard. India proposes to assist regional countries in curbing wildlife crime rates through improved information, communications and coordination, better legal frameworks, judicial

awareness and reforms. WCCB has a unique advantage in this since no other neighboring country has an institution dedicated to wildlife crime control. But WCCB is in the early stages of its evolution and GOI approved expanding WCCBs cadre by over 300 new staff. This sub-component will support WCCB strengthen its mandate through an institutional development program and comprehensive capacity building program. The key outputs would be:

- development and installation of a wildlife crime and criminal data network;
- establishment of a service laboratory for wildlife forensic testing for India and regional countries;
- institutional development, capacity building and training for WCCB through a twinning arrangement with US Fish and Wildlife Service;
- establishment of a regional center of excellence for training on wildlife crime enforcement and investigation, including training and capacity building for staff from regional countries;
- studies and research on wildlife crime; and
- programs for exchange of technical knowledge with internationally renowned institutions and centers of excellence on wildlife crime and trade control.

### **Component 2: Promoting wildlife conservation in Asia (US\$4.6 million)**

*Sub-component 2.1: Virtual Regional Center of Excellence (VRCE) for wildlife conservation* (US\$0.5 million) The VRCE seeks to fill crucial knowledge and information gaps in addressing regional threats to conservation. It entails the creation of VRCE that would include a network of scientists and practitioners whose mission would be to expand the scope and quality of research in wildlife conservation needed to develop a common response against illegal wildlife trade in and outside the region and to address other regional conservation and landscape level issues to be agreed by the participating countries.<sup>15</sup> For all participating countries to benefit from knowledge sharing efforts, VRCE could sponsor the creation of a local networking forum in each country to facilitate exchange of research information, collaboration and coordination of country level institutions involved in wildlife conservation research. Coordination of the forum in India would be facilitated by WD.

VRCE would provide the first (and only) coordinated, institutional response for research and knowledge dissemination on wildlife conservation in South Asia with possible links to analogous efforts in East Asia.<sup>16</sup> The exclusive focus will be on either promoting a conservation-related regional public good or addressing a regional public bad. Given the existence of national institutions with expertise in this area already, it is critical for VRCE to bring value-added and not duplicate existing efforts. By playing the role of coordinator and facilitator of knowledge and expertise, VRCE could become a vehicle for promoting dialogue and good practices as well as disseminating knowledge. Because VRCE will be virtual and will have no central physical facility, it will rely heavily on state-of-the-art information and telecommunication technology (ICT) to conduct its business and to attain its objectives. A Regional Operational Steering Committee (ROSC) – described in Section IV – would assist in the development of VRCE's overall program and objectives.<sup>17</sup>

<sup>&</sup>lt;sup>15</sup> Knowledge generation and research within the VRCE would focus primarily on conservation and species management research. Better management of PAs, species and stronger conservation would enable the establishment and maintenance of systems and mechanisms to address the threats to wildlife due to poaching and illegal trade.

<sup>&</sup>lt;sup>16</sup> Laos and Vietnam may join the VRCE at a later stage. Connection to other knowledge hubs and centers of excellence in Southeast Asia and Africa may be established through the relevant partnership mechanisms under the Global Tiger Recovery Program and the South-South Experience Exchange Program, respectively.

<sup>&</sup>lt;sup>17</sup> VRCE would be managed by a director and this position is envisaged to rotate among the participating countries to assure appropriate ownership and representation.

VRCE would build on existing regional and global environmental initiatives and benefit from established experience, mechanisms and protocols. It would draw on strategic partnerships with renowned wildlife conservation institutions in the region and elsewhere. It would develop an active *knowledge dissemination program* and the key outputs from this sub-component would include:

- publication of research and pilot project results;
- sponsorship of workshops, lectures and seminars;
- special seminars aimed at decision makers in the participating governments (legislators, administrators and policy makers);
- training modules and teaching materials for wildlife managers; and
- development of protocols for informing policy and wildlife managers in the field.

Sub-component 2.2: Innovative research and pilot projects with a regional dimension (US\$4.1 million)To sharpen incentives, promote demand-driven interventions and encourage attention to regional conservation benefits, this sub-component involves a funding window for innovative research and pilot projects with a regional dimension. Support would be provided for innovative research and pilot projects that would contribute towards more effective conservation at the national and regional levels. A competitive, demand-driven approach to reward innovation and efficiency of the staff of WD, WCCB and other implementing agencies under its jurisdiction, would be applied in selecting the activities that would receive support under Windows 1 and 2. A transparent review and approval process for proposals submitted for funding through this window will be developed and implemented. The eligibility criteria (including a negative list of activities) will be specified in the operational manuals to be finalized prior to disbursement. In line with the request of GOI, no field based activities within protected areas will be supported under this funding window. Since the precise activities to be supported under this funding window would be identified only during the preparation of the funding proposals, only a typical list of potential activities can be assumed at this stage. WD has prepared an environmental and social management framework which will be used to ensure that activities funded under this window have no adverse environmental and/or social impacts. Potential activities that would supported under this funding window include:

- Research in endangered species conservation;
- Preparation of endangered species recovery plans;
- Pilot programs in human wildlife conflict management models with financial and other incentives to encourage human wildlife coexistence;

### Component 3: Project coordination and communication (US\$3.8 million)

*Sub-component 3.1: Project management and monitoring* (US\$ 0.8 million) This sub-component would focus on project management and monitoring. MOEF will be responsible for overall project implementation although specific components/activities will be implemented by WD and WCCB. MOEF will create a National Project Steering Committee (NPSC) responsible for overall project oversight at the country level. Day to day project management will be undertaken through a project management unit (PMU) at WD. The PMU will be responsible for implementation of the WD component and coordinate and monitor WCCB component. WCCB will establish a Project Implementation Cell (PIC) which will be responsible for the day to day operations of the activities to be implemented by WCCB.

Sub-component 3.2: Project communications (US\$3.0 million) The project will adopt a multi-pronged approach to communications in order to meet regional and local challenges. In addition to relying on the regular communications mechanism of WD and WCCB, the project would support a public awareness campaign with targeted at illegal wildlife crime and wildlife conservation. Additionally, a wide range of consultations with various stakeholder groups will be conducted at the national and local levels. It is expected that rolling consultations will continue throughout the project cycle. The communications sub-component – that is being developed and implemented in collaboration with the World Bank's external relations specialists – will harmonize with GTI in view of the latter's broader geographic mandate to engage in demand side management.

## 3. RELEVANT SAFEGUARDS POLICIES AND REGULATIONS

## 3.1 Government of India's Applicable Policies and Regulations

## 3.1.1 Constitution of India

India hasthree tiers of government, within a structure of cooperative federalism. The first tier is the central government, the second is the state government, and the third is the village level, known as the panchayat system. India's Constitution clearly explains the responsibilities between thecentral and state governments. Part XI of the Constitution governs the administrative and legislative relationbetween the centre and the states. Article 246 divides all subject areas of legislation into three categories –Union, State and Concurrent. When a central law conflicts with a state law in a concurrent subject, theformer prevails. Forests and protection of wild animals and birds have been included in the concurrent list.

The State's responsibility with regard to environmental protection has been laid down under Article 48-A of our Constitution, which reads as "The State shall endeavour to protect and improve the environment and to safeguard the forests and wildlife of the country". Environmental protection is a fundamental duty of every citizen of this country under Article 51-A(g) of the Constitution which reads as "It shall be the duty of every citizen of India to protect and improve the natural environment including forests, lakes, rivers and wildlife and to have compassion for living creatures."

## 3.1.2 Environmental Protection Act, 1986

The Environmental Protection Act 1986 of the Government of India is an umbrellaact for the prevention, control and abatement of environmental pollution for the conservation, preservation, protection, enhancement and management of theenvironment; and for matters incidental to or connected with the foregoing. This actauthorizes the central government to intervene directly in order to protect theenvironment and also allows public interest litigation for the same purpose. In termsof responsibilities, this Act and the associated Rules requires for obtainingenvironmental clearances for specific type of projects addressed under Environmental Impact Assessment (EIA) notification.

## 3.1.3 EIA Notification

This is the Indian Government's Guidelines for environmental impact assessmentgoverning all of the development interventions that takes place within the boundaries of India. EIA notification was first issued by Ministry of Environment and Forests(MOEF) in 1994 and later amended in 2002 and in 2006.

Under the latest EIA Notification, 14th September 2006, all projects listed inSchedule-1 of the notification require prior environmental clearance. The objective of the notification is to formulate a transparent, decentralized and efficient regulatorymechanism to:

- Incorporate necessary environmental safeguards at planning stage
- Involve stakeholders in the public consultation process
- Identify developmental projects based on impact potential instead of the investment criteria.

## 3.1.4 National Rehabilitation and Resettlement Policy, 2007

The National Rehabilitation and Resettlement Policy (NRRP), 2007 aims to minimize large-scaledisplacement as far as possible. The objectives of the NRRP are:

- To minimize displacement and to promote as far as possible, non-displacing orleast-displacing alternatives
- To ensure adequate rehabilitation package and expeditious implementation of therehabilitation process with the active participation of the affected families

- To ensure that special care is taken for protecting the rights of the weakersections of society, especially members of the Scheduled Castes and ScheduledTribes, and to create obligations on the State for their treatment with concern and sensitivity
- To provide a better standard of living, making concerted efforts for providingsustainable income to the affected families
- To integrate rehabilitation concerns into the development planning and implementation process
- Where displacement is on account of land acquisition, to facilitate harmonious relationship between the requiring body and affected families through mutual cooperation.

The provisions of the NRRP, 2007 provide for the basic minimum requirements, andall projects leading to involuntary displacement of people must address therehabilitation and resettlement issues comprehensively. The State Governments, Public Sector Undertakings or agencies shall be at liberty to put in place greaterbenefit levels than those prescribed in the NRRP, 2007. The principles of this policymay also apply to the rehabilitation and resettlement of persons involuntarily displaced permanently due to any other reason.

- Where involuntary displacement of four hundred or more families en masse inplain areas, or two hundred or more families en masse in tribal or hilly areas, DDPblocks or areas mentioned in the Schedule V or Schedule VI to the Constitution, itmust be mandatory to do social impact assessments and provide all required infrastructural facilities and amenities in the resettlement area.
- Where the Scheduled Tribes people are being displaced in sizeable numbers, awell thought out Tribal Development Plan must be put in place. The Plan shall also contain a program for development of alternate fuel, fodderand non-timber forest produce (NTFP) resources on non-forest lands within aperiod of five years sufficient to meet requirements of tribal communities who aredenied access to forests.
- Clear timeframes within which the implementation of the rehabilitation packageas well as utilization of the land shall be accomplished.
- An effective monitoring and grievance redressal mechanism must be framed.

While undertaking a social impact assessment, take into consideration the impact thatthe project will have on public and community properties, assets and infrastructureparticularly, roads, public transport, drainage, sanitation, sources of safe drinkingwater, sources of drinking water for cattle, community ponds, grazing land, plantations; public utilities, such as post offices, fair price shops, etc.; food storage godowns, electricity supply, health care facilities, schools and educational/trainingfacilities, places of worship, land for traditional tribal institutions, burial andcremation grounds, etc.

## 3.1.4 Forest (Conservation) Act, 1980

This Act provides for the conservation of forests and regulating diversion of forestlands for non-forestry purposes. When projects fall within forestlands, prior clearance is required from relevant authorities under the Forest (Conservation) Act, 1980. State governments cannot de-reserve any forestland or authorize its use for any non-forest purposes without approval from the Central government.

## 3.1.5 Wildlife Protection Act, 1972

According to the Wildlife Protection Act, 1972 "wildlife" includes any animal, bees, butterflies, crustacea, fish and moths; and aquatic or land vegetation which forms part of any habitat. In accordance with Wildlife (Protection) Amendment Act, 2002 "no alternation of boundaries / National Park / Sanctuary shall be made by the State Government except on recommendation of the National Board for Wildlife (NBWL)".

Further, in terms of Supreme Court Order dated 13.11.2000 the StateGovernments have to seek prior permission of Supreme Court before submitting the proposal for diversion of forest land in National Park sanctuaries.

Whenever, any part of Wildlife Sanctuary / National Park is getting affected by a hydro project the forest proposal in respect of such project is entertained by MOEF, GOI only after permission of de-reservation / denotification of Wildlife Sanctuary /National Park has been accorded. After recommendation of Standing Committee of NBWL proposal for dereservation/ de-notification is ratified by the Supreme Court.

Based on a decision taken by the National Board for Wildlife in 2006, it has been decided to notify surrounding areas to the distance of 10 km from any PA, as Ecologically Sensitive Area under the EPA. This would ensure that the land use activity within such areas arenot in conflict with the principles of conservation of the life forms in the PA. Till such areas are identified and notified, any activity, which requires environmental clearance under the EC notification, if located withinsuch areas, will need clearance from the NBWL.

## 3.1.6 Biological Diversity Act, 2002

The Ministry of Environment and Forests has enacted the Biological Diversity Act, 2002 under the United Nations Convention on Biological Diversity signed at Rio de Janeiro on the 5th day of June, 1992 of which India is also a party. This Act is to "provide for the conservation of biological diversity, sustainable use of its components, and fair and equitable sharing of the benefits arising out of the sued of biological resources, knowledge and for matters connected therewith or incidental thereto." As per the provision of act certain areas, which are rich in biodiversity and encompasses unique and representative ecosystems are identified and designated as biosphere reserve to facilitate its conservation. All restrictions applicable to protected areas like National Park and Sanctuaries are also applicable to these reserves.

### 3.1.7 Forest (Recognition of forest rights to Scheduled Tribes and Forest Dwellers) Act 2006

The newly enacted law provides for recognition of rights of forest communities for sustainable use and management of forests traditionally used by them as their natural habitats. This law recognizes the forest communities as local self governments and empowers them to take responsibility of forest conservation and provides for their prior consent for any diversion or development within the forests inhabited by them.Resettlement or relocation of forest communities has been prescribed only after completion of full settlement process of the rights with the procedures proescribed.

## **3.2** World Bank Operational Policies and Procedures Applicable to the Project

World Bank Operational Policies (Ops) and guidelines, pertaining to environmental and social safeguards that may require consideration under this project are as follows:

- OP/BP/GP 4.01 Environmental Assessment
- OP/BP/GP 4.04 Natural Habitats
- OP/BP/GP 4.36 Forestry
- OP/BP/GP 4.12 Involuntary Resettlement
- OP/BP/GP 4.10 Indigenous Peoples

The main environmental safeguard policy to be triggered under this project will be OP 4.01 on Environmental Assessment. The other environmental safeguard policy namely, OP 4.04 on natural habitats and OP 4.36 on forestry have been identified and will be considered to ensure minimal adverse environmental impacts due to the project. In addition to environmental safeguards policies, OP 4.12 on Involuntary Resettlement and OP 4.10 on Indigenous Peoples will be triggered to ensure community assets and livelihoods are protected or compensated and indigenous peoples requirements are taken into consideration by the project wherever applicable.

## 3.2.1 Compliance with OP 4.01 – Environmental Assessment

Strengthening Regional Cooperation for Wildlife Protection Project has been classified as a Safeguards **Category B.** Although project activities are expected to be environmentally beneficial in the long-term, implementation of certain activities will have the potential to trigger environmental impacts which are not irreversible and are likely to be localized and can be easily mitigated. Since the project will operate in areas of high ecological sensitivity and vulnerability, great care will be taken to address environmental issues at the earliest stage possible in order to minimize their potential impacts. However, significant adverse social and environmental impacts are not expected as physical interventions are to be focused on conservation and safety of people.

However, (a) all activities that fall under the prescribed categories stipulated in the national laws of GOI, environmental assessments will be done according to local regulations and applicable World Bank environmental safeguard; and (b) all other sub-projects that do not require screening according to national regulations but where World Bank environmental safeguard policies are applicable and/or having some level of environmental impacts will be screened using appropriate methodology (as proposed in this framework), depending on the nature and scale of potential impacts, and mitigated. The GOIis responsible for carrying out the EA/EMPs and for implementing the necessary safeguards.

# **3.2.2** Compliance with OP 4.01 Annex C Environmental Action Plans (or Environmental Management Plans)

According to Annex C of the World Bank OP 4.01 an Environmental Management Plan (EMP) is a recommended element of EA reports for Category B projects. The EMP should consists of a set of mitigation, management, monitoring, and institutional measures to be taken during implementation and operation to eliminate adverse environmental and social impacts, offset them, or reduce them to acceptable levels. The plan should also include the actions needed to implement these measures. In preparation of an EMP, the EA consultant should:

- (a) Identify the set of responses to potentially adverse impacts;
- (b) Determine requirements for ensuring that those responses are made effectively and in a timely manner
- (c) Describe the means for meeting those requirements.

More specifically, the EMP should include the following components:

- The EMP should identify feasible and cost-effective measures that may reduce potentially significant adverse environmental impacts to acceptable levels. The plan includes compensatory measures if mitigation measures are not feasible, cost-effective, or sufficient.
- The EMP should define monitoring objectives and specify the type of monitoring needed, with linkages to the impacts assessed in the EA report and the mitigation measures described in the EMP.

- To strengthen the project sponsor's environmental management capability, EMPs should mention any technical assistance that may be needed by the borrower.
- For all three aspects (mitigation, monitoring, and capacity development), the EMP should provide (a) an implementation schedule for measures that must be carried out as part of the project, showing phasing and coordination with overall project implementation plans; and (b) the capital and recurrent cost estimates and sources of funds for implementing the EMP.
- The EMP must be integrated into the project's overall planning, design, budget, and implementation.

During project implementation, the project sponsor should report on compliance with:

- (a) Measures agreed with World Bank on the basis of the findings and results of the EA, including implementation of any EMP, as set out in the project documents
- (b) The status of mitigatory measures; and
- (c) The findings of monitoring programs.

## 3.2.3 Compliance with OP 4.04 Natural Habitats

The World Bank's Operational Policy 4.04 recognizes that conservation of natural habitats and other measures that protect and enhance the environment is essential for long-term sustainable development. The Bank therefore supports the protection, maintenance, and rehabilitation of natural habitats and their functions. The Bank supports, and expects borrowers to apply, a precautionary approach to natural resource management to ensure opportunities for environmentally sustainable development. The Bank does not support projects that, involve significant conversion or degradation of critical natural habitats unless there are no feasible alternatives for the project and its siting, and comprehensive analysis demonstrates that overall benefits from the project substantially outweigh the environmental costs. In projects with natural habitat components, project preparation, appraisal, and supervision arrangements include appropriate environmental expertise to ensure adequate design and implementation of mitigation measures. The Bank expects the borrower to take into account the views, roles, and rights of groups, including local nongovernmental organizations and local communities, affected by Bank-financed projects involving natural habitats, and to involve such people in planning, designing, implementing, monitoring, and evaluating such projects. Involvement may include identifying appropriate conservation measures, managing protected areas and other natural habitats, and monitoring and evaluating specific projects. The Bank encourages governments to provide such people with appropriate information and incentives to protect natural habitats.

The proposed project's objective is similar to that of OP 4.04 where the project will not entail any conversion or degradation of natural habitats and it is highly unlikely that the policy will be triggered in its full force as the project will not directly affect natural areas in an adverse way. Aside from EA documentation that may be required for pilot projects under the subcomponent 2.2, there is no free-standing document that is automatically required by the trigger of OP 4.04 as it applies to the project.

### 3.2.4 Compliance with OP 4.36 Forestry

This policy focuses on themanagement, conservation, and sustainable development of forestecosystems and resources. It applies toproject that may have impacts on(a) health and quality of forests;(b) affect the rights and welfare ofpeople and their level of dependenceupon forests and projects that aim tobring about changes in the management, protection or utilization of natural forests or plantations, whether they are publicly, privately or community owned. The Bank does not support the significant conversion or

degradation of critical forest areas or related critical habitats. Similar to OP 4.04, the likely impacts are possible due to pilot projects under the subcomponent 2.2. Compliance of OP 4.01 will ensure possible impacts forests are managed within an acceptable level to the GOI and the World Bank.

## 3.2.5 Compliance with OP 4.12 Involuntary Resettlement

The proposed project will not permit any involuntary resettlement and involuntary land acquisition. However, subcomponent 2.2 pilot projects are likely to affect land use patterns of the communities. This will have an impact on their livelihoods. Hence, OP 4.12 will be triggered, and a Resettlement Policy Framework (as part of this Framework) establishes the process by which members of potentially affected communities will be consulted and participate in design of project and mitigatory/compensation measures.

The primary objective of the World Bank policy on 'Involuntary Resettlement' is to explore all alternatives to avoid or at least minimize involuntary resettlement. Where resettlement is unavoidable, the resettlement activities should be conceived and executed as sustainable development programs, providing sufficient resources to enable affected persons to share in project benefits and assisted in their efforts to improve their livelihood and standard of living, or at least to restore them to pre-project level. The policy also requires that affected people are meaningfully consulted and should have opportunities to participate in planning and implementing the programs. The policy applies to the taking of land and other assets when involuntary resettlement results in the loss of shelter (which is not applicable for this project), the loss of all or part of productive assets, or access to them, and the loss of income sources or means of livelihood, with or without physical displacement.

Measures required ensuring that resettlement has a positive outcome include:

- Providing Project-affected persons with options;
- Permitting their participation in planning and selecting these options;
- Prompt compensation at full replacement cost for losses;
- Choosing relocation sites that provide, at a minimum, the same benefits as the sites they replace;
- Providing allowances and other assistance to make a smooth transition after displacement;
- Identifying vulnerable groups and providing and special assistance to these groups; and,
- Implementing an institutional structure that supports the process to a successful end.

Bank's policy on Involuntary Resettlement requires income rehabilitation assistance to those affected severely due to the loss of their productive assets or loss of incomes and livelihood.

Absence of legal title does not exclude individuals from the eligibility to receive compensation and/or other assistance. The displaced or affected population eligible for compensation for losses include: those who have formal legal rights to land or other assets, and those who initially do not have formal legal rights to land or other assets but have a claim to legal rights based upon the laws of the country. The Policy also requires that those without legal title should be given assistance to meet the objectives of the policy. The genesis of these rights may come from continued possession of public land where the government has not sought their eviction. Bank's policy also recognizes that stakeholders who illegally occupy project-affected areas after established cut-off-date for any components are not eligible for compensation and other assistance provided that adequate measures are taken for information dissemination to people.

## 3.3.5 Application of OP 4.10 Indigenous Peoples

Key objectives of the Indigenous Peoples policy are to: (i) ensure that indigenous people affected by World Bank funded projects have a voice in project design and implementation; (ii) ensure that adverse impacts on indigenous peoples are avoided, minimized or mitigated; and (iii) ensure that benefits intended for indigenous peoples are culturally appropriate. The policy is triggered when there are indigenous peoples in the project area, if there is a potential of adverse impacts on indigenous peoples, and if indigenous peoples are the intended beneficiaries. Since the sites of pilot projects under the subcomponent 2.2 are unknown, the presence or absence of IPs and impacts towards them are unknown at this stage of the project. However, OP 4.10 will be triggered to ensure a culturally appropriate Indigenous Peoples Plan (IPP) will be prepared following meaningful consultation with the affected Indigenous People (IPs)/Tribal People (TP).

## 3.3.6 Adequacy of National Environmental and Social Clearances of GOI

The composite GOIenvironmental clearance processes, in principle, are consistent with World Bank environmental and public disclosure requirements. However, all activities with an impact on the environment and people under the proposed project will be subjected to some form of an environmental and social analysis, prior to disbursement of funds. The extent of the analyses will depend on a given activity; the site selected and will be decided in consultation with the World Bank.

In conclusion, the GOI's clearance procedure is adequate and fairly reliable for the context of this project. However, theWorld Bank will review safeguards documentation, as appropriately used, prepared under the project and provide necessary concurrence for the approval of disbursements of funds. Any activity defined in this framework, which does not fall within the GOI safeguards requirements will need to develop appropriate environmental analyses and planning and will be reviewed by World Bank and provide necessary concurrence for the approval of disbursements of funds.

## 4. ENVIRONMENTAL MANAGEMENT FRAMEWORK

The Environmental Management Framework (EMF) outlines the framework for planning, implementationand monitoring of environmental management measures required to ensure that potentialadverse environmental impacts from the project activities are eliminated, offset, orreduced to an acceptable level. At the same time, it is expected that the EMF will help theproject enhance environmental benefits from the project interventions. The EMF has beenbuilt on relevant existing national policies, legislations, regulations and guidelines and onWorld Bank safeguard policy requirements.

## 4.1 Environmental Management Tools

This section describes some of the key environmental management tools that would likely to be used in this project. Based on the regulations of the GOI and World Bank environmental safeguards policies, decisions will be made with the concurrence of the World Bank on the best tool(s) to be used for a given activity that may have environmental impacts due to its implementation.

## 4.1.1 Environmental Screening

The purpose of environmental screening is to minimize the resources used to assess interventions with minimal environmental implications, conserving them for the assessment of interventions having:

- Known potentially significant adverse impacts requiring additional assessment
- Potential impacts that require additional assessment to determine the level of significance
- Known management measures requiring additional development or customization
- A need to consider, conceptualize and design novel management measures

Environmental Checklists are forms containing a series of questions on environmental aspects, designed to screen potential environmental impacts of the proposed project. Environmental checklists can be used for an initial screening of impacts which is to be followed by a more detail analysis or in projects where the level of activity is not meant to cause much harm a checklist only would suffice

All project activities involving physical interventions will be screened using the checklist provided in Annex 1. The responses provided to the screening checklist for a given activity will indicate the requirement of undertaking an EA or development of an EMP or use of code of practice. However, if the GOI law mandates EA for an activity, screening serves no purpose and therefore will not be necessary.

### 4.1.2 Environmental Assessment

Environmental Assessments (EA) are effective tools for evaluating the environmental risks and opportunities of project proposals and improving the quality of outcomes. Ideally the EA should be carried out at the end of the preliminary design phase so that the impacts of each planned activity can be evaluated and alternatives can be worked out for activities that have major impacts. The outcomes of the EA should then be used to finalize the project design which should ensure that the impacts of the given project are minimal.During the sub-project preparation, for example EA can provide preliminary information about siting implications, potential impacts of alternatives, and opportunities to incorporate mitigation and enhancement measures into project concepts and designs. This will also provide the possibilities for cumulative impacts induced due to multiple activities within the same area or similar interventions in large areas in order to provide guidance in possible replication of activities and/or avoidance of supporting certain interventions.

The importance of this management tool as means of foreseeing potential environmental impacts caused by proposed projects and its use in making projects more suitable to the environment has been highly effective. As a decision making tool, EA has its strengths and weaknesses. It plays a crucial role at the project level decision making. However, in the entire development process application of EA as a tool to bring in environmental sustainability comes fairly at a late stage. At this point, it may be too late to change certain policy decisions and the choices are limited.

In the preparation phase, the EA shall achieve the following objectives:

- To establish the environmental baseline in the study area, and to identify any significant environmental issues;
- To assess these impacts and provide for measures to address the adverse impacts by the provision of the requisite avoidance, mitigation and compensation measures;
- To integrate the environmental issues in the project planning and design;
- To develop appropriate management plans for implementing, monitoring and reporting of the environmental mitigation and enhancement measures suggested.

## 4.1.3 Environmental Management Plan

Certain activities will have explicit impacts on the natural environment and thus require a specific plan to institute and monitor mitigation measures and take desired actions as timely as possible. An Environmental Management Plan (EMP) must be kept as simple as possible, clearly describing adverse impacts and mitigation actions that are easy to implement. The scale of the subproject will determine the length of the EMP. A small-scale subproject's EMP can be elaborated in a few paragraphs or in tabular format, keeping it as simple as possible with concrete mitigation actions, timelines and responsible persons.

An EMP generally addresses the following:

- Mitigation, enhancement, protection and compensation measures in each project development phase including design (for infrastructure activities this involved pre-construction, construction, operation and maintenance /benefit realization, and abandonment if applicable)
- Mitigation performance monitoring (i.e. monitoring the operation and maintenance of mitigation measures and their targeted impacts)
- Beneficiary/affectee participation arrangements by project development phase
- Disaster management contingency plan where applicable
- Institutional arrangements for implementation, monitoring and reporting
- Cost estimates for all EMP activities
- Standard construction environmental safeguards clauses for interventions involving works

It is essential to involve local communities during the development of the EMP since they are likely to be the most affected parties due to the proposed development. Further, most of the local knowledge is important in identifying, designing and planning the implementation. In addition, the success of the implementation of the EMP will depend on community support and action. Ideally, all EIAs and IEEs which identifies adverse environmental impacts should prepare an EMP as part of the report. In World Bank funded projects, a standalone EMP is considered appropriate in situations where a detailed environmental analysis is not required (as in the case of rehabilitation of an existing jeep track within a PA). Implementation of the EMP should be regularly monitored.

## Guidelines for Developing EMPs

Having identified the potential impacts of the relevant sub-component, the next step of the EA process involves the identification and development of measures aimed at eliminating, offsetting and/or reducing impacts to levels that are environmentally acceptable during implementation and operation of the project (EMP). EMPs provide an essential link between the impacts predicted and mitigation measures specified within the EA and implementation and operation activities. World Bank guidelines state that detailed EMP's are essential elements for Category A projects, but for many Category B projects, a simple EMP alone will suffice. While there are no standard formats for EMPs, it is recognized that the format needs to fit the circumstances in which the EMP is being developed and the requirements, which it is, designed to meet. EMPs should be prepared after taking into account comments from the PAA and World Bank as well as any clearance conditions. Annex C of OP 4.01 of the World Bank safeguards outlines the important elements of the EMP and guides its preparation. Given below are the important elements that constitute an EMP. Other elements as described earlier to be incorporated based on the circumstances and needs.

*a. Identification of impacts and description of mitigation measures:* Firstly, Impacts arising out of the project activities need to be clearly identified. Secondly, feasible and cost effective measures to minimize impacts to acceptable levels should be specified with reference to each impact identified. Further, it should provide details on the conditions under which the mitigatory measure should be implemented (ex; routine or in the event of contingencies) The EMP also should distinguish between type of solution proposed (structural & non structural) and the phase in which it should become operable (design, construction and/or operational).

*b.* Enhancement plans: Positive impacts or opportunities arising out of the project need to be identified during the EA process. Some of these opportunities can be further developed to draw environmental and social benefits to the local area. The EMP should identify such opportunities and develop a plan to systematically harness any such benefit.

*c. Monitoring programme:* In order to ensure that the proposed mitigatory measures have the intended results and complies with national standards and donor requirements, an environmental performance monitoring programme should be included in the EMP. The monitoring programme should give details of the following;

- Monitoring indicators to be measured for evaluating the performance of each mitigatory measure (for example national standards, engineering structures, extent of area replanted, etc).
- Monitoring mechanisms and methodologies
- Monitoring frequency
- Monitoring locations

*d. Institutional arrangements:* Institutions/parties responsible for implementing mitigatory measures and for monitoring their performance should be clearly identified as well as the legal instruments that will define their obligations. Where necessary, mechanisms for institutional co-ordination should be identified as often monitoring tends to involve more than one institution.

*e. Implementing schedules:* Timing, frequency and duration of mitigation measures with links to overall implementation schedule of the project should be specified.

*f. Reporting procedures:* Feedback mechanisms to inform the relevant parties on the progress and effectiveness of the mitigatory measures and monitoring itself should be specified. Guidelines on the type of information wanted and the presentation of feedback information should also be highlighted.

g. Cost estimates and sources of funds: Implementation of mitigatory measures mentioned in the EMP will involve an initial investment cost as well as recurrent costs. The EMP should include costs estimates for each measure and also identify sources of funding.

*h.Contract clauses:* This is an important section of the EMP that would ensure recommendations carried in the EMP will be translated into action on the ground. Contract documents will need to be incorporated with clauses directly linked to the implementation of mitigatory measures. Mechanisms such as linking the payment schedules to implementation of the said clauses could be explored and implemented, as appropriate.

Consultation with affected people and NGOs in preparing the EMP is recommended for Category B projects.

## 4.1.4 Environmental Audits

Most of the development projects go through the EIA process and develop EMPs that are not implemented at the end which will render the entire process an exercise in futility. Therefore, monitoring of the project during the construction and implementation phase is a must to ensure environmental compliance of a project. This could be achieved through regular environmental audits.

The purpose of the environmental audit is to

•	ollect, analyze and interpret monitoring results to detect changes related to implementation an operation of specific activities	C d
•	o verify the monitoring parameters are in compliance with national set standards	Т
•	o compare the predicted impacts with actual impacts and evaluate the accuracy of predictions	Т
٠	o evaluate the effectiveness of implementation of the EMP	Т
٠	o identify shortcomings in the EMP if any and incorporate it into the EMP if deemed necessary	Т
•	o identify and report if there is non-compliance with the EMP	Т

The auditors must first develop a structured questionnaire based on the EMP for the purpose of conducting the audit. Then during the site visit data can be collected using this questionnaire through interview surveys of officers responsible for implementation of the EMP and site records, logs etc., The audits can be carried out at regular intervals or on a *ad hoc* basis or when mitigation is not carried out as defined by the EMP leading to public concern.

Expected outcomes of the Environment Audit are

nsure that EMP is implemented properly

•

nsure that the mitigation measures are effectively minimizing the identified impacts as well as identify new impacts that may have been excluded in the EMP that require mitigation. Then make necessary adaptive changes to the EMP to ensure that the all significant impacts are effectively mitigated.

Е

E

• Identify non compliance with EMP if any and provide recommendations as to how to deal with such non compliance

## 4.1.5 Environmental Codes and Best Management Practices

In addition to the above tools following environmental codes and best practices may be sufficient where impacts of a particular activity are very minor, easily mitigatable and can adopt generic codes/practices developed elsewhere. This phase of the APL will contribute to the development of a manual on environmental codes and best management practices that will be replicable within the project and elsewhere as the implementation progresses.

## 4.2 Preliminary Assessment of Environment, Environmental Impacts and Mitigation Measures

### 4.2.1 Country Environment

*Land*:India is the seventh largest country in the world, with a total land area of 3,287,263 sq. km. It measures 3,214 km. from North to South and 2,993 km. from East to West. It has a land frontier of 15,200 km. and a coastline of 7,517 km. Out of India's total geographical area of 328.73 Mha., 306 Mhacomprise the reporting area and 146.82 Mha. is degraded land. Land degradation occurring due to the natural and human induced causes, like wind erosion and water logging, is one of the priority concerns in India. The varying degrees and types of degradation stem mainly from unsustainableuse and inappropriate land management practices. Loss of vegetation occurs as a result of deforestation, cutting beyond the silviculturally permissible limits, unsustainable fuel-wood and fodder extraction, shifting cultivation, encroachment into forest lands, forest fires and overgrazing, all of which subject the land to degradational forces. Other important factors responsible for large-scale degradation are; non-adoption of adequate soil conservation measures, improper crop rotation, indiscriminate use of agrochemicals such as fertilizers and pesticides, improper planning and management of irrigation systems and extraction of groundwater in excess of the recharge capacity.

North-East Region, which is the main focus of the project constituting 5.2 per cent of the total geographical area, represents the transition zone between the Indian, Indo-Malayan and Indo-Chinese bio-geographical regions as well as being a meeting point of the Himalayan mountains and peninsular India. The North-East is thus the biogeographical 'gateway' for much of India's fauna and flora and also a biodiversity hotspot. A diverse set of habitats coupled with long term geological stability has allowed the development of significant levels of endemism in all animal and plant groups. Eastern Himalaya comprising of Nepal, Bhutan, states of East and North-East India, and a contiguous sector of Yunnan province in South-Western China.

Geographically, apart from the Brahmaputra, Barak and Imphal valleys and some flat lands in between the hills of Meghalaya and Tripura, the remaining two-thirds of the area is hilly terrain interspersed with valleys and plains; the altitude varies from almost sea-level to over 7000 metres above MSL. The region's high rainfall averaging around 10000 millimetres and above creates problems of eco system, high seismic

activity and floods. The states of Arunachal Pradesh and Sikkim have a montane climate with cold, snowy winters and mild summers

*Air:*Air pollution and the resultant impacts in India could be broadly attributed to the emissions from vehicular, industrial and domestic activities. Air quality has been, therefore, an issue of concern in the backdrop of various developmental activities.

*Water:*From the East to the West and from the North to the South, water has defined life in the Indian subcontinent for thousands of years. On an average, the combination of rainfall, surface and groundwater resources have been sufficient in providing adequate water to the Indian population. Rise in demand and development pressures are changing the characteristics of water in India. Erosion in the watershed due to the fast growing development and poor land management practices is increasing siltation and changing stream hydraulics. Groundwater reserves are becoming more and more depleted as surface water sources have become too polluted for human use.

**Biodiversity:** India is one of the 17 identified mega diverse countries of the world. India is situated at the tri-junction of the Afro-tropical, the IndoMalayan and the Paleo-Arctic realms, which display significant biodiversity. Being one of the 17 identified megadiversecountries, it is home to 8.58 per cent of mammalians, 13.66 per cent of avians, 7.91 per cent of reptilians, 4.66 per cent of amphibians, 11.72 per cent of fish, and 11.80 per cent of plant species documented so far.India's forest cover ranges from the tropical rainforest of the Andaman Islands, Western Ghats, and North-Eastern India to the coniferous forest of the Himalayas. Between these extremes lie the Sal-dominated moist deciduous forest of Eastern India, the Teak-dominated dry deciduous forest of Central and Southern India, and the Babuldominated thorn forest of Central Deccan and Western Gangetic plains. Among species found in India, only 12.6 per cent of amphibians. Notable endemics are the Nilgiri Leaf Monkey and the Brown and Carmine Beddome's Toad of the Western Ghats. India contains 172 (2.9 per cent) of the IUCN designated threatened species. These include the Asiatic Lion, the Bengal Tiger, and the Indian White-Rumped Vulture, which suffered near-extinction situation from feeding on the carrion of diclofenac-treated cattle.

The richness of the north east regions' where the pilot activities will be focused avifauna largely reflects the diversity of habitats associated with a wide altitudinal range. North East India supports some of the highest bird diversities in the orient with about 850 bird species. The global distribution of 24 Restricted-range species is limited to the region. The region's lowland and montane moist to wet tropical evergreen forests are considered to be the northernmost limit of true tropical rainforests in the world. The region has been identified by the Indian Council of Agricultural Researchas a centre of rice germplasm while the National Bureau of Plant Genetic Resources, India, has highlighted the region as being rich in wild relatives of crop plants. It is the centre of origin of citrus fruits. Two primitive variety of maize, Sikkim Primitive 1 and 2 have also been reported from Sikkim. Although jhum cultivation, a traditional system of agricultural economic activity practiced by local tribes reflects the usage of 35 varieties of crops. The region is rich in medicinal plants and many other rare and endangered taxa. Its high endemism in higher plants, vertebrates and avian diversity has qualified it to be a biodiversity 'hotspot' and this aspect has been elaborated in details in the subsequent sections.

Human activities, both directly and indirectly, responsible for current high rates of biodiversity loss are - habitat loss; fragmentation and degradation due to agricultural activities; extraction (including mining, fishing, logging and harvesting); and development (human settlements, industry and associated infrastructure). Habitat loss and fragmentation leads to the formation of isolated, small and scattered populations.

*Climate:*The climate of India may be broadly described as tropical monsoonal type. There are four seasons:(i) Winter (January-February); (ii) Hot weather summer (March-May); (iii) Rainy South-Western monsoon (June-September) and (iv) Post-monsoon, also known as North-East monsoon in the southern Peninsula (October-December). India's climate is affected by two seasonal winds - the North-East monsoon and the South-West monsoon. The North-East monsoon, commonly known as the winter monsoon blows from land to sea, whereas the South-West monsoon, known as the summer monsoon blows from sea to land after crossing the Indian Ocean, the Arabian Sea, and the Bay of Bengal. The South-West monsoon brings most of the rainfall during a year in the country.

**Protected Areas:** The network of protected areas presently covers 4.83 per cent of the country's total land area and includes 99 national parks and 523 wildlife sanctuaries. Of these, 100 cover both terrestrial and freshwater ecosystems and 31 are marine protected areas. There are also 15 Biosphere Reserves and several Reserved Forests, which are part of the most strictly protected forests outside the protected areas.

India has some 2,356 known species of amphibians, birds, mammals and reptiles according to figures from the World Conservation Monitoring Center. Of these, 18.4 per cent are endemic, meaning they exist in no other country, and 10.8 per cent are threatened. India is home to at least 18,664 species of vascular plants, of which 26.8 per cent are endemic. About 4.9 per cent of the country's area is protected under IUCN categories I-V: 1. Nature Reserves, Wilderness Areas, and National Parks (categories I and II); 2. Areas Managed for Sustainable Use and Unclassified Areas (category VI and 'other'); 3. Natural Monuments, Species Management Areas, and Protected Landscapes and Seascapes (categories III, IV and V)

As per the recommendations of a special task-force of the Indian Board of Wildlife, Project Tiger was launched in 1973 with the following objectives: (1) To ensure maintenance of the available population of tigers in India for scientific, economic, aesthetic, cultural and ecological value; and (2) To preserve, for all times, the areas of such biological importance as a national heritage for the benefit, education and enjoyment of the people

Starting with nine reserves in 1973-74, the number has grown to 229 in 2006. A total area of 38,620 kmcorresponding to 1.17 per cent of the total geographical area of the country is covered by Project Tiger.

Project Elephant was launched in 1991-92 to assist the States having free ranging populations of wild elephants to ensure the long term survival of identified viable populations of elephants in their natural habitats . The project is being implemented in the states of Andhra Pradesh, Arunachal Pradesh, Assam, Jharkhand, Karnataka, Kerala, Meghalaya, Nagaland, Orissa, Tamil Nadu, Uttaranchal, Uttar Pradesh and West Bengal.

*Socio-economics:* The 39 million people of Northeast India constitute only about 3.8 per cent of the total population of the country (2001 census). Over 68 per cent of this population (26.64 million) lives in the state of Assam alone. Mizoram has the lowest population of less than a million, i.e. only 0.891 million. The density of population varies from 13 per sq. kilometre in Arunachal Pradesh to 340 per sq. kilometre in Assam. The predominantly hilly terrain in all the states except Assam is host to a large proportion of tribal population ranging from 19.3 per cent in Assam to 94.5 per cent in Mizoram. The region has over 160 Scheduled Tribes and over 400 other sub-tribal communities and groups. It is predominantly rural with over 84 per cent of the population living in the countryside. According to 2001 census, the total literacy rate of the population in the region at 68.5 per cent, with female literacy rate at 61.5 per cent, is higher than the country's average of 64.8 per cent and 53.7 per cent respectively. Of course, there are significant variations in the literacy rates among different states with Assam, Arunachal Pradesh and Meghalaya below the national average. The economy in the entire Northeast India is agrarian in nature, although little land is available for settled agriculture. The inaccessible terrain has made rapid

industrialization difficult in the region. Along with settled agriculture, *jhum*(shifting cultivation) is still practiced by a few indigenous groups of people. The North-east India with over 220 ethnic groups and equal number of dialects makes it a hugely diverse region. The hills states in the region like Arunachal Pradesh, Meghalaya, Mizoram and Nagaland are predominantly inhabited by tribal people with a fair degree of diversity even within the tribal groups. Besides the indigenous inhabitants people form Tibet, Burma, Thailand, West Bengal and Bangladesh have migrated into the region at various periods of history.

## 4.2.2 Preliminary Assessment of Project Impacts

While the project is classified as environmental category B, the overall project outcome is expected to be overwhelmingly beneficial from environmental and social perspectives. However, the risks associated with implementation of project activities in the vicinity of protected areas, which are areas of ecological sensitivity and of high conservation value, both nationally and internationally, could be high requiring extra diligence.

EMF has been designed to achieve sound environmental practice in the project. The EMF provides the mechanism to allow program implementation by screening out or enhancing acceptability of sub-project proposals on the basis of environmental criteria. By a simple process of elimination, the first step in the screening process is to identify subproject activities not suitable for funding. It is recommended that the following types of subprojects are not financed and therefore should be considered as a "Negative List":

- Sub-projects that involve the significant conversion or degradation of critical natural habitats such as sensitive ecosystems
- Activities that could lead to invasion or spread of weeds and feral animals or the use of toxic chemicals
- Activities that could dangerously lead to the exposure of sensitive/critical/vulnerable habitats
- Illegal Activities as defined specifically under laws of GOI

The following sections of the frameworktry to identify the possible environmental that could arise in each component and how best they could be assessed and addressed during project implementation.

# Component 1: Capacity building for wildlife conservation and cooperation for addressing the illegal trans-boundary wildlife trade

Sub-component 1.1 Institutional strengthening for monitoring, evaluation, policy analysis and research for development of Wildlife Division and implementing agencies under MOEF: This subcomponent would support the strengthening of WD/MOEF to better discharge its mandate in policy development and regulation and play a leadership role in regional collaboration and cooperation in wildlife conservation and management. It will not trigger any adverse environmental impacts. In fact, this sub-component will bring about environmentally positive impacts where staff would be adequately skilled to ensure better management of wildlife.

*Sub-component 1.2 Capacity building and training for Wildlife Crime Control Bureau:* This subcomponent will support WCCB strengthen its mandate through an institutional development program. One of the main adverse environmental impact that is likely to arise due to the siting of the service laboratory for wildlife forensic testing. In addition, issues related health and safety of staff and surrounding and generation of solid and liquid waste are possible with the establishment of the laboratory. In addition, the improvement of enforcement and control of illegal wildlife trade would bring about positive environmental impacts.

### **Component 2: Promoting wildlife conservation in South Asia**

Sub-component 2.1 Virtual Regional Center of Excellence (VRCE) for wildlife conservation: This component would support the creation of a virtual regional center of excellence (VRCE) for wildlife conservation. The center will be virtual and will have no central location or physical facility. Assessing the nature of activities proposed under this sub-component no negative environmental impacts are envisaged.

Sub-component 2.2 Innovative research and pilot projects with a regional dimension: Since the precise activities to be supported under this sub-component would be identified only during the preparation of the funding proposals, only a typical list of potential activities can be assumed at this stage. Potential activities that would supported under this funding window include research in endangered species conservation; preparation of endangered species recovery plans; and pilot programs in human wildlife conflict management models with financial and other incentives to encourage human wildlife coexistence.

It is proposed that pilot projects will be developed to address Human-Wildlife Conflict (HWC) and developing and adopting incentives mechanisms. At this point of time, the types of interventions in terms of pilots are not known. Failure of the pilots is unlikely to lead to any adverse environmental impacts that are not already present. The areas suggested for the pilots are to be implemented are areas with very high HWC at present and any intervention can only improve the situation. Potential social impacts of activities that may take place to manage human-wildlife conflicts are likely to be on livelihood patterns of community members as the pilots may attempt to changes to land use practices of local communities and issues related to safety of community members selected to participate in immobilization and containment of wild animals.

Species monitoring and recovery programs will be environmentally extremely beneficial. However, there is potential to create issues both within species and different species such as increased completion for space and food if recovery efforts are not managed properly.

## **Component 3: Project coordination and communications**

This involves a national and regional coordination of project activities and a communication plan to meet local challenges while respecting the overall regional nature of the project. No adverse environmental and social impacts are anticipated through this component.

## 4.2.3 Environmental Mitigation Measures

By design, the project is expected to have far greater environmental benefits than adverse environmental impacts. The potential adverse environmental impacts from the project are likely to be small and limited. However, it is recognized that such impacts can accrue into larger impacts if they are not identified early on in the planning cycle and their mitigation measures integrated in the project planning and implementation. The following table provides direct and significant potential impacts due to project activities. As the actual site of intervention and scope of interventions are not known, it is not possible to provide specific impact level category although preliminary identification based on likelihood has been done.

Activity	Environmental Impacts	Magnitude of Impacts	Mitigation Measures
Technical assistance for policy studies, development of monitoring and evaluation systems, support for modern field, research and IT equipment, staff training and capacity building including	Improvement of policy environment and analysis capability for facilitating effective collaborative wildlife conservation and management in the	M positive	-

	•	1	
study tours and exchange programs with regional and international conservation agencies and support for institutionalizing regional coordination of wildlife protection and conservation	region		
Development and installation of a wildlife crime and criminal data network	Better enforcement and control of wildlife trade	H positive	-
Establishment of a service laboratory for wildlife	Better enforcement and control of wildlife trade	H positive	-
forensic testing for India and regional countries	Issues related to siting of the laboratory	L negative	Laboratory is sited in established institutional areas away from residential areas, close to surface water/ shallow ground water table and set up in a land with considerable space.
	Health and safety of staff and surrounding and generation of solid and liquid waste	M negative	Adequate space will allow for the laboratory to run its own waste management system within the grounds avoiding potential contamination while transporting. A robust and efficient solid and liquid waste management system is very crucial to manage on-site contamination, as well as to address other potential issues such as ground water contamination through leaching. A good planning and maintaining system should be developed that assure safety in the laboratory based on occupational health and safety guidelines of IFC <sup>18</sup> and provide adequate safety equipment in handing biological samples and waste. Such system should also include maintenance of records of injuries, process to follow in an event of an injury or contamination and routine safety inspections. It is also recommended that once established the laboratory should obtain nationally/internationally recognized laboratory accreditation with objective standards by which the quality of work produced in forensic laboratories are judged. Participation in such a program is important to demonstrate to the public and to users of laboratory services the laboratory's concern for and commitment to quality
Creation of virtual regional center of excellence	Better coordination to address illegal wildlife trade issues	M positive	-
Human-wildlife conflict management	Improvement to wildlife populations	M positive	-

<sup>&</sup>lt;sup>18</sup>http://www.ifc.org/ifcext/sustainability.nsf/AttachmentsByTitle/gui\_EHSGuidelines2007\_GeneralEHS\_2/\$FILE/2+Occupation al+Health+and+Safety.pdf

Greening infrastructure	Enhance the	M positive	-
	conservation status of		
	sensitive ecosystems		
Pilot programs in endangered	Opportunities for	M positive	-
species recovery	endangered species to		
	recover to a healthy		
	population size		
	Increased intra and	M negative	Use of historic population data for
	inter-specific		conservation efforts
	competition among		Conservation plans to be made based on
	species		the community requirements as opposed
			to species-specific interventions within a
			given locality/habitat

Impact categorization: H – High; M – Medium; L - Low

# 5. SOCIAL MANAGEMENT FRAMEWORK

Subproject interventions proposed under this project are expected to be small and cause minimal negative social impacts. Land acquisition and resettlement are unlikely and discouraged under the project. However, as a precautionary measure, a Social Management Framework (SMF) has been prepared to address unavoidable impacts that may arise from: (i) loss of structures; (ii) loss of livelihood systems/income opportunity (due to the loss of productive land or impact to a structure where a livelihood activity is being carried out); and (iii) loss of community property resources (religious structures, grazing land). The framework guides the compensation for lost assets, livelihoods, community property, and resettlement and rehabilitation of project affected people in accordance with the World Bank's Operational Policy 4.12 on Involuntary Resettlement and GOI guidelines and legislation for similar circumstances. Stakeholder consultations and social screening during the feasibility stage of each activity will identify and categorize the level of impacts and what modalities need to be followed for defined losses to the project.

## 5.1 **Definitions**

## 5.1.1 General Definitions

For purposes of this framework, the following definitions will be applicable:

**Project Affected Persons (PAP)** includes any person or persons, households, a firm, or private or public institution who, in the context of acquisition of assets and change in land usage, as of the cut-off date, on account of the execution of the project, or any of its subcomponents or part, would have their:

- Standard of living adversely affected;
- Right, title, or interest in any house, land (including residential, commercial, agricultural and grazing land) or any other moveable or fixed assets acquired or possessed, in full or in part, permanently or temporarily adversely affected; or
- Business, occupation, places of work or residence or habitat adversely affected, with or without displacement provided such occupation is legal under applicable law.

PAP means persons or affected household and consists of all members of a household residing under one roof and/or operating as a single economic unit, who are adversely affected by a project or any of its components.

Household (HH)is a group of persons who commonly live together and would take their meals from a common kitchen.

**Replacement Cost** means and includes an amount needed to replace an asset at current value including depreciation and overhead expenses of the transaction, including stamp duty and registration charges, as follows:

- Agricultural land based on its productive potential;
- Residential land based on market value;
- Houses and other related structures based on current market prices of building materials and labor, without depreciation and deductions for salvaged building materials, plus transaction costs (such as administrative charges, registration and titling costs), etc.;
- Trees, crops and plants on current market value; and;

• Other productive assets like shops and commercial assets based on market value of similar location attribute, i.e. premium, etc.

**Cut-off date** is the date prior to which the occupation or use of the project area makes residents/users of the project area eligible to be categorized as affected persons. In many projects, the cut-off date coincides with the commencement of the census of affected persons within the project area boundaries. Persons not covered in the census will not be eligible for compensation and other entitlements. *For PAPs with legal titles the cut-off date would be the date of issue of legal notice under the Land acquisition act. For those without titles, the cut-off-date will be the date of commencement of census.* 

**Land**: The term land refers to land acquired under the land acquisition act of the given country or through private transactions.

Squatters are persons who occupy / possess an asset without legal title.

**Encroachers** are those owners of land adjacent to public property, who have illegally extended their land holdings or structures into the public land.

**Vulnerable groups**: These are distinct groups of people who might suffer disproportionately or face the risk of being marginalized from the effects of the project and include: (i) female headed households with dependents, (ii) disabled household heads, (iii) households falling under the generally accepted indicator for poverty, (iv) elderly households with no means of support and landlessness, and (v) indigenous people or ethnic minorities.

**Severely Affected households**: These are households that will be affected by any one of the following : (i) Significant loss of income (> 50%) and (ii) Loss of accesses to common property resources for those whose livelihoods depends on these.

## 5.1.2 Social Assessment

#### Categories of Impacts

Following basic categories of issues/impacts may take place under this project, though land acquisition and large scale loss of livelihood are highly unlikely:

- a) Loss of structure;
- b) Loss of source of livelihood;
- c) Loss of access to common resources and facilities;
- d) Loss of standing crops, trees and perennial trees; and
- e) Loss of public infrastructure.

#### Impacts and Entitlement Framework

Entitlements for compensation and rehabilitation assistance to different categories of PAPs that are likely to be applicable for this project are described in the following sub-sections of this section:

- I. PAPs losing Agricultural Land
  - (a) When the portion of the land to be lost represents 20% or less of the total area of the land-holding, cash compensation at full replacement value, will be provided to the PAP except where the portion of a landholding is critical to livelihoods such as alluvial plains. Where significantly large or entire land holding is affected by the project, the general

mechanism for compensation of lost agricultural land will be through provision of "land for land" arrangements of equivalent productivity and at location acceptable to the PAP. In case suitable replacement land is not available, at the PAPs request cash compensation at replacement cost will be provided. Because many rural dwellers and poor people may be unaccustomed to managing large sums of cash, compensation payments would be made with supervision by appropriate personnel to assure that the beneficiary makes good use of the compensation received. In cases where only partial land is affected but the remaining land becomes economically unviable, the PAP will be entitled to compensation for entire holding at full replacement value or land-for-land option.

- (b) The replacement agricultural land will be provided to the PAP free of any tax, transfer costs, registration fee or charges.
- (c) PAPs whose land is temporarily taken by the works under the Project will be compensated at replacement cost for their net loss of income, damaged assets, crops and trees, as the case may be and their landholding will be restored at least to its original condition or improved.
- (d) Affected tenants and leaseholders on the agricultural land will be compensated for the market value of the gross harvest for one year's production or the remaining period of the tenancy agreement/lease, whichever is greater.
- (e) Affected agriculture labor will be compensated for the loss of income and will be paid compensation equivalent to the six months wages and assisted in getting alternative employment.
- (f) Squatters and encroachers will not be entitled to compensation for affected land.

## II. <u>PAPs losing Structures</u>

- (a) The mechanism for compensating loss of other structures if established legally or is considered as a right as per the country regulations (example: benefits defined for indigenous peoples) will be cash compensation reflecting full replacement cost of the structures, without depreciation.
- (b) Affected households will also be entitled to a transfer/shifting allowance and a transition allowance for three months. Vulnerable squatters will also be provided with relocation assistance through viable options and assistance packages to choose from.

#### III. Loss of Income or employment

Alternatively, income rehabilitation package would be provided to the PAPs for re-employment, training in other trades and skills, agricultural inputs and extension services support, or for starting a new business depending upon their needs and priorities. The type and level of assistance required will be decided in consultation with the PAPs. Furthermore, parties that will be temporarily affected will not be eligible for cash compensation but will be consulted to have a minimization of impacts.

## IV. Loss of standing crops and trees

- (a) PAPs will be entitled to cash compensation equivalent to market value of crops and trees *based* on the type, age and productive value of affected trees.
- (b) Compensation for all types of affected assets will be provided at replacement cost.
- (c) PAPs will be provided with compensation at full replacement cost, without depreciation for any other fixed assets affected in part or in full by the project.

- (d) All PAPs severely affected by the project due to the loss of productive assets, incomes and employment will be entitled to the income rehabilitation assistance including income restoration programs, training to improve skills or other assistance for self-employment depending upon the needs and priority of the affected PAPs. These rehabilitation measures would specifically focus severely affected PAPs, vulnerable groupsand those who are either below the poverty line or those severely affected by the project due to the loss of productive assets or are likely to fall below the poverty line.
- (e) In cases where community infrastructure such as religious facilities, water resources, roads, etc. is affected, project implementing agencies will ensure that alternatives will be provided at no cost to the community. Furthermore alternative routes will be identified if necessary.
- (f) PAPs without any legal title or ownership right to the land they occupy will be compensated for all their lost assets such as structures, fixed assets, etc. at full replacement cost and provided assistance in finding suitable relocation site. The relocation site would, as for as possible, contain the access to facilities and services better than or at least equivalent to the one lost and provided with tenure security.
- (g) In case of other unforeseen impacts not covered above, appropriate measures would be determined keeping in mind the overall objective of this policy.

#### Social Implications to be taken into Consideration

**Mitigating adverse impacts**: Before taking possession of structures and before start of activities, PAPs will be paid compensation and other assistance in full. Where PAPs are entitled to relocation, the relocation site will be fully developed before the PAPs are displaced. The project will ensure that the standard of living of all affected persons is restored to the level enjoyed before the commencement of the project, and, if possible, improved.

**Compensation at Replacement Cost:** Market surveys are required to establish fair rates for assets lost by squatters, so that they may replace those at current prices and for crops and trees lost by share-croppers, tenant farmers and lease-holders.

**Entitlements to affected people without legal rights to land**: Lack of ownership does not imply ineligibility for compensation rights. The lack of legal tenure to land or assets will not be regarded as a criterion for withholding financial compensation or assistance in relocation in the project. The affected squatters will be carefully screened to ensure that resettlement and rehabilitation assistance is provided only to vulnerable families who are screened out.

**Measures to avoid illegal occupation of land identified for project activities.** The preparation of a Resettlement Plan will require that an early cut-off date, preferably at the time of the baseline survey, is established. The implementing agency will ensure that the information on cut-off date and eligibility are provided to the people with the clear understanding that anyone illegally occupying the land after the cut-off date will not be entitled to any compensation and/or assistance. The implementing agencies will also take appropriate measure to ensure that all lands that is identified for project activities remains clear of squatters. Experience shows that the most effective means of preventing reoccupation of cleared land is to enlist local communities in the prevention and reporting of such occupations.

**Relocation of displaced squatters**: Affected households will be provided with viable options for relocation to choose from that may include, among others: self-relocation; special package for transfer to the place of origin; and relocation to a suitable resettlement site on other public lands in the vicinity. Where attempts to find suitable relocation sites are not successful or the locations of identified sites are not acceptable to the PAPs, other options will be considered in consultation with the World Bank.

**Social Networks**: Planning must take into account existing social networks such as families, clans, religious groups, cooperative labor arrangements and the like. The goal of any dislocation or land acquisition should be to minimize disruption of existing social networks.

**Entitlements:** Compensation amounts will be based on the principle of replacement value. The exact value of compensation and replacement cost will be different for each activity and will be based on an economic and social survey of the area of the activity and of affected persons. Entitlement matrix is provided in Annex 6.

Activity	Environmental Impacts	Magnitude of Impacts	Mitigation Measures
Technical assistance for policy studies, development of monitoring and evaluation systems, support for modern field, research and IT equipment, staff training and capacity building including study tours and exchange programs with regional and international conservation agencies and support for institutionalizing regional coordination of wildlife protection and conservation	Opportunities for employment, promotions and training	H positive	-
Development and installation of a wildlife crime and criminal data network	Improved efficiency to the enforcement personnel. Consequently positive enforcement environment to pride disincentives for illegal activities related to wildlife crime.	-H positive	-
Establishment of a service laboratory for wildlife forensic testing for India and regional countries	Nuisance to the neighboring communities	L negative because the laboratory is a low noise/ low pollution/ effluent facility.	Laboratory is sited in institutional area away from residential areas, close to surface water/ shallow ground water table and set up in a land with considerable space.Has its own waste management systems in place.
	Squatters on the selected site	L negative	Site selected for setting up the laboratory should be free of squatters. If it is an existing site identified prior to the project where squatters are present, appropriate social safeguards tools should be utilized to ensure the PAPs are provided with adequate compensation for their displacement and/or loss of livelihoods

## Potential Social Impacts of the Project and Mitigation measures

Creation of virtual	Governance issues such as	M negative	The Regional Operational Steering
regional center of	non-representation and	negutive	Committee will ensure governance of
excellence	lack of ownership		VRCE
	1		With the rotational chairmanship among
			participating countries will ensure
			ownership and representation
Human-wildlife conflict	Safety of community	L negative	Use of only trained personal/villagers to
management	members participating	e	carry out such activities
-	such as for animal		Provision of safety equipment, first aid
	immobilization and		and equipment/vehicle to transport
	containment		injured persons to hospitals
	Change of land use	H negative	The Resettlement Policy Framework
	practices	-	outlines the process whereby stakeholder
	Changes to livelihood	H negative	consultations with communities, who are
	patterns	-	affected by HWC, should be an integral
	Restrictions to movement	L negative	part of developing pilot projects.
	of communities		Stakeholder consultations can reduce or
			eliminate any disparities that may exist
			between research findings and real-life
			experiences – and research into IPs
			supposedly more harmonious
			coexistence with wildlife would also be
			very valuable for developing suitable
			pilots.
			Since the local communities are the
			major stakeholder (and victim) in the
			HWC, their views and perceptions on
			resolving the issues are essential.
			Consultations with community members
			must also discuss the impacts the project
			is likely to have on their land use
			patterns and livelihoods derived from the
			PAs. The community can also be given
			the opportunity to suggest solutions for
			their problems as well.
			Land acquisition or forced resettlement
			of individuals will not be approved or
			supported under the project because this
			is contrary to the basic premise of the
			human-wildlife co-existence models
			piloted under the project. An
			independent committee inclusive of
			representatives of affected communities
			should be responsible of managing the
			compensation program.
			The establishment of local-level GRCs
			to handle any grievances is also
			necessary to ensure equitable
			opportunities and benefits from the
			project to the affected communities.
Pilot programs in	-	-	-
endangered species			
recovery	High: M Medium: I I		

Impact categorization: H – High; M – Medium; L - Low

## 5.2 Assessments and Documentation

## 5.2.1 Preliminary Screening

During the identification and preliminary stages of any activity preparation, the implementing agency will employ the screening check-lists designed for the project. If displacement of people such as squatters is expected a preliminary Assessment to identify the types, degree and scale of potential social impacts of the activity will be undertaken via the check-list(attached in Annex-4). In cases where the preliminary assessment indicates that the potential adverse impact of the proposed project will be significant, appropriate preparation will be done for further surveys and consultation with key stakeholders.

## 5.2.2 Activity Preparation

It is understood that given the short time allowed between the identification and the actual implementation of those activities with social implications, the preparation time for activities will be minimal. Given the above time constraints, there will not be enough time to conduct a full scale Poverty and Social Impact Assessment (PSIA) for each activity. However where the check-lists demonstrate that displacement of squatters is expected (on public lands, or on private lands) the implementation agency will be responsible for the production of a Resettlement Plan (RP.) The census and the inventory of affected assets will cover all PAPs, regardless of entitlement or land ownership. Criteria for vulnerability of PAPs should be paid particular attention in order to provide additional assistance. All data should be maintained on computerized data management system to facilitate analysis and M&E.

Displacement of squatters may induce the loss of business income, on either a temporary or permanent basis. The Inventory of Losses must record these impacts and, and these must be mitigated in accordance with the Entitlements to ensure that livelihoods are restored.

## 5.2.3 Poverty and Social Impact Assessment (PSIA)

When the sites for specific activities are identified and if, according to the substantive social effects are anticipated a brief PSIA (based on PRA techniques) will be undertaken to identify project beneficiaries, particularly focusing on poor, impacted people and other relevant stakeholders. The PSIAs will utilize a well-planned and all-inclusive communication and consultation strategy and include a baseline survey covering the prevailing status of income, employment, education, age, skills and other socio-economic aspects along with cultural and community aspects in the areas. The assessment will feed into the individual RPs created for each location and will be incorporated, along with consultation feedback from those identified in the PAP census and all other relevant stakeholders, in the development of mitigation measures, especially livelihood strategies.Generic guidelines for PSIA are provided in Annex 5.

## 5.2.4 Resettlement Plan (RP)

Abbreviated (Summary) Resettlement Plan: In cases where the impacts of the activities are without any large scale displacement due to squatters, or where the impacts are minoran abbreviated and simplified RP should be prepared. It should briefly document consultation with PAPs, provide a census survey of displaced persons and/or valuation of assets (according to current market prices determined via a market survey), demonstrate the establishment of a cut-off date via the distribution of identity cards to those entitled; description of compensation and other resettlement assistance to be provided, institutional responsibility for implementation and procedures for grievance redress, arrangements for monitoring and implementation, and a timetable and budget. In acknowledgement of the fact that that project preparation time will be very brief, these documents can be allowed to be simplified and concise, as long as the key points mentioned above are documented.

For projects that only affect small numbers of squatters on public or private land (e.g. less than 50 families), the implementing agencies will be responsible to ensure compliance with the Bank policies including keeping records of actions undertaken (the simplified and abbreviated RP) demonstrating that appropriate mitigation actions and compensation took place before physical displacement of PAPs. It is expected that the vast majority of activities will fall in this category. The implementing agencies will be responsible for overall compliance with the requirements of this framework including applying the check-lists to all activities and for producing RPs and SIAs where necessary. Random audits will be performed on this batch of activities to ensure compliance.

## 5.2.5 Social Safeguards Monitoring and Evaluation Approach

No private land acquisition is expected to take place under the project. Since most activities will be carried out in rural settings where squatters are not widely found, no major displacement is expected. Due to nature of activities and the approach taken, as well as the exact sites of intervention are not known, the implementing agencies will use the screening procedures outlined earlier to identify, assess, evaluate, mitigate and monitor social impacts of each activity/sub-project. These procedures include the following key points.

- The Project implementing agencies will be responsible to screen all of their sub-projects using a check-list to identify possible social impacts related to either land acquisition resettlement or the presence of IPs in the project areas;
- No involuntary land acquisition is anticipated under the project. If small quantities of land are at all required for some sub-projects (though this is unlikely), it may be acquired on a voluntary basis on willing buyer-willing seller terms where permissible. All land transactions will be recorded. The framework provides guidelines to comply with World Bank and respective government requirements.
- Although no land acquisition or displacement of squatters is anticipated under this project, if the activities/sub-projects trigger land acquisition and/or are expected to impact squatters or economically displace less than fifty families, an Abbreviated Resettlement Plan (RP) will be prepared by the implementing agency using the procedures and guidelines outlined in this chapter. For activities/sub-projects that trigger the displacement of more than fifty families, a brief Social Impact Assessment will also be carried out, based on which a more detailed RP will be produced. The implementing agency may hire specialist consultants in preparing the RP.
- For projects that only affect small numbers of squatters on public land (e.g. less than 50 families), the implementing agencies will be responsible to ensure compliance with the Bank policies (incorporated in the Resettlement Policy Framework) including producing the RP and keeping records of actions undertaken. It is expected that the vast majority of sub-projects will fall in this category. The Bank will sponsor an independent verification and validation study by a third party monitoring agency via a random audit based on a sample of activities/sub-projects to ensure that adequate safeguards were in place, in line with the provisions of the SMF.
- In addition to the above, for activities/sub-projects that are expected to economically or physically displace more than 50 families a brief SIA will be carried out based on which the RP will be produced. For this batch of activities/sub-projects as well as those involving impacts on Indigenous People a third-Party audit will be undertaken to assess compliance with the requirements. The implementing agencies will be responsible for carrying out implementation of the RPF. The Bank will review the results of the audits and conduct an independent validation and verification via a third party monitoring agency, on a sample basis.
- Potential monitoring indicator identified in Annex 7 will provide the basis to undertake audits.

## 5.3 Grievance Redressal Mechanism

Despite best efforts to arrive at fair rewards in a project involving possible livelihood compensation and moving of squatters, there are always a few unsatisfied citizens. The implementing agency will make efforts at project level to resolve grievances through negotiations *involving community leaders and PAP's representatives*. In case dispute is not resolved at local level, the matter will be placed before a Grievance Resolution Committee to be established at the regional level.

The Grievance Resolution Committee (GRC) shall be constitute a panel of at least four Members, one of whom shall be the field-based project staff (at the respective sites), to be selected by the implementing agency. S/He will be responsible to provide secretarial support to the panel. It will include a representative from the residents of the project area, who would be publicly known to be a person of integrity, good judgment and commands respect, who can be considered independent and will chair the GRC. Other persons would be at least one representative from local Government bodies or NGO/CBOs and a representative from the PAPs in the area.

The designated project staff shall:

- Convene meetings of the committee as necessary at such place or places in the project area as s/he considers appropriate; and
- Provide all necessary secretarial support to the committee including recording of the committee meeting discussions and dissemination of deliberations and decisions taken to all concerned parties.

The chair of the GRC shall:

• Conduct the proceedings in an informal manner as s/he considers appropriate with the object to bring an amicable settlement between the parties;

The report of the members shall be recorded in writing and attested copies thereof shall be provided to the parties. In case of continuing differences and notwithstanding the provisions of nationally applicable legislation, the GRC can take a decision regarding entitlement and compensation. The decision taken during negotiations and GRC meetings shall be formally recorded for future reference and presentation in the court, if necessary.

If the matter cannot be resolved at the regional level, complaints will be referred to the Project Director, who will head a committee that includes the Social Management Specialist, the respective PAP representative and members of well-known national level NGO/Community-Based Organization (CBOs). All expenses incurred in arranging grievance negotiations and meetings of GRC as well as logistics required, shall be arranged by project-executing agency. These will be part of the project's administrative expenses.

The aggrieved PAP, if not satisfied with the decision of Grievance Resolution Committee, has the right to refer his / her petition to court of law.

#### 5.4 **Public Consultation and Participation**

Public consultation is the cornerstone of all project activities. As such, the PAPs will receive prior information of the compensation, relocation and other assistance available to them where applicable; planning and implementation for the acquisition of land and other assets will be carried out in consultation with the PAPs.

The implementing agency will be responsible to carry out continued consultation with and information dissemination to the key stakeholders regarding:

- The relevant details of the project;
- The resettlement plan and various degrees of project impact;
- Details of entitlements under the resettlement plan and what is required of PAPs in order to claim their entitlements(a copy of the entitlement matrix will be provided to the PAPs);
- Compensation process and compensation rates;
- Relocation and resettlement site development operation in order to obtain agreement and support of affected people in participating in these operations;
- Implementation schedule with a timetable for the delivery of entitlements, and
- Detailed explanation of the grievance process.

The implementing agencies shall enlist the help of community leaders and other influential community officials in encouraging the participation of the PAPs in resettlement activities. Finally, they shall attempt to ensure that all vulnerable groups and indigenous peoples/ethnic minorities understand the process and that their needs are specifically taken into consideration.

Public participation will be performed and information will be made available during preparation and implementation of the resettlement plan and at the minimum includes community meetings and focus-group discussions. Public consultation must be appropriately documented.

## 5.4.1 Consultation Strategy

As required for informed consultation, concerned implementing agency will provide PAPs with all activity-related information, including that on potential adverse impacts in a language familiar to and understandable by the PAPs. To facilitate consultation the implementing agency will,

- Prepare a time-table for dialogues during activity selection, design and implementation processes, and consult them in manners so that they can express their views and preferences freely.
- In addition to the communities in general, consult community organizations, community elders/leaders and others with adequate gender and generational representation; and civil society organizations like NGOs and groups knowledgeable of issues related communities living within PAs/GFRs.

Consultation will include the activity objectives and scope; the likely key adverse impacts on (and benefits for) communities; communities' own perception of the impacts and feedback; and a preliminary assessment of economic opportunities which the implementing agency could promote – in addition to mitigation of the adverse impacts.

Consultation will in general concentrate on the adverse impacts perceived by the communities and the probable (and feasible) mitigation measures, as well as exploring additional development activities that could be promoted under the project. The implementing agency will keep Minutes of these consultation meetings in the activity files and make them available for inspection by World Bank, respective government officials and other interested groups and persons.

If the presence of people is identified in the sub-project area, based on the baseline data appropriate social tool will be adopted usingfree, prior, informed consultation. This will serve as the basis for sub-project implementation and monitoring.

## 5.4.2 Key Impact Areas and Indicators

The following major impact areas and indicators are suggested for assessment of PAPs concerns and social risks.

#### a) <u>Cultural Characteristics</u>

- Relationships with areas where they live -- relating to religious/cultural affinity with the ancestral lands, existence of livelihood opportunities, etc.
- Presence of customary social and political organizations characteristics indicating internal organization and cohesion of the communities, and their interaction with those of the non-indigenous population.
- Interactions and relationships with other indigenous peoples' groups in the same and other areas.
- Presence of organizations, like NGOs and CBOs, working with community development issues, and their relationships with mainstream organizations engaged in community development activities.
- Identification of any cultural aspects likely to be affected or made vulnerable because of the proposed development works.

#### *b)* <u>Settlement Pattern</u>

- The extent to which the settlements are physically separated from those of outside PAs/GRFs, indicating interactions and mutual tolerance between the groups.
- Characteristics indicating physical organization of homesteads, and the existing community facilities, such as schools, water supply, etc.
- Present distance between the settlements and the participating institute.

#### c) <u>Economic Characteristics</u>

- Prevailing land tenure -- indicating legal ownership and other arrangements that allow them to reside in and/or cultivate the lands in their areas.
- Access to common property resources -- prevailing conditions under which they may have been using natural resources like forests, water bodies, and others that are considered important sources of livelihood.
- Occupational structure -- indicating relative importance of household's present economic activities, and the extent to which they might be affected or benefited because of the proposed activity.
- Level of market participation -- engagement in activities that produce marketable goods and services, and how and to what extent market participation would be affected or enhanced.

# 6. GENDER DEVELOPMENT FRAMEWORK

## 6.1 Gender Terminology

The following provides definitions of commonly used gender terms in order to increase the utility of the gender assessment for project staff and counterparts and to support a better understanding of the framework underlying the gender assessment

**Gender**refers to the social, economic, political, cultural roles and relations between women and men. These roles and relations are learned, practiced, and over time they change and develop. In much of the world today, men and women are socialized differently, with different expectations of and attitudes to their roles and responsibilities. Given this reality, any development intervention may affect women and men differently, and can result in discrimination if gender roles are ignored.

Gender and Development approach focuses on the socially constructed basis of differences between men and women and emphasizes the need to challenge existing gender roles and relations. Focusing on how development impacts both women and men, given their different roles and responsibilities, helps to identify and address the power dynamics and stereotypes that result in discrimination against either sex. Some of the terms in general usage are:

- Gender Analysis: The process of gender analysis encompasses a set of qualitative and quantitative social science methodologies used to identify the specific gender differences present in a given society. For example, it may involve a review of data, policies, procedures, plans, budgets, and/or activities, to identify obstacles to opportunities and resources that face either sex. If the findings of gender analysis reveal discrimination against women (or men), specific programs can be designed to address that discrimination, e.g. to increase access to credit or decrease female unemployment. Often the goal of a gender analysis is women's empowerment, discussed below.
- Women's Empowerment: Women's empowerment encompasses strengthened capacity of women to equally access resources, opportunities and rights political, civil, economic, social, and cultural. The term "women's empowerment" has been included because much of the gender analysis that is done reveals a backlog of discrimination again women that must be addressed. However, it is important to avoid the tendency to automatically include "women's projects" or "women's components" in development interventions. Programs must respond in two ways: a) ensure that women and men benefit equally, and b) target resources where necessary to enable one or the other to catch up.
- **Gender Equality:** This term refers to equal access by women and men to opportunities, resources, benefits and rights and responsibilities in all spheres economic, social, cultural, civil, and political. This is the outcome of projects that have ensured that both women and men benefit equally.
- **Gender Equity:** In order to achieve equality, groups that have been previously disadvantaged may require more investment than those that have had greater access to resources. For example, if men have traditionally enjoyed more access to credit than women, a development project would target women for special and additional access to credit.
- Gender Integration: The process of gender integration requires incorporating the data generated through the gender analysis process to support program design, planning, implementation, monitoring, and evaluation of impacts. It contributes to strengthening the project's life cycle by

taking into account the structure of relations between men and women and their relationship to inequality. As a result, it becomes an important factor in managing for sustainable program impact.

- **Gender Mainstreaming**: Gender mainstreaming, particularly defined by the United Nations Economic and Social<sup>19</sup> committee as guidance for bilateral and multilateral assistance and government policies, calls for employing methods, processes and institutional structures for achieving gender equality. Gender mainstreaming goes beyond gender integration as it requires the consideration of gender as a critical element that needs to be taken into consideration in all policies, approaches and decision-making processes while, at the same time, it confronts traditional institutional arrangements in order to generate social equality and change. It is predicated on norms of justice and equality, but also on expectations that women's empowerment and gender equality will improve the lives of families and communities and nations for more effective and sustainable social, economic and political change.
- **Gender Sensitivity**: This term refers to the understanding that any development intervention may have different implications for women and men, and the determination to factor such differences into development programs. It should be noted that being female is not a guarantee of gender sensitivity: women and men can be equally gender blind and some men may be more gender sensitive than some women.

## 6.2 **Process to Follow**

Focusing on gender leads to benefits that go beyond the good project performance. Women have primary roles in the collection, transport, use, and management of fuel, fodder, water and other household activities and yet are hardly involved in decision making in the sector. Gender should be addressed through an approach that is participatory and responsive to the needs of the poor, particularly when it involves natural resources management.

The participation of beneficiaries and focus on poverty reduction are two other key determinants of the effectiveness and sustainability of any project. Any project must address the constraints on women's participation in project design, implementation and monitoring and evaluation. The project must also focus on the linkage between gender and poverty, by identifying, for example, households headed by females and those households' special needs. An adaptive, learning, and process-oriented approach works better than a blue print approach. Project beneficiaries are likely to have a stronger sense of ownership when the project gives them enough time, design flexibility, and authority to take corrective action. In this way, they find it easier to incorporate their earlier learning and negotiate with project staff and service providers. Therefore, a mechanism must be built into the project to allow such two-way interactions between the beneficiaries and the service providers.

Three major tools are used to identify and deal with gender issues in the project cycle: gender analysis, project design, and policy dialogue.

*Gender analysis should* be an integral part of the initial social assessment at the screening stage itself. The issues identified can be scaled up during the feasibility and detailed analysis can be carried out during the specific sub-project identification stage.

<sup>19</sup>http://www.un.org/documents/ecosoc/docs/1997/e1997-66.htm

The *project designs should be gender responsive* based on the gender analysis, and should be included in the design documents. The findings and recommendations from the gender analysis during sub-project planning and feedback from beneficiaries during implementation must be discussed thoroughly to determine the need for further action. Listed below are the key action points:

## General Checklist

- Identify key gender and women's participation issues.
- Identify the role of gender in the project objectives.
- Prepare terms of reference (TOR) for the gender specialist or social development specialist of the client
- Conduct gender analysis as part of overall Social Assessment.
- Draw up a socioeconomic profile of key stakeholder groups in the target population and disaggregate data by gender.
- Examine gender differences in knowledge, attitudes, practices, roles, status, wellbeing, constraints, needs, and priorities, and the factors that affect those differences.
- Assess men's and women's capacity to participate and the factors affecting that capacity.
- Assess the potential gender-differentiated impact of the project and options to maximize benefits and minimize adverse effects.
- Identify government agencies and nongovernment organizations (NGOs), community-based organizations (CBOs), and women's groups that can be used during project implementation. Assess their capacity.
- Review the gender related policies and laws, as necessary.
- Identify information gaps related to the above issues.
- Involve men and women in project design.
- Incorporate gender findings in the project design.
- Ensure that gender concerns are addressed in the relevant sections (including project objectives, scope, poverty and social measures, cost estimates, institutional arrangements, social appendix, and consultant's TOR for implementation and M&E support).
- List out major gender actions.
- Develop gender-disaggregated indicators and monitoring plan.

#### 6.2.1 Specific Checklists to be covered during various stages of sub-project cycles

## Methodology

#### Desk review

- Review available information (e.g., statistics, gender analysis, documents of previous projects) in the project area and the socioeconomic profile of the target population.
- Review the relevant legal (e.g., inheritance law), policy (e.g., R&R policy), and institutional framework (e.g., current administrative system for land acquisition, compensation disbursement) and their gender implications.

#### Household surveys

- Draw up gender-disaggregated socioeconomic and cultural profiles and identify the constraints, and needs of the target population.
- Collect quantitative information.

*Participatory methodologies*(e.g., participatory rapid appraisal, focus group discussions, random interviews, walking tours)

- Collect qualitative information which cannot be collected through surveys.
- Define ways in which men and women beneficiaries and other stakeholders, especially poor women can participate in the project.
- Map out the target areas. Which are the most disadvantaged areas in terms of access to services and poverty level?
- Identify major stakeholder groups and their stake.

## Staffing

- Ensure adequate gender balance in field teams.
- Select field team members with gender awareness, local knowledge, cultural understanding, and willingness to listen.

#### Data to Be Collected

#### Macro institutional framework

- Gender impact of sector policy; legal and institutional framework.
- Executing agency's capacity and commitment to participatory approaches and gender focus.

## Socioeconomic profile

Demographic

- Composition by gender, ethnicity/caste, age, etc.
- In and out migration trend (male and female)
- Percentage of households headed by females
- Household size
- Age at marriage, by gender

#### Economic

- Income level and sources, by gender
- Expenditure patterns and decision making, by gender
- Land tenure and use, by gender

#### Health

- Population growth rate
- Infant and maternal mortality rates
- Service availability
- Fertility level and decision making
- Food allocation and nutrition level within households, by gender
- Incidence of domestic violence

#### Education

- Literacy and school enrollment ratios, by gender
- School dropout ratio, by gender
- Child labor, by gender

#### Status of women

- Political representation and awareness
- Socio cultural perceptions and practices of men and women
- Gender-discriminatory policies and laws
- Gender roles and responsibilities

• Broad gender division of labor in productive (e.g., agriculture, income-generating activities) and reproductive (e.g., household chores, child care) responsibilities, and time allocation for each responsibility

#### Access, control, constraints

- How do men and women differ in their access to and control of land, agricultural inputs, extension, markets, employment opportunities, and credit?
- Is external assistance provided to improve access/control? By whom?

## Participation

- What factors affect the level of men's and women's participation?
- What are the incentives and constraints?
- During which season is the demand for labor highest?
- Which modes of participation do men and women favor (e.g., decision making in planning, cash contribution, labor contribution for construction, training, financial management, organizational management)?

## Project impact

- Do men and women perceive positive and negative impacts of the project differently?
- Are the benefits likely to be distributed equitably?
- How can negative effects be mitigated?
- Are there any disadvantaged or vulnerable groups?
- Who are they? Where do they live? What are their socioeconomic characteristics?
- How will the project affect these groups?
- *Land acquisition/Resettlement*: Extent of land to be acquired
- What are the gender-specific implications?

#### Organization

- What is the current level of women's representation in other community decision- making bodies?
- Are there local organizations (e.g., local governments, national NGOs, CBOs, mass organizations) that address women's constraints and needs? How can the project link up with them?
- What mechanisms can be used to ensure women's active participation in project activities?
- What organizations can be used to mobilize and train women in the project activities and livelihood options?
- Incorporate the preferences of community men and women on issues such as: number and location of assets and sharing vs. individual arrangement of assets;
- Highlight women's strengths in mobilizing savings and resources.
- Incorporate the preferences of men and women in the community on:
  - financing arrangement
  - o possible preferential treatment for very poor, female-headed and other disadvantaged families
  - o credit or community-based revolving funds for women Self-Help Groups (SHGs)

#### Community participation mechanism

- Develop a *participation strategy* for men and women during project implementation and M & E.
- Avoid overly high expectation of women's participation and develop a practical schedule, as women often have time and financial constraints. The strategy should incorporate the following:

- *Planning:* Conduct women specific consultation to take their views and suggestions on the design. Any mechanism established during the project design such as grievance mechanisms should have adequate representation from women.
- *Construction*: Ensure work conditions that are conducive to women's participation (e.g., gender-equal wage rates, construction season, toilet and child-care facilities).
- *Monitoring and evaluation (M & E)*: Develop a feedback mechanism in which both male and female have a voice. Identify organizations that could facilitate women's participation during implementation and M & E.

## Training options

- Identify ways to link up with income-generation, literacy, and other activities to support an integrated approach to poverty reduction and women empowerment
- Support a decentralized structure to allow linkages between the village and local government.
- Include financial and technical capacity building for relevant local government bodies to enable them to effectively support women SHGs.

## Staffing, scheduling, procurement, and budgeting

- Hire female project staff.
- Consider seasonal labor demand in scheduling civil works.
- If appropriate, set a minimum percentage of female laborers and prohibit the use of child laborers in the civil works contract.
- Ensure adequate and flexible budgeting to allow a "learning" approach (e.g., training budget, consulting service budget for women's organizations).

## Monitoring and evaluation

- Develop M & E arrangements: (i) internal M & E by project staff; (ii) external M & E by NGOs or consultants, as necessary; and (iii) participatory monitoring by beneficiary men and women.
- Disaggregate all relevant indicators by gender such as number of women gaining access to credit, increase in women's income, and career prospects for project trained women.

## Documentation

• Document the gender-responsive design features in the sub-project proposals

# 7. INDIGENOUS PEOPLES PLANNING FRAMEWORK

## 7.1 Indigenous Peoples

Since the exact locations of the activities within India cannot be determined at this time, the possibility that the project may impact Indigenous Peoples (IPs) or Tribal People cannot be discounted.

## 7.1.1 Objectives

The main objectives of the Indigenous Peoples Plan (IPP) are to ensure that the activities funded under project do not adversely affect IPs if present, and that they receive culturally compatible social and economic benefits. This will require the institutes to carefully screen all proposed activities to determine presence of IPs in the locality and ensure informed direct participation of the IPs in the activities.

## 7.1.2 Identifying the Indigenous Peoples

The Constitution of India, Article 366 (25) defines Scheduled Tribes as "such tribes or tribal communities or part of or groups within such tribes or tribal communities as are deemed under Article 342 to the scheduled Tribes (STs) for the purposes of this Constitution". In Article 342, the procedure to be followed for specification of a scheduled tribe is prescribed. However, it does not contain the criterion for the specification of any community as scheduled tribe. An often used criterion is based on attributes such as:

- Geographical isolation they live in cloistered, exclusive, remote and inhospitable areas such as hills and forests.
- Their livelihood is based on primitive agriculture, a low-value closed economy with a low level of technology that leads to their poverty. They have low levels of literacy and health.
- Distinctive culture, language and religion communities have developed their own distinctive culture, language and religion.
- They have a marginal degree of contact with other cultures and people.

The Scheduled Tribe groups who were identified as more isolated from the wider community and who maintain a distinctive cultural identity have been categorized as 'Particularly Vulnerable Tribal Groups' (previously known as Primitive Tribal Groups) by the Government at the Centre. So far seventy-five tribal communities have been identified as 'particularly vulnerable tribal groups' in different States of India. These hunting, food-gathering, and some agricultural communities, have been identified as less acculturated tribes among the tribal population groups and in need of special programmes for their sustainable development. The tribes are awakening and demanding their rights for special reservation quota for them.

There is a substantial list of Scheduled Tribes in India recognized as tribal under the Constitution of India. Tribal people constitute 8.2% of the nation's total population, over 84 million people according to the 2001 census. One concentration lives in a belt along the Himalayas stretching through Jammu and Kashmir, Himachal Pradesh, and Uttarakhand in the west, to Assam, Meghalaya, Tripura, Arunachal Pradesh, Mizoram, Manipur, and Nagaland in the northeast. In the northeastern states of Arunachal Pradesh, Meghalaya, Mizoram, and Nagaland, more than 90% of the population is tribal. However, in the remaining northeast states of Assam, Manipur, Sikkim, and Tripura, tribal peoples form between 20 and 30% of the population.

Another concentration lives in the hilly areas of central India (Chhattisgarh, Madhya Pradesh, Orissa and, to a lesser extent, Andhra Pradesh); in this belt, which is bounded by the Narmada River to the north and

the Godavari River to the southeast, tribal peoples occupy the slopes of the region's mountains. Other tribals, including the Santals, live in Jharkhand and West Bengal. Central Indian states have the country's largest tribes, and, taken as a whole, roughly 75% of the total tribal population live there, although the tribal population there accounts for only around 10% of the region's total population.

There are smaller numbers of tribal people in Karnataka, Tamil Nadu, and Kerala in south India; in western India in Gujarat and Rajasthan, and in the union territories of Lakshadweep and the Andaman Islands and Nicobar Islands. About one percent of the populations of Kerala and Tamil Nadu are tribal, whereas about six percent in Andhra Pradesh and Karnataka are members of tribes.

## 7.2 **Process to Follow**

## 7.2.1 Basic Principles

To avoid or minimize adverse impacts and, at the same time, ensure benefits for IPs, the implementing agencies will apply the following basic principles in selection and design of particular activity:

- Ensure that IP communities in general and their organizations are not excluded by any means in activities selection, design and implementation processes.
- Together with IPs, carefully screen the activities for a preliminary understanding of the nature and magnitude of potential impacts, and explore alternatives to avoid or minimize any adverse impacts.
- Where alternatives are infeasible and adverse impacts on IPs are unavoidable, the projects together with IPs and others knowledgeable of IP culture and concerns, will immediately make an assessment of the key impact issues.
- The project will undertake the necessary tasks in order to adopt appropriate mitigation measures. The most important in this respect is intensive consultation with the IP communities, community elders/leaders, and formal and informal IP organizations, civil society organizations like NGOs, and others who are interested in and have knowledge of IP issues.

## 7.2.2 Identifying IP Social Concerns

Impacts on IPs will vary in terms activities and their scopes, presence and size of IP population in the locales, as well as the magnitude of potential adverse impacts and social risks. To the extent applicable for a particular activity, information on the cultural and socioeconomic characteristics and potential vulnerability will be used to identify the IP social concerns and adopt alternative mitigation measures.

## 7.2.3 Impact Mitigation & Development Measures

The project will explore, together with the IP communities, the possibilities of reinforcing any existing and promoting new culturally compatible development activities/measures that will benefit the IPs. Such measures may include providing credits where IPs are found to engage in production of marketable goods; basic water supply and sanitation facilities; and those, such as schools, that could also be used by the communities as a whole.

## 7.2.4 IP Consultation Strategy

As required for informed consultation, concerned institutes will provide IPs with all activity-related information, including that on potential adverse impacts in a language familiar to and understandable by the IPs. To facilitate consultation the institution will,

- Prepare a time-table for dialogues during activity selection, design and implementation processes, and consult them in manners so that they can express their views and preferences freely.
- In addition to the communities in general, consult IP organizations, community elders/leaders and others with adequate gender and generational representation; and civil society organizations like NGOs and groups knowledgeable of IP issues.

Consultation will include the activity objectives and scope; the likely key adverse impacts on (and benefits for) IPs; IPs' own perception of the impacts and feedback; and a preliminary assessment of economic opportunities which the implementing agency could promote – in addition to mitigation of the adverse impacts.

Consultation will in general concentrate on the adverse impacts perceived by the IPs and the probable (and feasible) mitigation measures, as well as exploring additional development activities that could be promoted under the project. The institutes will keep Minutes of these consultation meetings in the activity files and make them available for inspection by World Bank, respective government officials and other interested groups and persons.

If the presence of IP is identified in the sub-project area, then an Indigenous Peoples Plan (IPP) will be prepared based on free, prior, informed consultation. This will serve as the basis for sub-project implementation and monitoring.

# 8. PLANNING, IMPLEMENTATION & MONITORING ARRAGEMENTS FOR ENVIRONMENTAL AND SOCIAL SAFEGUARDS MANAGEMENT

## 8.1 Planning, Implementation and Monitoring Arrangements for ESMF

The Project Management Unit (PMU) under the Wildlife Division(WD) will be responsible for implementing the ESMF, conducting the overall monitoring of the Project's environmental safeguard activities and ensuring the proposed activities are in compliance with the ESMF. WD will ensure that their team has at least two members assigned to supervising, developing necessary documentation (i.e. EAs, PSIAs, EMPs, etc.), monitoring and reporting on environmental and social safeguards.

All activities that involve physical interventions on the ground will be screened using environmental and social checklists (Annexes 1 and 2). The field unit of WDproposing the activity will prepare the checklists. The WD environment and social specialists will recommend the type of assessment and/or plan needed to ensure safeguards upon review of the checklist.

Any civil works must include construction guidelines or other pertinent environmental guidance in bidding documents for contractors. New physical interventions will require an EA. Environmental impacts from small-scale construction, upgrading or refurbishing activities outside of PAs/FRs can be managed through screening, application of construction guidelines and the development and application of an EMP.

In order to ensure potential social issues including possible resettlements and effects on livelihoods will be managed through Bank's OP 4.12. Based on the information generated through the social checklist and the guidance of the framework, WD will make the decision, with the concurrence of the Bank, on what actions are to be taken to ensure social safeguards compliance.

The WD will be responsible for preparing the TORs for EA and EMP and for carrying out the assessments (with or without public consultation as the need may be) with World Bank concurrence. The Project Director will formally submit the EA for GOIconcurrence and then the World Bank's no objection. Once the project is approved and implemented, monitoring of implementation progress of each sub-project will be carried out periodically by the WD and World Bank. The WD will monitor the project and submit monitoring reports to the World Bank.

## 8.2 Stakeholder Consultation and Disclosure

Stakeholders for this project include communities in the buffer areas of PAs, government department staff, environmental conservation NGO lobby, wildlife enthusiasts and private sector involved with ecotourism. In keeping with consultation requirements with Category B projects, the project will require to conduct extensive consultations with the stakeholder groups as part of project implementation in order to obtain a wide spectrum of views, ideas and concerns about conservation priorities in the participating country. In addition, during implementation the relevant agencies will need to consult with such groups as necessary to address mandatory EA-related issues that affect them.

As this is a category B project, the ESMF has to be disclosed to the public. A soft copy of the framework has been posted on the websites of the key implementing agency,WD. Hard copies have been made available in the WDfor review by interested sections of the public and will be placed at appropriate localities once specific sites are identified for project interventions. The framework will also be made

available at World Bank's public information centre in accordance with the BP 17.50 requirements of disclosure. The implementing agency will organize special workshops, if needed, to evince feedback, and these should be incorporated into the project implementation. All EIAs/IEEs/PSIAs/RPs/IPPs that will be prepared by the project once it is effective shall also adhere to this disclosure policy.

## 8.3 Capacity Building and Training

In order to complement the existing capacities and fulfill any gaps on environmental and social safeguards management, this project-specific framework will be adopted. It has been identified it would be necessary to put in place certain amount of capacity to implement and monitor both environment and social safeguards as defined in this ESMF within the WD.

If it is necessary it has been proposed the WD should conduct a capacity needs assessment (process is provided in Annex 8) and make arrangements to provide training on ESMF requirements and conducting, managing and monitoring safeguards during year 1 of project implementation. In addition, Annex 9 (a) and (b) provide the TOR for social development officer and environmental officer, if additional staffing is required to be included within the implementing agencies based on the capacity needs assessment.

## **Annex 1 - Environmental Checklist**

Title of sub-project/activity: Brief description of the sub-project/activity: Location:

	INTRODUCTIO	N		
1	Does the site /project require any;	Yes	No	If yes, give the extent in ha
	Reclamation of land/wetland			
	Clearing of forest			
	Felling of trees			
2	Distance from coastline (m) (high water mark)			
3	Minimum land area required for the proposed			
	development (based on urban guidelines) (ha)			
4	Available total land area within the identified location (ha)			
5	Expected construction period (for infrastructure projects)			
6	Anticipated Date of Completion			
7	Present Land Ownership	State □	Private	Other (specify)
8	Total approximate Cost of the Project			

	DESCRIPTION OF THE ENVIRONMENT								
		PHYSICAL							
9	Topography & Landforms (map): Attach an extract from relevant 1: 50,000 topographic sheet/ if detailed maps are available provide them. If this information is unavailable, please describe the location.								
10	Relief (difference in elevation)	Low <20m	-	Aedium 20-40m	High 40-60		>60m		
11	Slope	Low <30%	-	India         High           0-40 %         40-60 %           □         □		, 0	Very High > 60% □		
12	Position on Slope	Bottom	Μ	lid-slope Upper-slo		ope			
13	Soil Type								
14	Depth of top soil	Shallow < 20cm		Mod 20 – 1			Deep >100cm □		
15	Soil Erosion (this information will be based on the site and surrounding environment)			Med			High		
16	Climate	Wet			Dry		Arid		
17	Annual dry period								

	DESCRIPTION OF THE ENVIRONMENT									
	PHYSICAL									
18	Source of fresh Surface Water	Spring/	Spring/ Tank/Rese		Perennial		l Seasonal			None
		canal	rvoir		Stream	n	Str	eam		
19	Surface Water Use (at the site and/or	Domestic	Washin	ıg∕B	Irriga	tion	An	imal		Other
	surrounding environment)		athing				use	;		
20	Surface Water Quality	Poor 🗖		Mo	derate			Good		
21	Ground Water Availability	Dug Well 🗖	Dug Well 🗖 🛛 T		Tube Well				er (sp	pecify) 🗖
22	Ground Water Use	Domestic			0		igation Anima use <b>D</b>			Other 🗖
23	Ground Water Quality	Poor 🗖		Moderate				Good	d 🗖	
24	Incidence of Natural Disasters	Floods	Pro	longe	d	Су	clone	es/	Ot	her
			dro	ughts		tidal w		ves	(sp	ecify) 🗖
25	Geological Hazards	Landslides	Roc	k fall	s 🗖	Subsi	denc	e 🗖	Ot	her
									(sp	ecify) 🗖

		ECOLOG	ICAL			
26	Habitat Types in the Project Site (indicate the approximate % of each habitat type)	Natural forest	degraded forest	natural scrubland	riverine forest	abandoned agricultura l land
		marsh	lagoon	estuary	coastal scrub	mangrove
		salt marsh	home- gardens	grassland	degraded scrubland	Other (list)
27	Habitat types within 500m radius from the site periphery (indicate the approximate % of each	Natural forest	degraded forest	natural scrubland	riverine forest	abandoned agricultura l land
	habitat type)	marsh	lagoon	estuary	coastal scrub	mangrove
		salt marsh	home- gardens	grassland	degraded scrubland	Other (list)

Screening Questions	Yes No		Sca	ale of impa	Remarks	
-			High	Medium	Low	
A. Siting of the Activity / Sub-project						
Are there any environmentally and						
culturally sensitive areas within the						
project site and 500 meters from the						
project boundary?						
Protected Areas / Forest Reserve						
• Migratory pathways of animals	п				п	
• Wigratory pathways of animals	-		-		-	
Archeological sites						

Screening Questions	Yes	No	Sca High	l <b>le of impac</b> Medium	c <b>ts</b> Low	Remarks
• Wetlands			Ő			
Mangroves strands						
• Estuarine						
• Bufferzone of PAs/FRs						
• Special area for protecting biodiversity						
Are there any plants (endemic and threatened species) of conservation importance within the project site and 500 meters from the project boundary?						
Are there any animals (endemic and threatened species) of conservation importance within the project site and 500 meters from the project boundary?			•			
<b>B. Potential Environmental Impacts</b> Will the activity / sub-project cause						
I and disturbance or site clearance?						
<ul> <li>negative effects on rare (vulnerable), threatened or endangered species of flora or fauna or their habitat?</li> </ul>						
<ul> <li>negative effects on designated wetlands?</li> </ul>						
<ul> <li>spread of invasive plants or animals?</li> </ul>						
<ul> <li>negative effects on wildlife habitat, populations, corridors or movement?</li> </ul>						
<ul> <li>negative effects on locally important or valued ecosystems or vegetations?</li> </ul>						
• destruction of trees and vegetation?						
<ul> <li>impact on fish migration and navigation?</li> </ul>						
<ul> <li>obstruction of natural connection between river and wetlands inside project area or natural drainage</li> </ul>						

	Screening Questions	Yes	No	Sca High	l <b>e of impa</b> Medium	Remarks
	system?			0		
•	water logging due to inadequate drainage?					
•	insufficient drainage leading to salinity intrusion?					
•	negative effects on surface water quality, quantities or flow?					
•	negative effects on groundwater quality, quantity or movement?					
•	increased demand of water requirements leading to reduction of water supply for competing uses?					
•	increase probability of spread of diseases and parasites?					
•	significant sedimentation or soil erosion or shoreline or riverbank erosion on or off site?					
•	loss of existing buildings, property, economic livelihood?					
•	negative impact on soil stability and compactness?					
•	impacts on sustainability of associated construction waste disposal?					
•	changes to the land due to material extraction?					
•	traffic disturbances due to construction material transport and wastes?					
•	increased noise due to transportation of equipment and construction materials?					
•	increased noise due to day-to-day construction activities?					

Screening Questions	Yes	No	Sca High	ale of impa Medium	Remarks
<ul> <li>increased wind-blown dust from material (e.g. fine aggregate) storage areas?</li> </ul>		D			
<ul> <li>degradation or disturbance of historical or culturally important sites?</li> </ul>					
• health and safety issues?					
Will the activity / sub-project require					
<ul> <li>setting up of ancillary production facilities?</li> </ul>					
<ul> <li>significant demands on utilities and services?</li> </ul>					
<ul> <li>accommodation or service amenities to support the workforce during construction</li> </ul>					

Note: Please add any other screening questions relevant to the proposed activity / sub-project. Also provide additional explanation of the responses and/or positive impacts in the remarks column.

Name of the officer completed the form (project proponent)
Designation and contact Information
Overall observation and recommendation
Signature and date

	FINAL OBSERV	ATIONS & RECOMMENDATIONS
(a)	Does this site require an Initial	
	Environmental	
	Examination/Environmental Impact	
	Assessment (IEE/EIA) or any other	
	Environmental Assessments (EA)	
	under the national regulations and	
	please state the reasons?	
(b)	Although national regulations may not	
	require IEE/EIA at this Site, are there	
	environmental issues which need to be	
	addressed through further	
	environmental investigations and/or	
	EA based on the guidance provided in	
	ESMF? If the answer is "Yes" briefly	
	describe the issues and type of	
	investigations that need to be	
	undertaken.	
(c)	Will this site be abandoned based on	
1	the current observations? If yes, please	
	state the reasons.	

	FINAL OBSERVATIONS & RECOMMENDATIONS					
(d)	Does the proposed site meet the national urban planning requirements					
	(only applicable for activities outside					
	PAs)? If the answer is "No", what					
	needs to be done to meet these					
	requirements; if the answer is "Yes",					
	has the project site obtained the necessary approvals?					
(e)	In addition to the above issues, please					
	indicate any additional observations,					
	recommendations if any					

Name and Contact Information of the officer who made the final observations and recommendations (PMU) Signature and Date

## Annex 2 – Social Screening Format

#### A. General Information

Title of the Subproject:

Site Locality:

Screening Date:

## B. Project Related Information

## B1 Activities includes: (described in brief regarding subproject activities)

B2. Describe existing land use/occupancy of site and surroundings in brief and accordingly draw a free-hand map (**Please use separate sheet**)

#### C. Socio-economic Information

- C1 What are the asset(s) that would be affected due to Subproject Interventions? Yes or No
  - Land .....
  - Physical Structure (dwelling or commercial).....
  - Trees/crops.....
  - Natural Resources (Water bodies/ Forest/ Public Pond)....
  - Community Resource Property.....
  - Others (please specify)....

## C2 Land

- C.2.1 Ownership of Land: Public/Private.....
- C.2.2 Type of Land: Agricultural/ Homestead/ Low Land /Fallow/ Pond/Others Please specify.....
  - Does the subproject require additional land permanently or on a temporary basis?
  - Sometimes as part of road/canal/community resource property upgrading interventions, subprojects may require small parcels of land permanently to meet engineering design requirements. In such case what would be the land procurement policy? Direct Purchase...Yes/no.....; voluntary donation.....yes/no...; acquisition ......................?
  - To except voluntarily donated land what would be the legal procedure?
  - In case of land acquisition, will there be physical and/or economic displacement of people?

# C2.3 Is there any **squatter/ encroacher/ leaseholder** residing on public lands? **Yes/ No** and specify type

If yes.

- What would be the total numbers of Affected Families?
- Is there any possibility of physical displacement?
- How will their livelihoods be affected? (example: due to loss of shelter and housing structure, loss of income source, loss of grazing field/ social network/ family bondage etc) Do the affected families have school going children? Yes/no If yes,......how many such children are there?
- Among the affected household, is there any person holding long term lease? Yes/no....., if yes, Land uses for what purpose?...., Till how many years remains out of total leasing period?.....

#### C3 <u>Structure (Housing/Commercial)</u>

- C 3.1 Type and total number of Housing structure that would be affected:
- C 3.2 Is there any commercial/ business structure that would be affected?
- C 3.3 Ownership types of the affected structures: Private/ Leaseholder/squatter/encroacher Please specify
- C 3.4 Is there any tenant identified using the affected structure? Yes/No

## C 4. Trees and Crops

- C 4.1 Is there any tree/plant that might be affected? Yes/no...... Total estimated number by size.....?
- C 4.2 Is there any social forestry /plantation project that would be affected? Yes/no.....
- C 4.3 Is there any common fruit bearing tree that would be affected? Yes/no...... Species.....
- C 4.4 Any agricultural land included within the subproject footprint? Yes/no.....

If yes, please provide necessary information regarding productivity of land, type and quantity of Crop that might be affected and market value

.....

- C 5. Is there any <u>Community Resource Property</u> that would be affected? Yes/No..... Please Specify...... Who are the beneficiaries of the affected Community Resource? What is their reaction- Positive/negative?..... Did they support the project?. Yes/No....... What are the reasons to support/ stand against the project?
- C6. Is there any **Natural Resource** that might be affected? Yes/No.....

If yes, please describe regarding dependency on the Affected Resources

## C7. <u>Indigenous Peoples</u>

- C 7.1 Is there any community of Indigenous Peoples residing within or adjacent the project site? Yes/No......For how long .....?
- C 7.2 Any Households of Indigenous Peoples would be affected? Yes/No..... If yes, how many families would be affected?.....
- C 7.2 Is there any way that proposed project may pose any threat to cultural tradition and way of life of indigenous Peoples? Yes/No.....

#### C 8 Beneficiaries

- C 8.1 Who are the Beneficiaries? How they would be benefited by the subproject?
  - Access to health facilities/services? Yes/No.....
  - Better access to schools, education and communication? Yes/No.....
  - Project activities would provide income generating source. Yes/No...... Please describe
  - Subproject shall promote marketing opportunities of the local products? Yes/No..... If yes, how would that happen? Please elaborate
  - Are people ready to co-operate with the project? Yes/No..... Please elaborate the reasons
- C 9 How will the subproject create opportunities for Beneficiaries?

## Annex 3 – Generic Guidelines/ TOR for Poverty and Social Impact Assessment<sup>20</sup>

Poverty and Social Impact Assessment (PSIA) involves the collection of data related to measurable change in human population, communities, and social relationships resulting from a development project or policy change; in this case an eco-systems conservation and management tourism project. The SIA must gather data on the following variables prior to the implementation of the project (planning/ policy development stage).

- 1. Population Characteristics- present population and expected change, ethnic and racial diversity etc.
- 2. Establish Socio-economic baseline: Household survey including a description of production systems, labor, and household organization; and baseline information on livelihoods (including, as relevant, production levels and income derived from both formal and informal economic activities) and standards of living (including health status) of the affected population;
- 3. Assess the magnitude and nature of the expected livelihood impact of proposed sub-project, and basic data on vulnerable groups or persons for whom special provisions may have to be made
- 4. Community and Institutional Structures- the size, structure, and level of organization of local government including linkages to the larger political systems. They also include historical and present patterns of employment and industrial diversification, the size and level of activity of voluntary associations, religious organizations and interests groups, and finally, how these institutions relate to each other.
- 5. Political and Social Resources- the distribution of power authority, the interested and affected publics, and the leadership capability and capacity within the community or region. Potential impact of project interventions on inter-community relations and local minorities in the wider locality.
- 6. Individual and Family Changes- factors which influence the daily life of the individuals and families, including attitudes, perceptions, family characteristics and friendship networks.
- 7. Community Resources- patterns of natural resource and land use; the availability of housing and community services to include health, police and fire protection and sanitation facilities. A key to the continuity and survival of human communities are their historical and cultural resources. Possible changes for indigenous people and religious sub-cultures also fall here.

#### Scope of work:

- 1. Gather data on all variables and during all the stages specified above. Mobilization of research assistants in this venture.
- 2. Use participatory tools in data gathering.
- 3. Public involvement- Develop an effective public plan to involve all potentially affected publics.
- 4. Identification of alternatives- Describe the proposed action or policy change and reasonable alternatives.
- 5. Baseline conditions- Describe the relevant human environment/area of influence and baseline conditions: The baseline conditions are the existing conditions and past trends associated with the human environment in which the proposed activity is to take place.

<sup>&</sup>lt;sup>20</sup> These guidelines are based on the international SIA guidelines/ principles put forward by IAIA (International Association for Impact Assessment- USA) (2003) and on the guidelines by the Interorganizational Committee on Guidelines and Principles for Social Impact Assessment, USA (1994). The consultant/s undertaking each SIA must be encouraged, as much as possible, to follow the international guidelines specified by these organizations. However, certain adaptations may be required to suit the local social, economic and cultural scenario.

- 6. Scoping- After obtaining a technical understanding of the proposal, identify the full range of probable social impacts that will be addressed based on discussion or interviews with numbers of all potentially affected.
- 7. Projection of estimated effects.
- 8. Predicting community responses to impacts- Determine the significance to the identified social impacts.
- 9. Indirect and cumulative impacts- Estimate subsequent impacts and cumulative impacts. Indirect impacts are those caused by the direct impacts; they often occur later than the direct impact, or farther away. Cumulative impacts are those impacts which result from the incremental impacts of an action added to other past, present, and reasonably foreseeable future actions regardless of which agency or person undertakes them.
- 10. Changes in alternatives- Recommend new/ changed alternatives and estimate/ project their consequences: Each new alternative or recommended change should be assessed separately.
- 11. Mitigation- Develop a mitigation plan.
- 12. Monitoring– Develop a monitoring program.

## Expertise required:

This may vary according to the components.

It is recommended that individuals with at least a Master's Degree in social science with experience in applied research techniques be recruited as chief researchers.

Several assistants who possess at least a BA degree should be recruited to support the chief researcher.

#### Deliverable:

- 1. Interim reports to be submitted one month after the SIA for comments by the implementing agencies.
- 2. Final report to be submitted two weeks after receiving comments.

# Annex 4 - Entitlement Matrix

No.	Type of Impact	Entitlement Unit	Entitlement
1	Loss of structures (house, sheds, temporary structures, boundary walls, etc.)	Title holders and non- title holders (tenants)	<ul> <li>Cash compensation equivalent to the amount per latest BSR rates at replacement cost without depreciation</li> <li>Lump sum shifting allowance of Nu. 1500.00 (or actual cost of production of bills) to title holders that will have to shift to a new or reassigned plot</li> <li>Rights to salvage materials</li> </ul>
2	Loss of economic assets (such as fruit trees)	Title holders	<ul> <li>Compensation at replacement cost based on the latest rates</li> <li>Right to salvage materials</li> </ul>
3	Loss of income /livelihood	Title holders and non- title holders (tenants)	• Compensation at replacement cost based on the net revenue earned per month for 3 months to enable them to re-establish their livelihoods
4	Loss of dwelling	Title holders and non- title holders (tenants)	<ul> <li>Reimbursement of rental deposit or unexpired lease amounts</li> <li>Lump sum shifting allowance of Nu. 1500.00 (or actual cost of production of bills)</li> </ul>
		Vulnerable groups	<ul> <li>Resettlement assistance to those that earn less than Nu. 5,000.00 per month and women-headed households with low household productive capacity (no paid employees) to enable them to restore or improve pre-displacement level livelihoods. A lump sum of Nu. 10,000 special assistance is proposed</li> </ul>
5	Shifting/ readjustment of plots	Title-holders	Consultations with PAPs will take place during demarcation of plots to reduce negative impacts
6	Any other loss not identified	Title holders and non- title holders (tenants)	• Unanticipated involuntary impacts will be documented and mitigated at the time of implementation based on the principles provided in the ESMF

Note: All compensation/assistance shall be paid before relocation/displacement and all such payments will be borne by the GOI.

Monitoring Issues	Monitoring Indicators		
Budget and Timeframe	<ul> <li>Have all resettlement staff been appointed and mobilized for field and office work on schedule?</li> </ul>		
	• Have capacity building and training activities been completed on schedule?		
	• Are resettlement implementation activities being achieved against agreed implementation plan?		
	• Are funds for resettlement being allocated to resettlement agencies on time?		
	<ul> <li>Have resettlement offices received the scheduled funds?</li> </ul>		
	<ul> <li>Have funds been disbursed according to RAP?</li> </ul>		
	<ul> <li>Have the affected HHs been relocated in Resettlement Site?</li> </ul>		
	• Has the land made encumbrance free and handed over to the contractor in time for project implementation?		
Delivery of AP Entitlements	<ul> <li>Have all PAPs received entitlements according to numbers and categories of loss set out in the entitlement matrix?</li> </ul>		
	• How many affected households relocated and built their new structure at new location?		
	• Are income and livelihood restoration activities being implemented as planned?		
	<ul> <li>Have affected fishing grounds received entitlements?</li> </ul>		
	• Have the non-titled PAPs been compensated as per RAP?		
	• Have the community structures are compensated and rebuilt at new site?		
Consultation, Grievances	Have resettlement information brochures/leaflets been prepared and distributed?		
and Special Issues	<ul> <li>Have consultations taken place as scheduled including meetings, groups, community activities?</li> </ul>		
	• Have any PAPs used the grievance redress procedures? What were the outcomes?		
	Have conflicts been resolved?		
Benefit Monitoring	<ul> <li>What changes have occurred in patterns of occupation compared to the pre- project situation?</li> </ul>		
	• What changes have occurred in income and expenditure patterns compared to		

# **Annex 5- Social Monitoring Indicators**

	pre-project situation?
•	Have PAPs income kept pace with these changes?
•	What changes have occurred for vulnerable groups?

## **Annex 6 - Safeguards Capacity Assessment Process**

#### Introduction

To support the capacity development process effectively requires identifying what key capacities already exist and what additional capacities may be needed to reach objectives. This is the purpose of a capacity assessment. A capacity assessment is an analysis of desired capacities against existing capacities which generates an understanding of capacity assets and needs that can serve as input for formulating a capacity development response that addresses those capacities that could be strengthened and optimizes existing capacities that are already strong and well founded. It can also set the baseline for continuous monitoring and evaluation of progress against relevant indicators and help create a solid foundation for long-term planning, implementation and sustainable results.

In the present requirement, it is necessary to assess the level of capacity to ensure environmental and social safeguards requirements of the participating countries, as well as the World Bank are adequate. If it is not adequate, the assessment will identify the type of capacity needs in terms of specialized staffing and/or training of existing staff in order to fulfill the requirements.

#### Framework for capacity assessment

These are the four capacity issues that to be the most commonly encountered: 1) institutional arrangements; 2) leadership; 3) knowledge; and 4) accountability. The capacity assessment team should at least consider all of them as it defines the scope of an assessment. They can be amended based on the needs of the client and the situation. In addition to functional capacities necessary to manage the Environmental and Social Management Framework will need to be assessed.

#### The process for conducting a capacity assessment

It is suggested that the team follows a three-step process to conduct a capacity assessment. The activities in each step aim at deepening engagement of implementing team and promoting dialogue among key staff around the capacity assessment process.

- Mobilize and design: Engaged team and a clear design are key to a successful capacity assessment. The design is driven by three guiding questions: 1) capacity for why?; 2) capacity for whom?; and 3) capacity for what?.
- Conduct the capacity assessment: During the capacity assessment data and information are collected on desired and existing capacity. This data and information can be gathered by a variety of means, including self-assessment, interviews and focus groups;
- Summarize and interpret results: The comparison of desired capacities against existing capacities determines the level of effort required to bridge the gap between them and informs the formulation of a capacity development response including terms of reference for new expertise if needed..

## **Annex 7 - TORs for Social Development and Environmental Officers**

## (a) Social Development Officer

Specific responsibilities of the Social Development Specialist at the project implementation level will include the following:

- Ensure that social issues and social management activities identified as part of Environmental and Social Management Framework including Indigenous Peoples Plan and Gender Development Plan are mainstreamed into the design and plan at the subproject level. In conjunction with the implementing agency, Social Development officer would conduct the social appraisal for the work plan of each sub-project and for providing the final social clearance to the workplans.
- Undertake field visits to the selected sub-projects to assess, how social issues related to the project activities are addressed at the subproject level.
- As part of the field visits, hold discussions with the PAPs and other relevant stakeholders and guide them in addressing social issues with particular reference to resettlement and impacts on livelihood, indigenous and gender development.
- Assess the completeness and appropriateness of the Poverty and Social Impact Assessments / Resettlement Plans (RPs) based on the field visit observations.
- Determine compliance of the safeguard management plans prepared at the sub-project level with the agreed the Social and Environmental Management Framework including policy frameworks and strategies on resettlement, indigenous and gender development, etc.
- Interact and coordinate within the implementing agency and other related departments/agencies particularly those dealing with development schemes for rural families, tribal and women to ensure dovetailing their programs for the benefit of these vulnerable sections.
- Develop monitoring formats to be used at the subproject level.
- Ensure that participatory monitoring is carried out by stakeholders and that the lessons learnt are reflected in activities of the subsequent irrigation schemes covered under the project.
- Review the monitoring reports prepared by the field staff and consultants on the preparation of assessments and implementation of plans. Based on these reviews (i) identify deviations, if any, in implementing social measures, (ii) identify positive measures taken at the sub-project level, (iii) suggest improvement in the social management plans and implementation at the sub-project level and (iv) disseminate good practices to the project functionaries.
- Prepare 'case studies' based on the reviews of monitoring reports and sample survey of the selected sub-projects and document procedures adopted, problems faced and good practices in planning and implementing social management plans.
- In order to review the actions taken by the project field officers, organize periodic meetings.
- Prepare and implement, as an on-going activity, plan for training and capacity building of the project functionaries to address social issues associated with the project.
- Have regular interactions with the Social Development Specialist of the World Bank on social and environmental management activities of the project.
- Any other responsibility assigned by the head of the project team

Qualification and Experience:Post Graduate in Sociology / Social Science / Anthropology / Community Development with suitable experience in community development, participatory natural resource management, community mobilization, gender and rural development. The candidate should be conversant with the Participatory Rural Appraisal techniques and other participatory approaches with aptitude for participative monitoring and evaluation in water resources sector and irrigation sub-sector. The candidate should be well versed with the socio-economic conditions of the project area and be well conversant with the local language.

## (b) Environmental Officer

The Environment Officer of the project will be the central resource person for planning, formulation and coordination of the environmental management activities concerning all the environmental aspects of the sub-projects. The Environment Officer will be based in the implementing agency and will report directly to the head of the project team. Specifically, the responsibilities of the Environment Officer will include the following:

- The Environment Specialist will be the primary person responsible for ensuring that the environmental components of the Environmental and Social Management Framework are properly integrated into the Project Operations. In conjunction with the Social Development Officer, he/she would conduct the social and environmental appraisal for the work plan of each sub-project and for providing the final social/environmental clearance to the work-plans.
- Field visits to the selected sub-projects to assess, how environmental issues have been addressed on the ground. Field visits should include discussions with the project stakeholders.
- Assessment of the completeness and appropriateness of the environmental components of the framework and associated strategies and action plans, based on the field visit observations.
- Determination of compliance of sub-projects to National, State and World Bank safeguard requirements based on the field visit observations.
- Ensuring that regular monitoring reports are prepared for the environmental safeguards.
- In conjunction with the Social Development Officer, organizing and supervising the consultancy for social and environmental audits of the Project.
- In conjunction with the Social Development Officer, preparation of half-yearly reports on the status of social and environmental aspects of the sub-projects under implementation, including (i) the deviations in implementing environmental measures, if any, (ii) positive measures taken at the sub-project level, if any, (iii) reconciliation of the findings of the external and internal audit reports, and (iv) suggestions for further improvement of environmental management practices at the sub-project level.
- Ensuring that environment-related modules are incorporated in the training and capacity building programs designed for the Project at all the levels.
- Interactions with the External Consultants and World Bank Mission on Environmental aspects.
- Any other responsibility assigned by the head of the project team

Qualification and Experience:Post Graduate in Environmental Sciences/ Engineering or a related field with suitable experience in environmental management and monitoring with special emphasis on natural resources management and conservation. The candidate should be well versed with preparation of environmental management and action plans. He should be conversant with environmental monitoring tools and techniques. Familiarity with procedures and practices of the government and the World Bank is a must