Vision

Uttar Pradesh is committed to protecting, restoring and promoting sustainable use of terrestrial ecosystemsin the interest of sustainable growth and inclusive development. It envisions sustainable use of natural resources like cultivable land, forests and water bodies and also aims at reversing environmental degradation by restoring the degraded ecosystems thus ensuring their availability for future generations. The state is also committed to conserving its rich biodiversity, natural habitats and to prevent the introduction and spread of invasive alien species. For the benefits of conservation efforts to reach all sections of society, the state also envisages strengthening the capacities of the agents of change both at institutional as well as at grass-roots level.







Approach to Vision

In order to achieve its goal of protecting, restoring and promoting sustainable use of terrestrial ecosystems, the state targets conservation and sustainable utilisation of its land, forest, wetland and biodiversity resources. It supports promotion and dissemination of sustainable agricultural practices, water use efficiency, and reclamation of degraded lands.

It endeavours to adopt world-class forest management practices for conservation of forests and biodiversity, large scale plantation for increasing the green cover, and sustainable harvesting of goods and services from biological resources. The state's approach to wetlands management focuses on both qualitative and quantitative aspects. In order to achieve broad-based equitable growth, the focus of the state is on strengthening local self-governance, participatory management practices and capacities of communities dependent on land resources.

The state also aspires to adopt innovative approaches for inculcating conservation ethics in the minds of the people. The above overall approach however recognises the imperative of nurturing strong institutions, rich research and academic environment, robust legal systems and public-private partnership.





The Context

Human existence is intricately linked with and sustained by natural resources provided by land in the form of agriculture, forests, wetlands and biodiversity. World over, nations are grappling with challenges of land degradation, desertification, deforestation, loss of biodiversity and degradation of wetlands. The challenges get magnified in a state like Uttar Pradesh where population density, at 890 persons per square kilometre, is the highest in India, exerting pressure on land resources. The state covers an area of 240,928 square kilometres, i.e., about 7.33 per cent of the total area of India, but is home to almost 16 per cent of the country's population. Thus in the context of land resources, there is a compelling case for planning and investing in its conservation, restoration and sustainable utilisation.

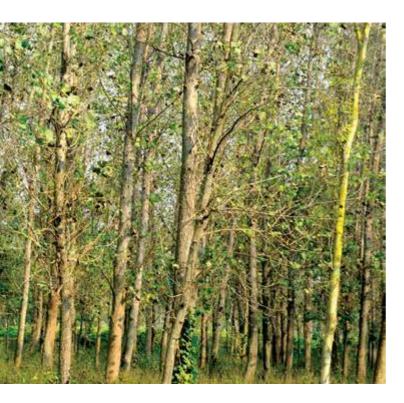
Approximately 80 per cent of the total geographical area of Uttar Pradesh is agricultural land, which contributes to 40 per cent of the state's GDP and employs 75 per cent of its population. However, continuous increase in population has resulted in shrinkage in the size of land holdings. This has made agriculture non-profitable for small and marginal farmers, who comprise the overwhelming majority (92 per cent) of the farming community. Simultaneously, injudicious exploitation of natural resources and excessive use of agro-chemical fertilisers has resulted in land degradation, which threatens sustainability of agriculture. The state contributes about 19 per cent to the national food basket, but in the past decade it has become a matter of concern that food grain productivity in the state has stabilised. Agriculture is an essential resource for food security, nutrition and health, and a source of livelihood for the poor. In order to sustain agricultural productivity, interventions are required, among other things, for consolidation of land holdings, reclamation of sodic/fallow lands, promoting water use efficiency, development and dissemination sustainable agricultural practices and crop varieties.

Forests are a vital global resource as they serve as pollution sinks, natural habitats for biodiversity, and instruments for combatting climate change. At the same time they are a vital local resource providing timber, clean air and water. They also provide livelihood, food, fuel and fodder for forest dependent communities. According to the State of Forest Report 2017 prepared by Forest Survey of India, Uttar Pradesh has 6.09 per cent geographical area under forest

cover (protected forests and reserve forests) and 3.09 per cent under tree cover; forest and tree cover have increased by 676 sq. km. in 2017 as compared to 2015. Thus a total of 9.18 per cent of the state's geographic area is under forest/tree cover, as against 33 per cent mandated by the National Forest Policy 1988. However, on account of high population density and competing land uses, like agriculture, industry, housing, infrastructure, etc., the state can realistically target bringing 15 per cent of its geographical area under forest/tree cover. In order to achieve the target, interventions are required not only for plantation,







conservation and restoration of green cover, but also for ensuring participation of local communities to achieve broad-based benefits.

Biodiversity covers all ecosystems, species, and genetic resources. The Convention on Biodiversity has for the first time linked biodiversity conservation to the development process, fair and equitable sharing of benefits from sustainable use of genetic resources to the eventual goal of economic development. Uttar Pradesh, on account of its wide climatic and geographical landscape, has over centuries nurtured and preserved a rich biodiversity pool. The recorded floral diversity of Uttar Pradesh includes 1,017 genera and 2,932 species, and faunal diversity of 2,387 species and 1,241 genera under 281 families. Twentyfour bird and eight mammalian endangered species have been identified. The state is home to two tiger reserves and 26 wildlife sanctuaries. Notwithstanding the intrinsic imperative of biodiversity conservation, the latter assumes significance in UP as the state still has a considerable section of population's livelihood directly dependent upon access to products and services derived from biological sources.

Wetlands provide economic, environmental aesthetic benefits, apart from providing natural habitats for biodiversity conservation. Despite being a landlocked state, Uttar Pradesh is blessed with vast and varied, natural and created, open and closed inland aquatic resources. According to the Wetland Atlas Uttar Pradesh 2010, the state has 133,434 wetland bodies covering 5.16 per cent of its geographical area. The terai and eastern zones of the state are known for extensive floodplain wetlands and underground water resources, apart from abundance of rivers, canals, reservoirs, lakes, ponds and riverine wetlands. However, these ecosystems are threatened by overextraction, pollution caused by domestic, industrial effluents agricultural run-offs, encroachment on river and lake beds and siltation. In order to stem biodiversity loss, sustain urbanisation and demands posed by the state's growing population, inland water bodies require urgent and comprehensive management strategies.





Present Interventions

Various departments in the state are in the process of implementing schemes and interventions relevant to the goal. These are broadly categorised as below:

Sustainable Agriculture and Prevention of Land Degradation

Sustainable agriculture is being promoted by on-farm interventions like dissemination of improved soilwater management practices, development and dissemination of stress tolerant crop varieties and dry land agriculture practices, and promotion of use of bio-fertilisers and bio-pesticides as opposed to chemical equivalents. Agriculture diversification is being promoted through horticulture, floriculture, sericulture, fisheries and agro-forestry, in order to reduce the burden on land resources. Land consolidation is an on-going programme to reverse the trend of declining land holding size; 130,000 hectares of sodic land and 10,000 hectares of ravine land have been restored under the UP Sodic Land Reclamation Project II. Public participation is being supported by formation of BhoomiSenas and National Mission on Sustainable Agriculture (NMSA).

Forest Conservation

In order to increase and conserve forest cover, the forest department has undertaken large scale plantations, with the support of other government departments (rural development, agriculture, horticulture, irrigation, PWD, education, urban bodies, etc.), private educational institutions and the public. Social forestry and green belt development is being done in forest blocks, government land, roadside, canal side and along railway lines, covering both urban and rural areas. The VanavaranSamvardhanYojana is being implemented in reserve forest areas in 18 districts (Agra, Aligarh, Bareilly, Meerut. Saharanpur, Moradabad, Jhansi, Banda, Kanpur Nagar, Lucknow, Faizabad, Gonda, Varanasi, Mirzapur, Allahabad, Gorakhpur, Basti and Azamgarh) with



UP creates guinness world records

- The most trees planted in one day is 10,000,000 across the state of Uttar Pradesh on 31 July 2007
- Largest distribution of saplings (1,053,108 nos.) across 10 locations in 8 hours on 7 November, 2015.
- Most trees planted (50,414,058 nos.) in 6,146 locations in 24 hours on 11 July, 2016.
- The largest distribution of saplings at Prayagraj,
 India on 09 August, 2019

financial support from National Bank for Agriculture and Rural Development (NABARD). The Total Forest Cover Scheme, which targets 100 per cent plantation coverage of all vacant lands, is being implemented in districts Mainpuri, Etawah, Lucknow, Unnao, Kannauj and Badaun. Additional measures include checks on ground fire, assisted natural regeneration of forest for density improvement, participatory forest management by involving local communities for management of forests and wildlife, and nursery management for producing quality planting material (QPM) for departmental plantation as well as supply to private persons.

Going by the past trajectory, the existing plantation drives are expected to raise the forest cover to 11 per cent by 2030 and 15 per cent by 2047.