



Policy Brief on Forest Ecosystem

Executive Summary



In collaboration with



Indian Network on
Ethics & Climate Change



INTRODUCTION

In the current global focus on sustainable development, especially in the context of an “urgent response to the phenomenon of climate change, the forest ecosystem plays a crucial role. The dynamics among the key stakeholders in this forest ecosystem – communities, markets and Government – come to fore in the tussle for the ownership and control over the natural resources, which are found abundantly in the forest ecosystem. The Government takes an upper hand in deciding the direction of the policies that favour the markets over the forest communities. This policy brief is an attempt to provide a rationale for a balancing act to course correct the skewed colonial policy orientation of exploiting the natural resources by disregarding the legitimate habitat and livelihood rights of the forest communities.



FOREST ECOSYSTEM

A forest ecosystem is a dynamic complex of plant, animal and micro-organism communities and their abiotic environment interacting as a functional unit, where trees are a key component of the system. The tribals, and other forest dwellers, with their cultural, economic and environmental needs and livelihood activities are an integral part of the forest ecosystem.

A CASE STUDY OF THE FOREST ECOSYSTEM: EAST GODAVARI DISTRICT, A.P.

If we analyse the policies and legislations from 1770 till date, we cannot fail to notice the increasing State ownership of forest resources in India. This may enable us to assess the impact of this ownership on livelihoods of the forest dwellers in the forest ecosystem of East Godavari District in Andhra Pradesh.

Forest Area and Cover in the Scheduled Areas of East Godavari District

Three-fourths of the forest area of the district is hilly. The major groups of formations found in hilly areas of East Godavari District are (as per the revised Champion's Forest Types):

1. Southern tropical dry deciduous forests
2. Southern tropical secondary moist deciduous forests

The AP State has 36,914.77 sq.km. of notified forest cover which is 22.73% of its total geographical area. The data of forest cover is prior to the merging of 4 mandals of Khammam District into East Godavari District after the formation of Telangana State.

The forest cover in the Kakinada Division in East Godavari District is 2807.62 sq.km. which is 25.97% of the geographical area. In terms of the forest canopy density classes, the Division has 67.18 sq.km. of Very Dense Forests (VDF), 1996.70 sq.km. of Moderately Dense Forests (MDF) and 734.74 sq.km. of Open Forests (OF). The area of the Scrub is 30.89 sq.km., Non-forest 244.03 sq.km. and Water Bodies 152.85 sq.km.





Forest-based Communities in the Scheduled Areas of East Godavari District

Tribal Communities: The 7 mandals of the Scheduled Areas of the district are Addateegala, Rajavommangi, Maredumilli, Devipatnam, Y. Ramavaram, Gangavaram and Rampachodavaram (and after the formation of Telangana State, 4 more mandals Chinturu, Kunavaram, V.R. Puram and Tetapaka). The tribal population of East Godavari District comprises of six tribal groups: Konda Reddy and Konda Dora (shifting cultivators) Koya Dora (cultivators preferring low land area) Konda Kammara (black smiths) Konda Kapu (settled as well as shifting cultivators) and Valmiki (mostly literate, employed as village servants and also practicing petty business). Majority of the tribals in the agency area are Konda Reddy and Koya Dora with a population 41,685 (33.9%) and 30,263 (24.6%) respectively. Other tribes are Konda Dora (8.8%), Konda Kapu (13.1%), Kammara (13%) and Valmiki (6.6%).

Historically, three factors linked these hill-communities together: first, a largely self-sufficient economy based on shifting cultivation; second, the shared religious beliefs; and third, the overarching muttadari system.



The economy in the Scheduled Areas is agro-forest based. Though the tribals mainly subsist on agriculture of one type or another, the forest plays a vital role in their economy. Shifting cultivation is still being practiced. Livestock is another major source of livelihood in the forest fringe villages, which in turn depends extensively on the forest for various inputs.

Thus, the forest provides a variety of food, shelter and medicines, besides Minor Forest Produce (MFP) for both domestic and commercial use. These include adda leaves, tamarind, soap nut, nux vomica, gum, hill brooms, etc. Even the settled cultivators also partly subsist by collecting edible roots and tubers, fruits and hunting.

The tribals are not only forest dwellers but also for centuries they have evolved a way of life which, on the one hand, is woven around forest ecology and forest resources, and on the other hand, ensures that the forest is protected against the degradation by man and nature, by evolving their own conservative systems. Hence, there cannot be any development of forest without development of the forest-dwelling tribal communities.





Key Policy Issues of Forests and Tribal Communities in the Scheduled Areas of East Godavari District

Deforestation: Extraction of Timber, Forest Based Industries

In the early 1970s the Forest Department began extracting timber from trees of all kinds from the interior and semi-accessible areas in three of six ranges. Private contractors were allowed to work freely resulting in illicit felling even outside the allotted area. The coupes of the bamboo working circle sold to private contractors, were also subjected to over exploitation and unsystematic working affected adversely the bamboo growth. Over exploitation of bamboo forests had led to several areas being rendered incapable of regeneration. The major forest-based industries in the district of East Godavari are Andhra Pradesh Paper Mills, Godavari Plywood Industry, Matchwood Industry (4 units), Private Saw Mills (123 units) and other commercial units like sugar, sago factories (60 units), tobacco barns (3,556 units), motor vehicle body building unit and the Fisheries Development Corporation. Besides these industries, there are four units of Matchwood Industry in the district.



Shifting Cultivation

The major source of food production for the tribals has been shifting cultivation, which is an integral part of the economy in tribal culture. Historically, two types of podu (shifting) cultivation are practiced, namely chalaka podu (practiced in the plain areas) and konda podu (confined to hill slopes). The general crops grown in podu cultivation are the following, millets and cereals: ragi, sama, kora, maize, bajra, jowar, budama paddy; pulses and legumes: redgram, blackgram, horsegram, greengram and beans; oilseeds: niger and castor, etc.

People's Rights over Forest Land and NTFP

The colonial government, especially from the beginning of the 20th century had forcibly usurped the right to the collection of the minor forest produce, which hitherto was enjoyed by the hill tribes. Till the enactments of the PESA and FRA Acts, there were hardly any legislative provisions for the protection of the rights that the tribals had enjoyed for centuries. The FRA recognises three broad sets of rights over forests: Individual Forest Rights (IFRs), Community Forests Rights (CFRs) and Community Forest Resources Rights (CFRRs). The tribals collect varieties of minor forest produce (MFP)/non-timber forest produce (NTFP), which includes fodder and grasses, raw materials like bamboo, canes and leaves, gums, waxes, dyes and resins and several forms of food including nuts, wild fruits, and honey. National Commission on Agriculture (1976) has classified MFP/NTFP as: i) Fibers and flosses ii) Grasses (other than oil producing), bamboo, reeds and canes iii) Oil seeds iv) Dyes v) Gums, resins and oleoresins vi) Leaves. These often play a critical part in the livelihood of the tribals.

FORESTS AND CLIMATE CHANGE

Deforestation and forest degradation are a major cause of global carbon dioxide emissions, but sustainably managed forests are important carbon sinks. Protecting forests, improving forest management and establishing new forests all increase the climate-mitigation benefits of forests. Thus, forests have a central role to play as the world confronts the challenges of climate change, food shortages, and improved livelihoods for a growing population.

Under the United Nations Framework Convention on Climate Change (UNFCCC), REDD+ is a financial instrument to incentivise conservation and sustainable management of forest and thereby reduce GHG emissions from deforestation and forest degradation. It aims at compensating the forest owners in developing countries for conserving the forests by putting a value on the forest carbon stocks.



FORESTS AND COMMUNITY RESILIENCE

The need to pursue community resilience is a key factor in the sustainability of forest-dependent communities in the context of the impacts of climate change. However, forest-dependent communities are complex and dynamic entities that are constantly exposed to social and ecological forces of change to which they must adapt in order to be sustainable. Also, forest management policies affect different communities differently, depending on their individual characteristics and circumstances.

FORESTS AND SUSTAINABLE DEVELOPMENT GOALS (SDGs)

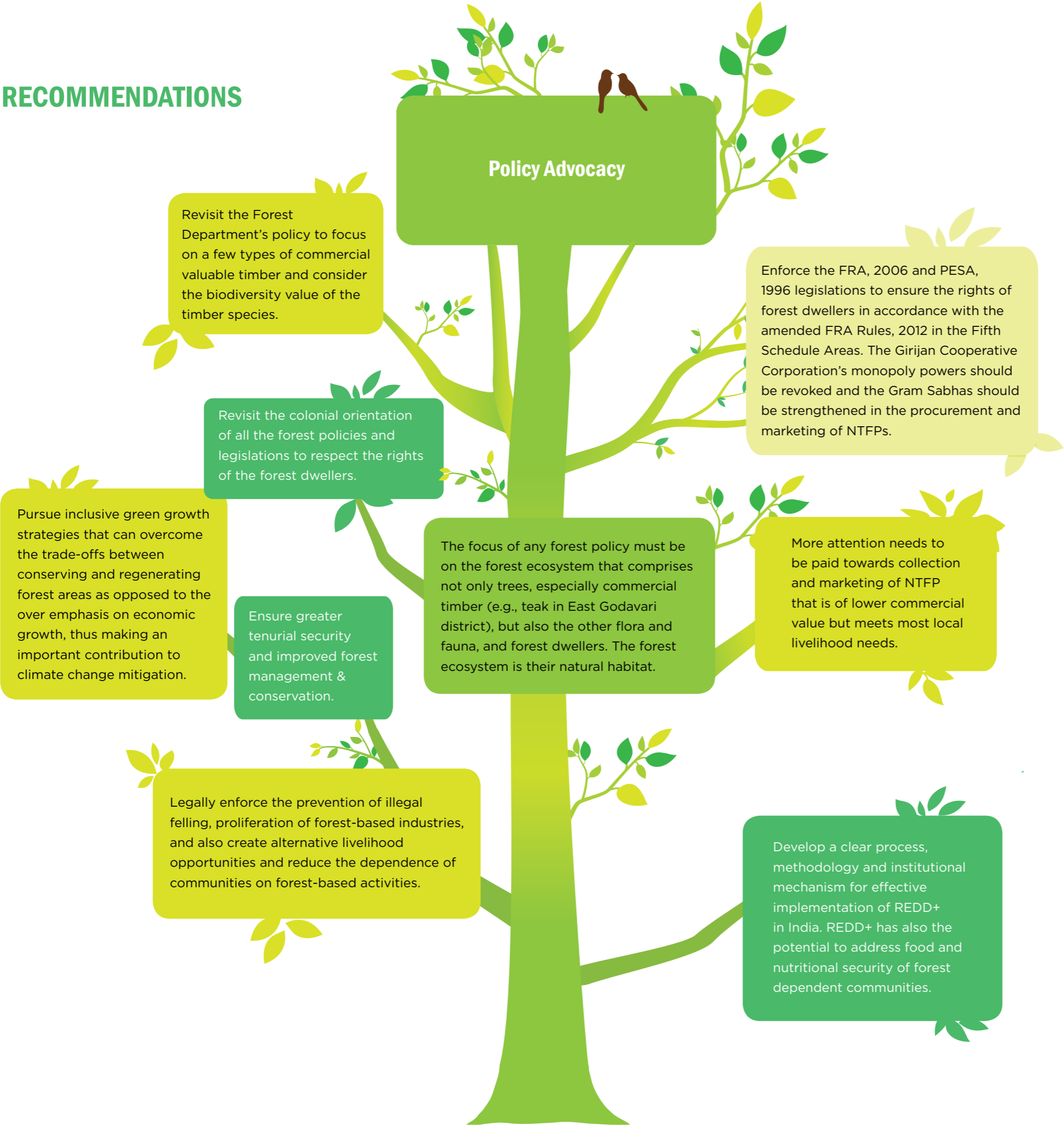
However, the Sustainable Development Goal 15 (Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, halt & reverse land degradation and halt biodiversity loss) includes two targets specifically related to forests. Forests contribute to opportunities for sustainable development: wild edibles from forests and trees outside forests contribute to food security by providing nutritious food supplements all year round, including during periods of hardship. In many parts of the world, fuelwood is the main source of energy for cooking. Forests generate employment in remote rural areas and are the basis of small enterprises, many of which are run by women and generate income that is invested in improving livelihoods, including the education of children.

Forests provide medicines and contribute to human health and a healthy environment. Their ecosystem services, including climate regulation, soil stabilisation, regulation of water flow and biodiversity, as well as their role as a gene pool for agricultural crops and home of pollinators, play an important role in support of sustainable agriculture.

CONCLUSION

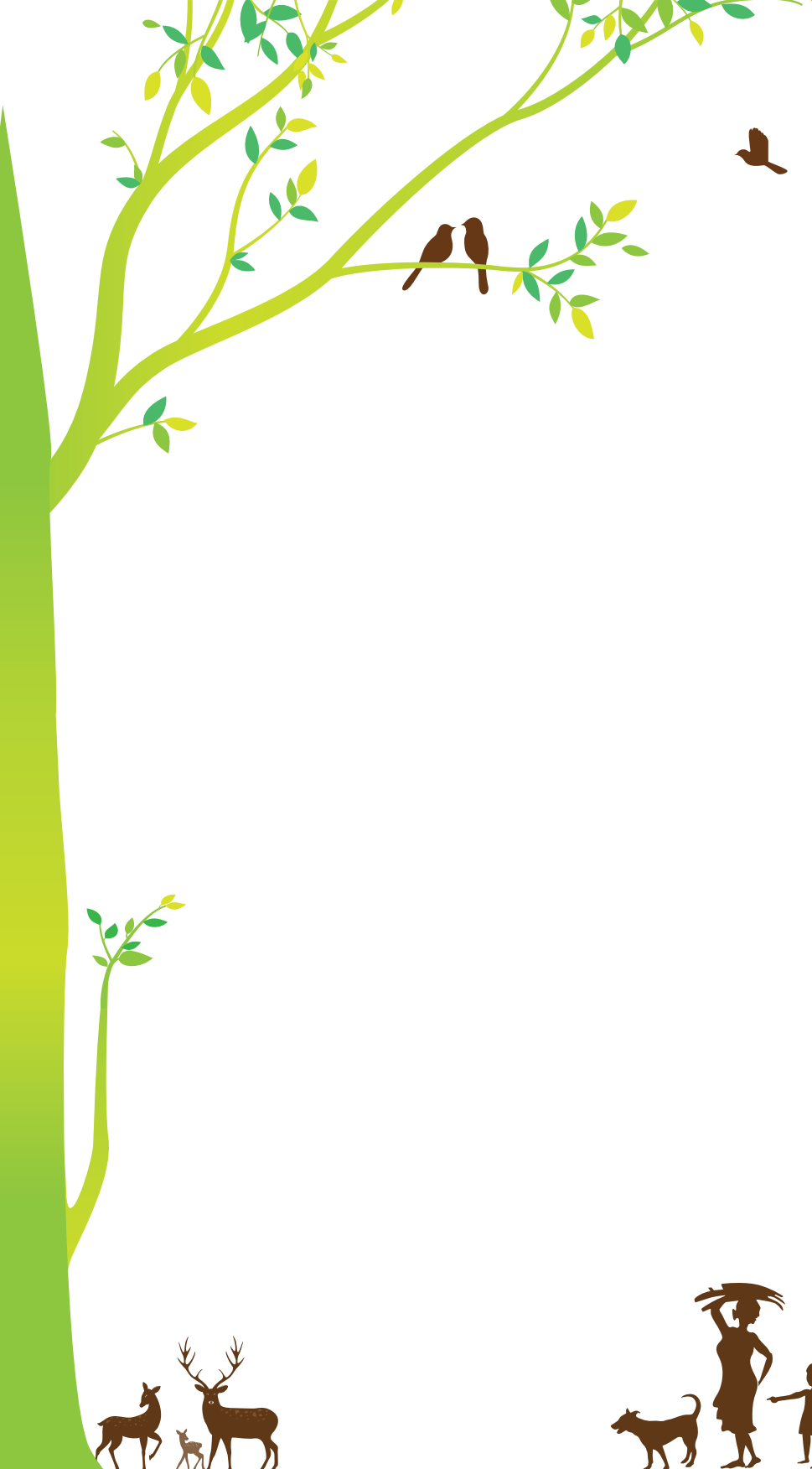
We have seen how the livelihoods of the communities living close to the forest and within the forest are symbiotically linked to the forest ecosystem; also how the colonial and post-colonial forest policies progressively deprived the forest dwellers of their traditional rights and paved the way for the diversion of natural resources from the subsistence economy to market-oriented production. Under community pressure, there has been a number of policies, legislations, guidelines and programmes that have acknowledged the rights of the forest dwellers over the forest resource, but the colonial imbalance in terms of ownership continues. The need to pursue community resilience is a key factor in the sustainability of forest-dependent communities in the context of the impacts of climate change.

RECOMMENDATIONS



Community Resilience

- Support initiatives of planting and protecting productive but extreme climate tolerant species to maximise homestead and community forest resources and enhance adaptive and resilience capacity of community people to shocks and slow onset changes
- Encourage communities to restore degraded forests lands by domesticating various economically important forest species: broom grass (*Thysanolaena Maxima*), nara mamidi (*Litsea Glutinosa*), gum karaya (*Sterculia Urens*)
- Protect and conserve medicinal plants (especially the endangered); domesticate wild edible tubers; sustainably harvest and process wild non-edible oilseeds
- Replace unsustainable extraction of timber, fuelwood, MFP/NTFP with mechanisms sustainable harvesting of the forest produce
- Encourage alternative livelihood opportunities and energy sources like biogas, solar energy and improved cook stoves
- Promote greater involvement of the local communities in the management of forest and devolution of decision-making in the access and ownership
- Encourage documentation of natural resources being conserved and managed by local communities



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