

Biodiversity Study of Chandur Railway Region

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Abstract:-

Amravati district is the second most important district in Vidarbha region of Maharashtra state. It is located between 20°32'N and 21°04'N north latitude and between 76°03' E and 78°03' E east longitudes. Chandur Railway is one of the three talukas of Amravati district (two are Dhamangaon and Nandagaon Khandeshwar). Chandur Railway subdivision of Amravati district. It is located between 20.8142°N and 78.1667°E east. Many villages are also included in Chandur railway, it is very rich in both flora and fauna due to river Chandrabhaga, Bakhali, and Kholad.

Keywords:- Amravati, Chandur railway, Chandrabhaga, Bakhali, and Kholad.

Introduction:-

The word biodiversity was coined by Walter G. Rosen in 1986 and it is highly popularized during recent times (Pullaiah T.). Scientists have estimated that more than 50 million species of plants and animals. Biological diversity refers to the variety and variability among living organisms and the ecological complexes in which they occur (Pullaiah T.). Biological diversity must be treated more seriously as a global resource, to be indexed, used and above all, preserved. Three circumstances conspire to give this matter an unprecedented urgency. First, exploding human populations are degrading the environment at an accelerating rate, especially in tropical countries, second science is discovering new uses for biological diversity in ways that can relieve both human suffering and environment destruction. Third much of the diversity is being irreversibly lost through extinction caused by the destruction of natural habitats, again especially in the tropics, overall we are locked into race, we must hurry to acquire the knowledge on which a wise policy of conservation and development can be based for centuries to come (Wilson E.O.). Biodiversity provides the basic goods and services for human society to exist and secure economic and social development, health, wealth, food security and many other needs of human beings are dependent on natural resources and yet human beings have used these with scant regard to latter health and survival. Such indiscriminate use and resultant loss of biodiversity threatens the very survival of the planet itself. The convention on biological diversity (CBD) which entered into force in December 1993, is an international agreement among the nations of the world to arrest and reverse this situation for the welfare and survival of the planet and its denizens, as well as for intergenerational equity. The convention has three objectives namely conservation of biodiversity, sustainable use of the components of biodiversity, diversity into relevant sectoral or cross sectoral plans, programme and policies (India's National Biodiversity action plan 2019). Biological diversity deals with the degree of nature's variety in the biosphere. The variety can be observed at three levels, the genetic variability within a species, the variety of species within a community and organization of species in an area into distinctive plant and animal

communities constitutes ecosystem diversity biological diversity or biodiversity is that part of nature which includes the differences in genes among the individuals of a species, the variety and richness of all the plant and animal species at different scales in space, local, in a region in the country and the world, and various types of ecosystem both terrestrial and aquatic within a defined area. The conservation and management of biodiversity are crucial for achieving poverty reduction and sustainable development (Millennium Ecosystem Assessment 2005). India is a biodiversity rich nation that support 18% of the world's population on only 2.4% of the world's total land area, remarkably, it holds part of four global biodiversity hotspots. that have high concentration of endemic taxa (Myers 2003) and some of the biggest remaining wild populations of large, wild ranging mammals (Sukumar 1989, Ranganathan et al 2008). Climate change is widely expected to have multiple adverse impacts on biodiversity and human well being (Bhatt J.R. et al 2018). Earth is the only known planet to have life till date, however life on the earth has evolved from microscopic organisms (microbes) that left signals of their presence in rocks about 3.7 billions years old to the present time's complex plant and animal forms (Kumar Vinod et al 2021).

Objectives:- The main objective of the present study is to analysis and overview of flora.

Study Region:- Chandur Railway

Data Source:- The present study is based on the geographical analysis, map, location and report given by Government Of India, Ministry Of Environment Forest and Visit on Spot.

Methodology:- 1) Geographical analysis 2) Field survey 3) Spot visit 4) Plant analysis 5) Camera traps 6) Collection if unidentified species and Vegetation is large 7) Categorization 8) Make Biodiversity record of recorded plant species in Chandur Railway Region.

Climate:- Tropical climate with Geographical area 535.61sq.km, hilly area 64.99sq.km. and normal rainfall 827.60mm.

Geology:- Alluvium plain of Bakhali and Kholad river.

Soil:- Alluvium sand, silt and clay alternating beds and basalt types.

Vegetation:- Many types of shrubs and tree, deciduous types of trees are recorded near residential area, in forest and along roadsides, some deciduous trees loss their leaves like *Tectona grandis*, many are getting beautiful flowers like *Butea monosperma* and *Gliricidia sepium*. *Ipomia aquatic* shows dense vegetation over the water bodies.

Observation :- Present survey was done in the taluka Chandur Railway region in district Amravati which is located in Maharashtra. This region is well known for its hilly surrounding and dry deciduous forest. This region is also well known for various water bodies such as Malkhed Dam, River Chandrabhaga, Bakhali and Kholad River.

Biodiversity or Flora in Chandur Railway:- Various area of the Chandur Railway such as Dahigaon, Chirodi, Pohara, Manjarkhed, Malkhed, Brahmi, Sawanga Vithoba, Baslapur was studied. This region is rich in plant species such as *Tectona grandis*, *Butea monosperma*, *Gliricidia sepium*, *Cassia fistula* where as some water bodies is full of dense vegetation *Ipomea aquatica*, *Polygonum barbatum*, *Colocasia esculenta*, *Persicaria lapathifolia* variety of shrub

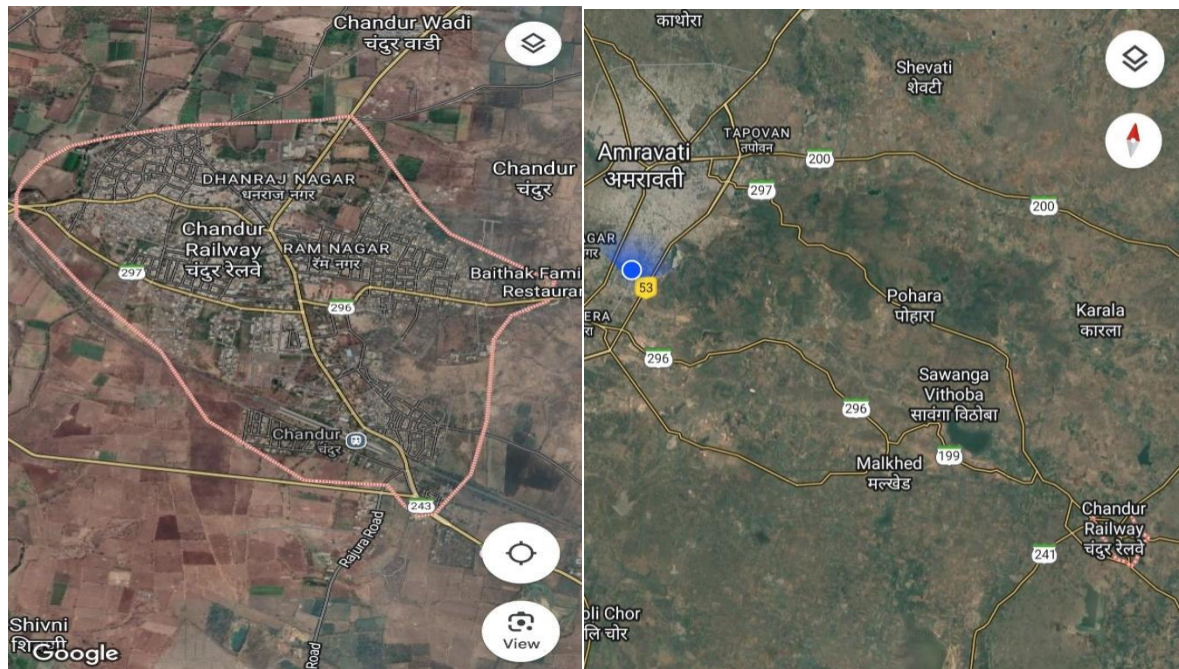
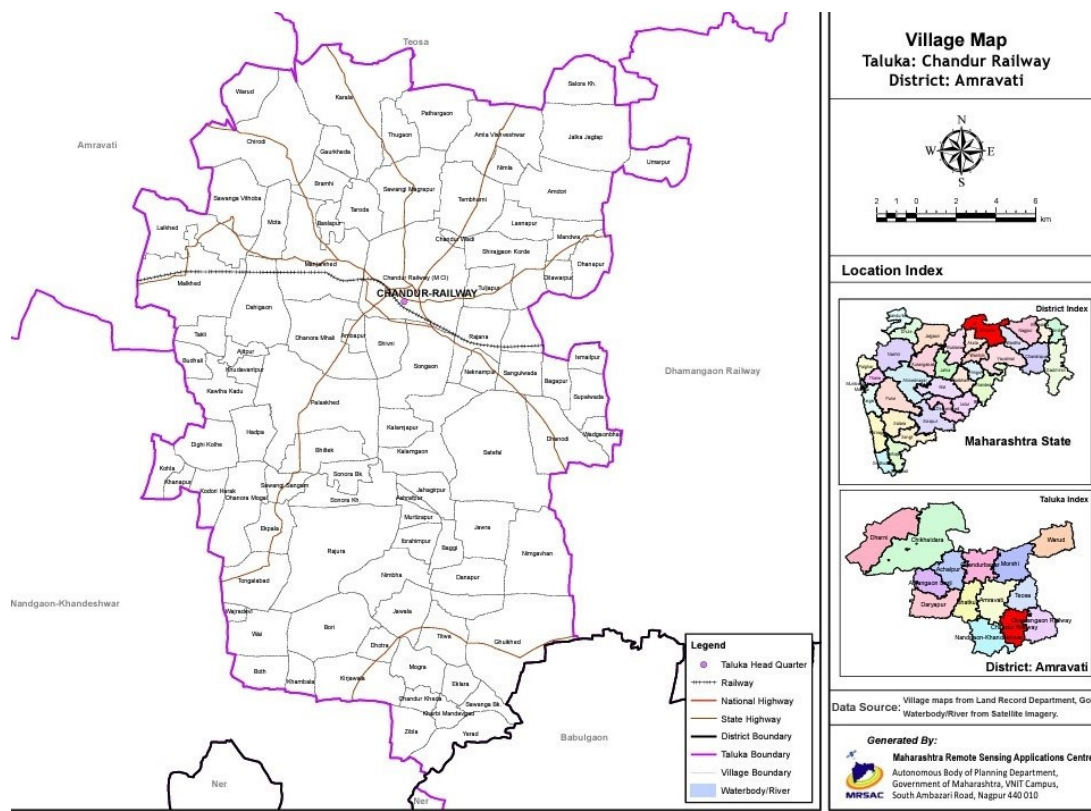
identified are *Chrozophora rottleri*, *Alternanthera sessilis*, *Abutilon palmeri* and *Lantana camara* which was luxuriantly grow on road side etc.

Table 1 :- Biodiversity of flora in Chandur Railway Region.

Sr.No.	Common Name	Botanical Name	Region
1	Palas	<i>Butea monosperma</i>	NH 297
2	Teak, Sagvan	<i>Tectona grandis</i>	Pohara
3	Giripushp	<i>Gliricidia sepium</i>	Chirodi
4	Golden shower, Bahava	<i>Cassia fistula</i>	Manjarkhed
5	Ghaneri, Raimuni	<i>Lantana camara</i>	Baslapur
6	Smartweed, Dhaktasheral	<i>Polygonum barbatum</i>	Malkhed
7	Taro, Arbi	<i>Colocasia esculenta</i>	Brahmi
8	Pale smartweed	<i>Persicaria lapathifolia</i>	Sawanga Vithoba
9	Round leaf wattle	<i>Acacia strongylophylla</i>	Chirodi
10	Neem	<i>Azadiracta indica</i>	Dahigaon
11	Caper bush, Kaber	<i>Capparis spinosa</i>	Shri Krushnaji Sagar Paryatan Sthal
12	Water spinach	<i>Ipomea aquatifolia</i>	Chandur Railway (water bodies)
13	Ratanjoti	<i>Jatropha gossypifolia</i>	Chandur Railway
14	Indian Mallow	<i>Abutilon palmeri</i>	Chandur Railway
15	Kantakari	<i>Solanum virginianum</i>	Chandur Railway
16	Babul	<i>Accacia nilotica</i>	Chandur Railway
17	Kambarmodi	<i>Tridax procumbans</i>	Chandur Railway
18	Rui, Mandar	<i>Calotropis procera</i>	Chandur Railway
19	Shepherd purse	<i>Capsella bursa</i>	Chandur Railway
20	Ran methi	<i>Melilotus albus</i>	Chandur Railway
21	Datura	<i>Datura metel</i>	Chandur Railway
22	Congress grass	<i>Parthenium hysterophorus</i>	Chandur Railway
23	Banyan tree, Vad	<i>Ficus benghalensis</i>	Chandur Railway
24	Gulmohar	<i>Delonix regia</i>	Chandur Railway
25	Duckweed	<i>Lemna minor</i>	Chandur Railway

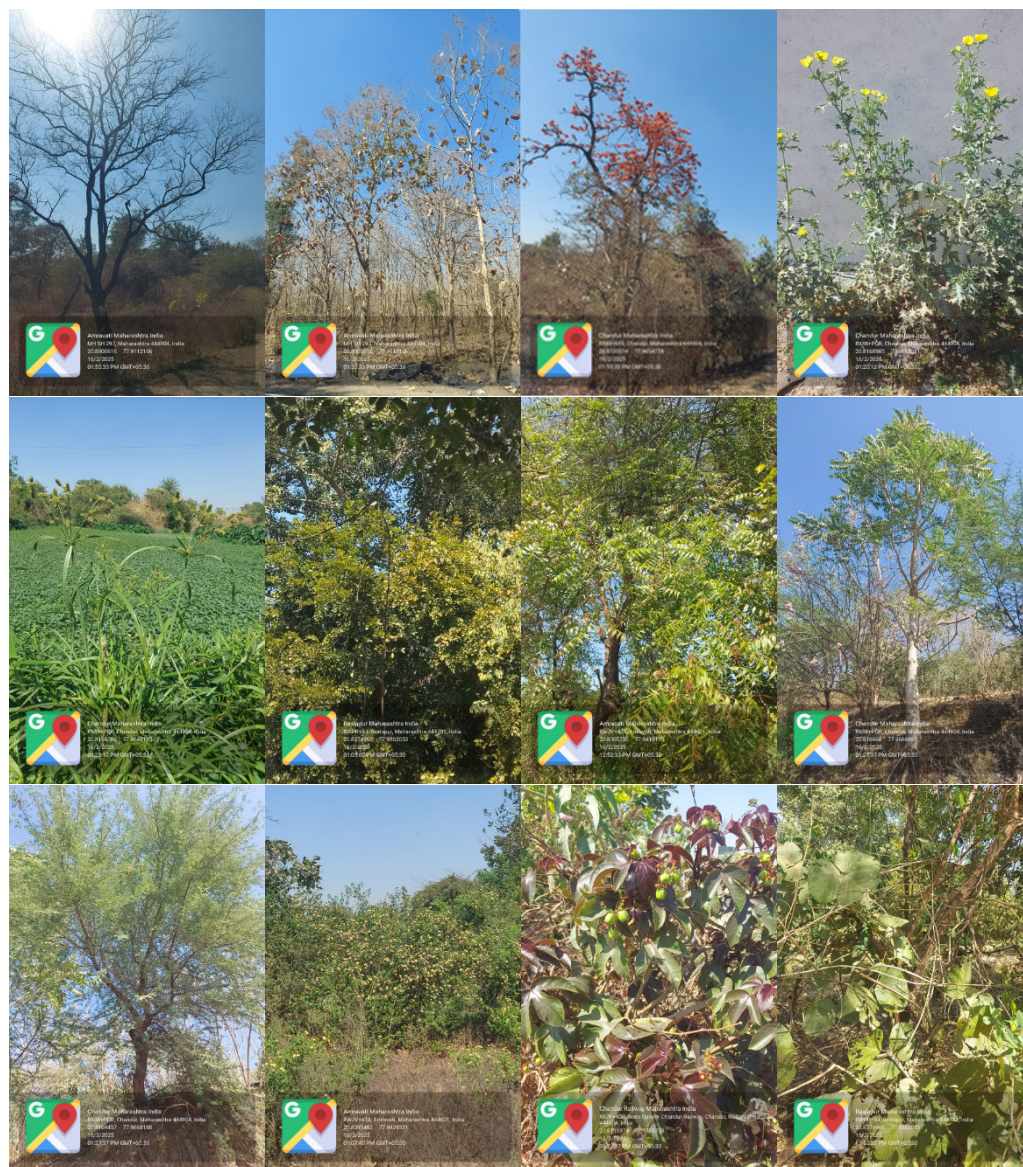
Conclusion:- Dense vegetation reported in different area of Chandur railway region. Region is rich in diversity of herb, shrub and deciduous tree where as some wild medicinal plants was also reported that's why these area is very rich in flora and fauna.

Map :-



Photographs :-







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