

## **NATURAL RESOURCES SCENARIO OF UTTARA KANNADA DISTRICT AND ITS CONSERVATION FOR SUSTAINABLE ENVIRONMENT**

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### **Abstract**

Uttara Kannada District is known as Karwar district and is one of the very interesting districts of our State with abundant natural resources. It is surrounded by Belgaum District and State of Goa in the North, by Dharwad District in the East, by Shimoga and Udupi Districts in the South. Arabian Sea forms the West border. The district has varied geographical features with thick forest, perennial rivers and abundant flora and fauna and a long coastal line of about 144 KM in length.

The district is the land of rivers, lush green thick forests, beaches, wild life and human resources. There are five important rivers such as Kali, Aghanashini, Bedti (Gangavali) and Sharavati flowing in the district from the high range of mountains to the Arabian Sea. The other important rivers of the District are the Venktapur and the Varada.

Natural resources are depleting day by day, hence there is a need to put attention for the proper management of the resources available. The problem should be solved tactfully and it has become a great challenge to the natural scientists. Natural, ecological, human resources and their conservation management is discussed in this paper. An attempt is also made to draw the attention on the depletion of the natural resources.

**Key words:** Natural resources, depletion, conservation, management.

### **Introduction:**

**Natural resources** occur naturally within environments that exist relatively undisturbed by humanity, in a natural form. A natural resource is often characterized by amounts of biodiversity and geo-diversity existent in various ecosystems. Natural resources are derived from the environment. Some of them are essential for our survival while most are used for satisfying our wants. Natural resources are materials and components that can be found within the environment. Every man-made product is composed of natural resources. A **natural resource**

may exist as a separate entity such as fresh water, and air, as well as a living organism such as a fish, or it may exist in an alternate form which must be processed to obtain the resource such as metal ores, oil, and most forms of energy.

Some natural resources such as sunlight and air can be found everywhere. However, most resources only occur in small sporadic areas, and are referred to as localized resources. There are very few resources that are considered inexhaustible (will not run out in foreseeable future) – these are solar radiation, geothermal energy, and air (though access to clean air may not be). The vast majority of resources are exhaustible, which means they have a finite quantity, and can be depleted if managed improperly.

There are various methods of categorizing natural resources. These include source of origin, stage of development and by their renewability. On the basis of origin, resources may be divided into biotic and a biotic. Considering their stage of development, natural resources may be divided in to potential resources, actual resources, reserve resources and stock resources. On the basis of renewability natural resources can be categorized in to renewable and non-renewable resources.

### **Objectives:**

1. To identify the major natural resources of the district.
2. To create awareness about the promotion and conservation of the natural resources.
3. To find out the solutions for the depletion of the natural resources.
4. To create awareness about the successful management of natural resources.

### **Depletion:**

Some resources actually naturally deplete in amount without human interference, the most notable of these being radio-active elements such as uranium, which naturally decay into heavy metals. Of these, the metallic minerals can be re-used by recycling them but coal and petroleum cannot be recycled .In recent years, the depletion of natural resources has become a major focus of governments and organizations such as the United Nations (UN). This is evident in the UN's Agenda 21 Section 2, which outlines the necessary steps to be taken by countries to sustain their natural resources

The depletion of natural resources is considered to be a sustainable development issue. In regards to natural resources, depletion is of concern for sustainable development as it has the ability to degrade current environments and potential to impact the needs of future generations. The depletion of natural resources is caused by 'direct drivers of change' such as **Mining, petroleum extraction, fishing and forestry** as well as 'indirect drivers of change' such as **demography, economy, society, politics and technology**. The current practice of Agriculture is another factor causing depletion of natural resources. For example the depletion of nutrients in the soil due to excessive use of nitrogen and desertification. The depletion of natural resources is a continuing concern for society.

### **Conservation and management:**

**Conservation and management of natural resources is very important at present scenario and it should be wisely and tactfully utilized.** Conservation is the scientific study of the nature and status of Earth's biodiversity with the aim of protecting species, their habitats, and ecosystems from excessive rates of extinction. It is an interdisciplinary subject drawing on sciences, economics, and the practice of natural resource management. The conservation of natural resources is the fundamental problem. Unless we solve that problem, it will avail us little to solve all others. Natural resource management is a discipline in the management of natural resources such as land, water, soil, plants and animals, with a particular focus on how management affects the quality of life for both present and future generations.

A successful management of natural resources should engage the community because of the nature of the shared resources the individuals who are affected by the rules can participate in setting or changing them. The users have the rights to device their own management institutions and plans under the recognition by the government. The right to resources includes land, water, fisheries and pastoral rights. The users or parties accountable to the users have to actively monitor and ensure the utilization of the resource compliance with the rules and to impose penalty on those peoples who violates the rules.

### **Natural resources of the district:**

Uttara Kannada District is one of the biggest districts of our State with abundant natural resources. The district has varied geographical features with thick forest, perennial rivers and abundant flora and fauna and a long coastal line of about 144 KM in length. It is surrounded by

Belgaum District and State of Goa in the North, by Dharwar District in the East, by Shimoga and Udupi Districts in the South. Arabian Sea forms the West border. For the purpose of administration, the district has been divided into four Sub-Divisions viz Karwar Sub-Division comprising Karwar, Haliyal & Joida Talukas, Kumta Sub-Division comprising Kumta & Ankola Talukas, Sirsi Sub-Division comprising of Sirisi, Siddapur, Yellapur & Mundgod Talukas and Bhatkal Sub-Division comprising Bhatkal & Honnavar Taluka Uttara Kannada District, lies between 130 55' and 150 31' north latitude and 74" 9' units and 750 10' East longitude .

Uttara Kannada is the land of rivers. **There are five important rivers flowing in the District from the high range of mountains to the Arabian Sea.** The Kali River rises in Joida Taluk, the Gangavali rises in Dharwad District flows through Ankola Taluk. The Aghanashini rises near Sirsi, Sharavati which forms the famous Jog Falls flows through Honnavar . The other important rivers of the District are the Venktapur and the Varada. Except Varada river which flows eastwards all other rivers flow from East to West, cutting the Western ghats into deep Valleys, thus rendering themselves unfit for irrigation, but at the same time fit for generating hydroelectricity.

Uttara Kannada District has a coastal line of 144 K.Ms. extending from Majaii on the north to Gorte in Bhatkal Taluka on south and is endowed with natural resources. The District has 14 minor ports. The national Highway No.17 passes along the coastal areas in this district, facilitating good communication and transport.

### **Human resource:**

According to the 2011 census Uttara Kannada has a population of 1,436,847, roughly equal to the nation of Swaziland or the US state of Hawaii. This gives it a ranking of 346th in India (out of a total of 640). The district has a population density of 140 inhabitants per square kilometre (360 /sq mi). Its population growth rate over the decade 2001-2011 was 6.15%. Uttara Kannada has a sex ratio of 975 females for every 1000 males, and a literacy rate of 84.03%.

The chief language of the district is Kannada, with minorities of Konkani, Marathi, and Tulu speakers. **The population is predominantly Hindu**, comprising of many communities like Havyaks, Naiks, Namdharis and Vanis. The main tribes of the district are Sidhi, Kunabi, Halakki Vokkaliga, Gonda and Gouli.. **Sidhi's population is around ten thousand and are generally**

**found in Haliyal, Yellapur and Ankola taluks.** Now their culture is completely Indian and have adopted mainly Hindu religion. A small population of them are Muslims and Christians. They are extremely poor and backward and work mainly as agriculture labourers in the fields of Havyak Brahmins. Halakki Vokkaligas living in the foot of Western Ghats's of. Uttara Kannada". Their distinctiveness and backwardness are too obvious. They have administrative system of their own and the headman is called "Gouda". Their way of living is still ancient and need amalgamation with the main stream. The men are practically naked at home and the women decorated with beads and necklaces, heavy nose rings have distinct attire. Goulis are a nomadic tribes migrated from Maharashtra. They are mainly cow and goat rearers. They stay on the fringes of forest. Some have taken up agriculture.

Kunabis are said to be the most backward of the tribals of Uttara Kannada District.. They live in small groups deep inside forests in bamboo huts built in a row sharing common walls. Not having access to the medical facilities due to seclusion, mortality rate among them is very high. Gonds live mainly in the forests of Bhatkal taluk. They live off forest products. They have rich folk culture of tribal dance. Muslims and Christians are also found in the district.

**Table 1. Community wise Hindu population of the district and their distribution.**

<b>Community</b>	<b>Distribution</b>	<b>Community</b>	<b>Distribution</b>
<b>Havyaks</b>	Sirsi, Yellapur, Siddapur, Kumta, Honnavar, Bhatkala, Ankola	<b>Sidhis</b>	Haliyal, Yellapur, Ankola
<b>Naiks</b>	Ankola, Kumta, Karwar	<b>Kunabi</b>	Yellapur, Ankola, karwar
<b>Namdharis</b>	Ankola, karwar, Kumta	<b>Halakki</b>	Ankola, Kumta
<b>Vanis</b>	Ankola, kumta, karwar	<b>Vokkaliga</b>	Kumta, Honnavar
<b>Konkana maratha</b>	Karwar, ankola	<b>Gonda</b>	Bhatkala
		<b>Gouli</b>	Haliyal, Mundagod

### **Ecological resources:**

The district's high rainfall supports lush forests, which cover approximately 70% of the district. The North Western Ghats moist deciduous forests cover the Sahyadris below 1000 meters elevation. Many trees shed leaves in the drier months. In pockets above 1000 meters elevation lie

the evergreen North Western Ghats rain forests. Anshi National Park near Dandeli, preserves approximately 250 square kilometres (97 sq mi) of semi-evergreen forest, which is home to the Tiger, Black Panther, Leopard Cat, Gaur, Asian Elephant, sambar and a range of birds and reptiles **Dandeli Wildlife Sanctuary** protects 834 square kilometres (322 sq mi) of semi-evergreen and Bamboo forest in the watershed of the Kali river and its tributaries. **Yana of kumta** taluk is an enchanting place that can be reached by trekking about 10 kilometres (6.2 mi) through lush forest. It is famous for its tall jagged rock formations and waterfalls.

**Table 2. Forest and Social forest area of the district**

Miscellaneous				
Sl.No.	Taluk	Forest Department		
		Forest Area (In hectares)	Social forest (In hectares)	Saplings planted (In lakhs)
01	Ankola	75734	0	12.76
02	Bhatkal	25433	24.22	8.7
03	Haliyal	57819	0	18.72
04	Honnavar	57632	0	7.79
05	Karwar	55104	0	8.88
06	Kumta	39641	0	37.45
07	Mundgod	48333	0	8.56
08	Siddapur	68130	10.21	15.77
09	Sirsi	103270	0	23.81
10	Yellapur	116986	0	18.87
11	Joida	165873	24.35	19.96
	<b>Total</b>	<b>813955</b>	<b>58.78</b>	<b>181.27</b>

**Agriculture Area developed under different schemes in the district is 17,033.62 Hectares.**

(As per the report prepared by the joint director, district agricultural dept, Karwar)

The district is also home to patches of Savanna and degraded scrub jungles, which are often the result of overuse for logging or grazing. Much of the lowland has been cleared for agriculture. Mangrove forests can be found in the river estuaries, and the sandy beaches are home to groves of *Calophyllum Inophyllum*, Coconut and Screw pine (*Pandanus*). The rocky beaches at *Binaga*, *Arga*, *Belekeri*, *Tadadi*, *Ankola*, *Kumta*, *Dhareshwar*, *Kasarkod*, *Murdeshwara*, *Bhatkal* and *Belke* of the district are rich with Marine Fauna Diversity. The rocky

beaches of Uttara Kannada District harbor the invertebrates belonging to the Phylum Porifera, Coelenterata, Annelida, Arthropoda, Mollusca and Echinodermata.

**Attiveri bird sanctuary of mundagod** taluk is home to 79 species of birds including migratory birds from 22 countries. Burude falls is about 20 kilometres (12 mi) from Siddapur, Unchalli Falls, Shivagangae, Beene Holae Fall is about 25 kilometres (16 mi) from Sirsi,

**Magod Falls and Sathodi Falls near Yellapura** are some of the best natural falls in Uttara Kannada District. There are many dams in this district namely Supa Dam, Kodasalli Dam and Kadra Dam. The famous Atomic energy station at Kaiga is on the beautiful banks of River

### **Significance and future challenges:**

Fragmentation of the forest land, changes in the land use pattern and anthropogenic pressure on the land, forest, rivers and streams have resulted in large scale decline of many species of plants ,animals and natural resources in India in general and Western Ghats in particular. Hence now there is a need for landscape, waterscape and natural resources based approaches for the assessment and management of our tropical biodiversity for the future generation. The problem should be tackled by accepting it as challenge in future.

### **Conclusion:**

Environment management and conservation is the responsibility of every citizen of the world. However, academicians have to take the lead for the protection and promotion of the natural resources. The proper and honest efforts of delivery are in the hands of academicians. The awareness should be created about the proper utilization, conservation and management of our natural recourses in the minds of our young buds.If they really mind, can create miracles and a beautiful world to live. If we want to protect our natural resources we must sensitize ourselves to this important issue in the interest of entire community.

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