

## **POLICY PAPER ON WILDLIFE CONSERVATION INDIA**

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### **Introduction**

India is an internationally recognized 'mega-biodiversity' nation. In spite of occupying just 2.2% of world's land area India harbors 13% of its bird species and 7% of the mammals as well as significant diversity of other animal and plant taxa. The 'wildlife' component of biodiversity is scientifically defined as 'terrestrial, free-ranging, vertebrates', with a national policy focus on larger threatened species and their habitats.

The Hindu ethos philosophically recognizes the 'rights of wild species to exist. Most other cultures hold a more expedient view that nature exists for the sake humanity. This is one of the reasons why India's wildlife has survived the post-colonial transition facing difficult socio-economic challenges. Unfortunately, this natural asset is at great risk, even as the country has attained necessary resources to conserve it.

Scientifically defined, 'wildlife conservation' includes recovery of rare wild species, wise utilization of a few others (e.g. Inland fisheries) as well as mitigation of their depredations on crops, livestock and human lives.

In India, such wildlife commonly occurs within government designated wildlife reserves (national parks and wildlife sanctuaries). It may sometimes be found in other types of lands owned by the government, communities or Individuals. Regardless of where it occurs, wildlife is government property.

Two primary laws govern conservation of wildlife and its habitat: The Wildlife Protection Act of 1972 (WLP) and the Indian Forest Act of 1927 (IFA). Other laws such as the Forest Conservation Act of 1980 (FCA), Environmental Protection Act of 1986 (EPA) have also positively impacted wildlife conservation. Furthermore, conservation of biodiversity, of which wildlife is sub-set, is also mandated by the Biological Diversity Act of 2002 (BDA), and other laws consequent to International treaties. However, the Forest Rights Act of 2006 (FRA) has negatively impacted wildlife contrary to one of its professed goals.

Wildlife was placed in the Concurrent List of the Indian constitution in 1976. The Centre provides policy guidance and partial funding, while the States also provide fund as well as manage the wildlife.

At the Centre, wildlife conservation is the responsibility of the Ministry of Environment, Forests and Climate Change (MOEF&CC), and in States that of 'Departments of Forests'. Officers of the Indian Forest Service (IFoS), an All India Service resurrected in 1969, occupy higher levels of management, with lower level staff being drawn from respective State Cadres. (Words: 385)

## History and Current Status of Wildlife Conservation Policies

Historically, the following steps were foundational in India's effort to conserve wildlife:

1. Creation of a government-owned 'Forest Estate' covering nearly 30% of the country in the 19th century, to stem the ongoing wholesale conversion to agriculture. That notified forest area has eroded down to 17% of India's land area of 3.1 million sq.km. Only half of this forest area is still somewhat intact. Only 4-5% of land area is in legally designated wildlife reserves (National Parks and Sanctuaries). At a rough guess, barely 2-3% of the land supports wildlife at reasonable densities. These basic facts contradict the wildly held impression that, wildlife conservation is significantly retarding India's economic development.

2. Enactment of strong conservation laws (WLPA, FCA, EPA) were enacted during 1972-1984. These were vigorously advocated by wildlife conservationists, sternly mandated by Prime Minister Indira Gandhi and firmly implemented by State Forest Departments. These policies, which led to significant wildlife recoveries preceded the 1990s economic reforms, which raised incomes, consumption and social aspirations. In contrast, in ASEAN countries and China, this sequence was reversed, and most of the wildlife was irreversibly lost.

However, after 1990's, political support for conservation has declined and violations of earlier conservation laws ratcheted up, clashing against attempts to speed up development and redress social grievances. Citizen groups advocating 'conservation', and, sometimes 'social justice,' legally challenged such violations, compelling the Supreme Court of India, and, sometimes local courts and tribunals to intervene.

As a result, today, needs of 'development' and 'wildlife conservation' have locked horns causing legal gridlocks across India, thwarting meaningful progress on both fronts. Given that needs of wildlife conservation are primarily confined to a tiny fraction of the land, generating smarter, evidence-based policies to address these problems does appear feasible. Unfortunately, during the last decade, governments a both at the Centre and States have been trying to undermine conservation laws that enabled earlier wildlife recoveries, instead innovating such pragmatic solutions.

For example, the initiative by the NDA government in 2104, to setting up the Subramaniam committee, was poorly conceived. The committee essentially tried to subordinate all conservation laws to one omnibus 'environmental management law'. This attempt failed because of its own inconsistencies as well as challenges mounted by conservationists through the legislative process.

Unfortunately, the conservation community has not offered realistic responses either. Mainstream conservation thinking in India has largely boxed itself into a romantic vision of 'traditional harmony' of human needs with wildlife conservation. It is a position that denies the obvious fact that communities themselves are now demanding modern development. Such 'Luddite' conservation positions appear to be surprisingly ideology-free. They are manifest among conservationists oriented towards Maoism, Socialism, Gandhism, Hindutva and even post-modernism.

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Because conservationists have failed to generate pragmatic solutions (Gadgil Report on Western Ghats being a good example), courts and bureaucracy have expanded their roles.

A clear outcome has been massive growth of bureaucracy in the wildlife sector aided by sundry 'experts' under its command. Conservation interventions, in the form of environmental impact assessments, wildlife population surveys, management of wildlife habitats, landscape level conservation planning, wildlife tourism, human-wildlife conflict mitigation have all come under the thumb of this powerful 'statist' domain. Infusion of science, genuine new knowledge and private enterprise, never strong to begin with have been choked by growing coils of red tape.

Ironically, in the same post-liberalization period significant progress has been achieved in several other sectors by applying private enterprise, modern technologies and robust science. This is strikingly evident in fields as diverse as health care, agriculture, telecommunication, information technology, finance and transportation.

In contrast, in wildlife conservation, despite massively increased funding progress has stalled. The primary problem is the expansion of the state-centric conservation model beyond its legitimate domain of wildlife law enforcement. It now encroaches and stifles complementary fields of wildlife research, monitoring, habitat management, tourism, public education, and even rural development activities on forest boundaries.

India's significant wildlife gains of 1970- 1990s are now at risk unless policy innovations that imbibe scientific talent and private enterprise are put in place. Such policies must squarely address the key needs of wildlife recovery, and, must include explicit metrics for assessing both successes and failures. Neither a luddites longing for the past nor a reckless rush to development can deliver the necessary innovations.

With this background in view, I have proposed a few policy formulations under the 'sustainable landscapes' conservation paradigm proposed by ecologist John Robinson in 1993. Its fundamental merit is that the model does not deny the societal aspiration for prosperity, even as it pursues explicit conservation objectives. (Words: 755)

## **POLICY PROPOSALS FOR THE WILLDIFE CONSERVATION SECTOR (1919-1924)**

### **1. The Sustainable Landscapes Policy Framework**

The policy framework avoids conflating 'conservation' with 'development'. The two endeavors involve very different goals, processes and outcomes. I propose that India's geography should be spatially categorized as 'Conservation Priority Landscapes (CPL)', 'Multiple Use Landscapes (MUL)' and 'Intensive Development Landscapes (IDL)' respectively. Preliminary Biogeographic studies at Centre for Wildlife Studies, suggest that a spatial unit of 20 sq.km, may be the appropriate 'grain' for designing a quilt of sustainable landscapes across India. At a rough guess, to adequately capture India's wildlife diversity at least 10% of

the geographic area should be in CPLs, an additional 60% in MULs and the remaining 30% in IDLs. Different sets of policies and laws should govern these landscape types.

In terms of applicability of conservation laws, EPA which covers air, water and soil quality and BDA which deals with general biodiversity, should apply across the entire country. The scope of applying other conservation laws should vary with landscape category, thus mitigating the inherent contradictions between conservation and development objectives.

The CPL's should receive full and strict protection under the WLPA, IFA, FCA and any other specific conservation laws and international treaties on endangered species. These landscapes should be exempt from provisions of the FRA.

The MUL's should attract the WLPA only partially, specifically through provisions relating to illegal hunting and notification of conservation reserves. These landscapes should not attract sections/provisions of the WLPA relating to wildlife habitats etc. MUL's should be exempt from IFA and FCA, except where they overlap with notified forest areas.

In the IDL's, generally, only the EPA would apply, thus reducing a substantial proportion of potential litigation across the country.

## **2. Expanding Wildlife Habitats and Improving their Connectivity**

Under the policy framework (1) proposed above, wildlife habitats would primarily include 10% area in CPLs as well as some additional areas under MUL, depending species biogeography. The key goal in CPLs is expanding habitats with wildlife populations at 'natural densities'. To achieve such a doubling or tripling of area of natural, diverse, wildlife habitats the following specific policy measures are proposed:

2. 1. Increasing the land-base for wildlife habitat by eliminating 'honey combing' by human settlements, reducing fragmentation, and improving connectivity through purchases, swaps and long-term lease of private lands. Promotion of incentive-based voluntary relocation of human settlements, taking advantage of ongoing trends in labor movement and urbanization. Some of the necessary funding is available (about Rs. 50,000 crores) in monies impounded under the Compensatory Afforestation Fund Act of 2016, which likely to be other wise spent on non-priority tasks. These CAFA funds can also be augmented by net savings of 'development expenditure' at pre-relocation sites.

2.2. Economic growth and urbanization have created a substantial social class, whose economic power needs to be channeled into expanding wildlife habitats in CPLs. Enormous untapped potential exists in the wildlife tourism sector for harnessing this economic power. Tourism pressure is currently leading to overuse and degradation of wildlife reserves. Instead, private sector partnerships between the tourism industry and farmers in PCLs to create new 'wildlife conservancies' should be encouraged through tax breaks and relaxation of land laws.

2.3. In MUL areas, market-based incentives for private farmers and companies to grow trees or crops that tolerate wildlife presence (e.g. through import restrictions on timber, subsidies for methanol) are necessary. While government did promote farm forestry in the 1970's and 80's, this activity can now entirely shift to the private sector and benefit from market forces. The current approach of massive state expenditure on forestry, such as the 'Green India Mission' drawing on CAFA should be wound down.

2.4. A clear policy should be put in place for prevent intrusion of linear infrastructure (roads, railways, canals, pipelines and transmission lines for power, gas etc.) into CPLs through an a priori mandate for their diversion 'around' CLPs rather than through them. Where such diversions are technically unfeasible, the policy mandate should be for building scientifically designed tunnels and overpass structures to maintain ecological connectivity.

2.5. All financial subsidies, tax-breaks and other incentives now provided to the so-called green energy projects (wind, solar and small hydro power) that are are increasingly fragmenting wildlife habitats, should be withdrawn in CPL areas.

### **3. Managing and Enhancing Natural Quality and Diversity of Wildlife Habitats**

Reducing pressure of illegal hunting and wildlife trade through law enforcement should continue to be most critical need in CPLs, particularly in parts of Central, Eastern and North-eastern India where these threats are pervasive. Global illegal wildlife trade is now impacting wildlife even outside CPL areas, exterminating hither to secure species of small mammals, birds and reptiles. A major management problem is that tough wildlife law enforcement is a high-risk, low-reward activity for reserve staff. Consequently, if alternative activities are available, law enforcement intensity inevitably drops. So thrust of the new policy should be to eliminate activities that detract from law enforcement.

In addition to expanding land-base for wildlife through polices suggested earlier, a separate set of policies is needed to ensure wildlife habitats are recovered and maintained at as 'natural' a state as possible. Such management requires reversing the effects of unnecessary and excessive manipulation habitats, which unfortunately is now pervasive in wildlife reserves. Unfortunately, this threat arises from management actions driven by lack of professional understanding of ecology or even by corruption.

In sections that follow, specific measures are suggested for removing such 'attractive distractions' in CPL areas:

3.1. Currently, the capital and operating expenditures incurred for wildlife conservation bear no relationship to key parameters like a demonstrable ecological need, size of the area, topography or available skills and resources. As a result, large sums of money are being spent at locations without any need while other locations where funds are needed receive very little.

3.2. Management activities that are critical from an ecological perspective (voluntary relocations, land purchases) are often ignored and funds are directed at excessive artificial manipulation of habitats, construction and civil structures, purchase of vehicles and

equipment, all activities scope for leakages. The management plans prepared by reserve managers are, in fact, key drivers of this drift away from scientific conservation.

3.2. Preparation of wildlife management plans and annual plan of operations for reserves should be entrusted to qualified independent professional ecologists, finance experts, engineers and wildlife managers tasked only with law enforcement and administration. These plans should set ecological and conservation goals and prescribe scientific monitoring of progress towards them. Such planning and monitoring activities should work like independent ecological audits of reserve management.

3.3. A Zero-based budgeting approach, wherein expenditures above basic law enforcement needs to justified based on evidence should be implemented.

3.4. All special 'schemes' that are now consuming bulk of available wildlife conservation funds, should be merged into a single multi-species funding scheme to address the current excessive funding directed at MOEF designated tiger reserves.

3.5. At present there is no-coordination or control over amount of funds being spent in each wildlife reserve, from a diversity sources such as State Governments, Central Schemes, NABARD, CAMPA, Multilateral aid, CSR funds, private donors, and internally generated revenues. A transparent tracking/auditing mechanism is urgently needed to regulate and eliminate this waste and duplication.

3.6. Since 1990s, a concept called 'Eco-development' which entails wildlife and forest managers engage in what are essentially rural development activities has taken root and expanded. Eco-development has led to problems such as distraction of staff from core law enforcement work, massive expansion of reserve budgets and duplication of developmental activities that are already being executed by other government agencies. Therefore, Eco-development in all its forms should be eliminated from the scope of Forestry and Wildlife Management Programs in CPL areas.

3.7. Although cattle numbers are declining due to economic reasons in many CPL areas overgrazing and related burning of forests continue to be problems in some areas. To reduce grazing competition and disease threat from cattle to wildlife species policies promoting farm mechanization, intensive dairying as well as policies that reduce livestock numbers in the longer run should be instituted.

3.8. There appears to be substantial reduction in volumes of timber/firewood extraction from forests because of India's conservation policies as well as a result of timber imports, farm-forestry and switch to petroleum-based cooking. However, commercial extraction of Non-Timber Forest products appears to be increasing in volume as well variety, with canes, palms, grasses, leaves, fruits, bark, roots, resins, lichens, honey, etc. being extracted, often illegally, to meet growing industrial and consumer demands. This NTFP extraction is altering forest composition and dynamics, and poses long term consequences for wildlife. A priority policy principle should be to eliminate such NTFP extraction from CPL areas and create incentives for their cultivation driven by market forces in MUL and IDL areas.

#### **4. Building Professional Capacity and Winning Public Support for Wildlife Conservation**

Implementation of any conservation policy initiative requires professional capacity both inside and outside the government sector. Additionally, it requires public and social support. The following specific measures are likely to generate these:

4. 1. The Forest and Wildlife official's role should be fundamentally redefined to perform only specialized law enforcement and administration of reserves including management of conflicts between wildlife and local societies that often accompany wildlife recoveries. A reasonable beginning in this direction would be to reinstate forestry/ wildlife as a 'State Service', which it was prior to 1968.

4. 2. In the medium term, a professional cadre should be created for managing wildlife and habitats in each State. Recruits into such a cadre should require 4-year undergraduate professional training at lower levels, and, 2-5 years of post-graduate training at higher levels, as is the case with other professional disciplines like engineering and medicine.

4.3. Ecological auditing of wildlife and habitats should be assigned to specialized experts with knowledge of animal population ecology, forest ecology, statistics, social sciences as relevant and not entrusted to untrained career wildlife officials as at present.

4.5. Credible peer reviewed wildlife science can only be generated through high quality research. The present virtual monopoly over funds, reserve access and research permits by institutions of Central and State Governments should be eliminated. Research should be facilitated by suitably amending the extremely restrictive Wildlife Protection Act, which promotes the current state monopoly. Universities, specialized wildlife research institutions and qualified scientists should be encouraged to take up both academically interesting research and research necessary to address conservation needs.

4. 6. Because wildlife film makers, photographers, natural history writers, amateur naturalists, citizen scientists and nature clubs are mechanisms that leverage and broaden public support for wildlife conservation they should be actively encouraged by suitably amending the Wildlife Protection Act. (Words: 1761)

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