



UTILIZATION OF SUSTAINABLE FOREST RESOURCE MANAGEMENT IN KALWAN TEHSIL

Mr. Nimba Bhaurao Ahire

Research Scholar Ph.D.

Mahatma Gandhi Vidyamandir M.S.G. College, Malegaon camp. Tal. Malegaon Dist. Nashik

Dr. R. A. Jadhav

Research Guide

LVH College Art's, Science and Commerce College, Panchavati, Nashik.

Abstract:

As humans have progressed, they have adversely affected the environment. The environment is being degraded due to many reasons like human industrialization, factories, chemicals, etc. The environment is being overexploited for the development of industrialization. The utilization of forest resources is a key issue for countries. Forest utilization is the key to survival due to the requirement of agriculture on rain. However, population pressure results in a requirement to conserve forests. Nations depend on forests and forest resources to meet the various needs of daily life. The sustainable use of forest resources is a worldwide concern due to the importance of forest resources for the environment and clean society. Forests have been clear on a large scale. Due to the large amount of natural resources being used, the imbalance in the environment is seen. Therefore, we can see its adverse effect on human life. Humans must maintain the balance of forest resources. It requires sustainable development. In sustainable development, we must use natural resources appropriately for human development. If we want to achieve balance in forest development, humans should act in a manner that does not cause the loss of forest resources. Sustainable Development of Forests Sustainable development cannot happen without forest protection. Considering the needs of future generations, we should consider how to use the forest resources in the present time. This study visualized exploring linkages between forest utilization and household characteristics for reducing pressure on forests for conservation.

Keywords: *Environment, pollution, sustainable development, Forest resources, Forest Utilization.*

Copyright © 2023 The Author(s): This is an open-access article distributed under the terms of the Creative Commons Attribution 4.0 International License (CC BY-NC 4.0) which permits unrestricted use, distribution, and reproduction in any medium for non-commercial use provided the original author and source are credited.

Introduction:

Nature fulfills every human need. Man fulfills his needs by using various types of goods and services available from nature itself. Water, soil, air, and minerals are inorganic resources while forests, crops, and wildlife are examples of biological resources. What are Resources? a

resource is any material that is needed or used for living. In recent times, the problem of forest conservation has become more serious day by day. Mainly, we hear many words like forest protection, wildfire, deforestation, sustainable development, and forest destruction. Many problems related to forests are posing a great challenge



to the entire world. Forest resources have been used by humans for material convenience and to live a happy life to a greater extent than necessary. Due to this, environmental pollution has increased largely due to deforestation. Environmental pollution has affected the entire world. In the early days, nobody paid much attention to environmental pollution. That is why there is a need to create public awareness about forests today. Forest protection, forest awareness, and sustainable development of forests have become important mainly in recent times. In the present time, the amount of various problems related to forests is increasing. Artificial problems have increased over natural problems.

Objectives:

1. Use of forest resources in good conscience.
2. Prioritizing sustainable development without harming forests.

Research Area:

Kalwan is a very scenic taluka situated in the lap of the Sahyadri Mountains. A hundred percent of tribal people live here. It is a high and low hilly region bordering the state of Gujarat in the west. The main occupation is agriculture and the Girna, Poonad, Behdi, and Tambadi rivers have fed Sujalam Suflam. Chankapur, Punad, and Bhegu dams are here and vegetables are grown along with paddy, rice, maize, and wheat. With the help of social afforestation, agroforestry can be seen in hilly

areas. Along with agriculture, development is taking place through fishing, handicrafts, trade, and animal husbandry.

Kalwan taluka of Nashik district is included in this study. Kalwan Tehsil is situated in the Punad and Girna sub-basins of the Tapi Valley and covers an area of 86670.64 hectares. It extends between 20° 20' 15" - 20° 40' 23"N.lat and 73° 45' 6" - 74° 05' 22"E.long. . Administratively, the tehsil is divided into 4 circles namely Kanashi, Mokbhangi, Abhona, and Kalwan, with a total of 144 villages and 35 subdivisions. The tehsil is bounded by the Dang district of Gujarat state on the northwest, Surgana tehsil of Nashik district on the west, Dindori tehsil of Nashik district on the southwest, Deola on the east, and Baghlan tehsil on the north.

Hypothesis:

Sustainable forest development should cogitate the limits and tolerance of forest ecosystems, as healthy as possible for economic growth and social benefits.

Database and Methodology:

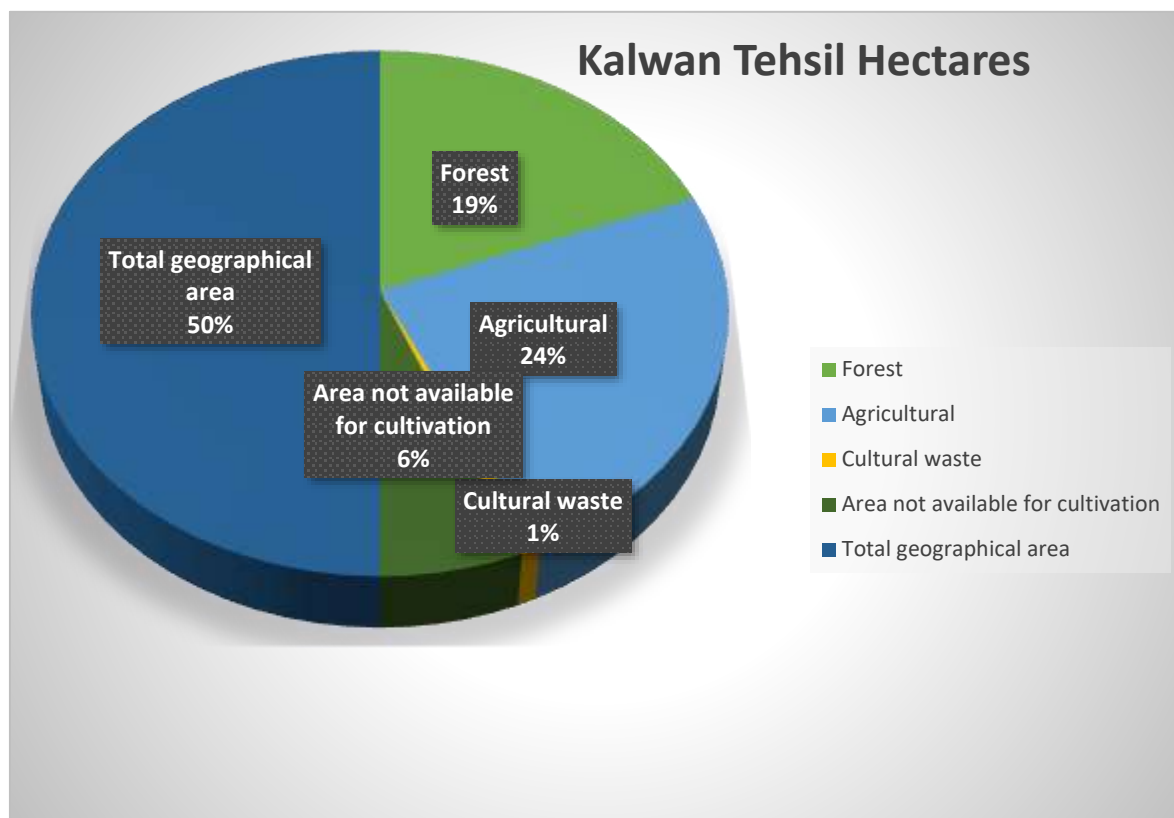
Various forest use statistics have been compiled from the 2011 Tehsil Office, District Statistical Abstract, District Gazetteer, and Nashik District Census Handbook. Apart from this, some statistics have been prepared from field surveys by adopting various statistical techniques and tables, graphs, and maps

Table No-1. Total Forest Area of Nashik District

Forest Department	Reserve	Secured	Unclassified	Total	%
	1874.84	213.86	3.61	2092.31	13.4

Table No:-2. Various uses of land in Kalwan Tehsil as compared to Nashik District (2011 Census)

Sr. No	Land use	Kalwan Tehsil		Nashik District	
		Hectares	%	Hectares	%
1	Forest	33040.71	83.13	327818.32	21.67
2	Agricultural	41581.43	47.98	926714.02	61.25
3	Cultural waste	1443.63	1.67	93424.21	6.18
4	Area not available for cultivation	10604.87	12.23	164880.69	10.9
	Total geographical area	86670.64	100	1512837.24	100

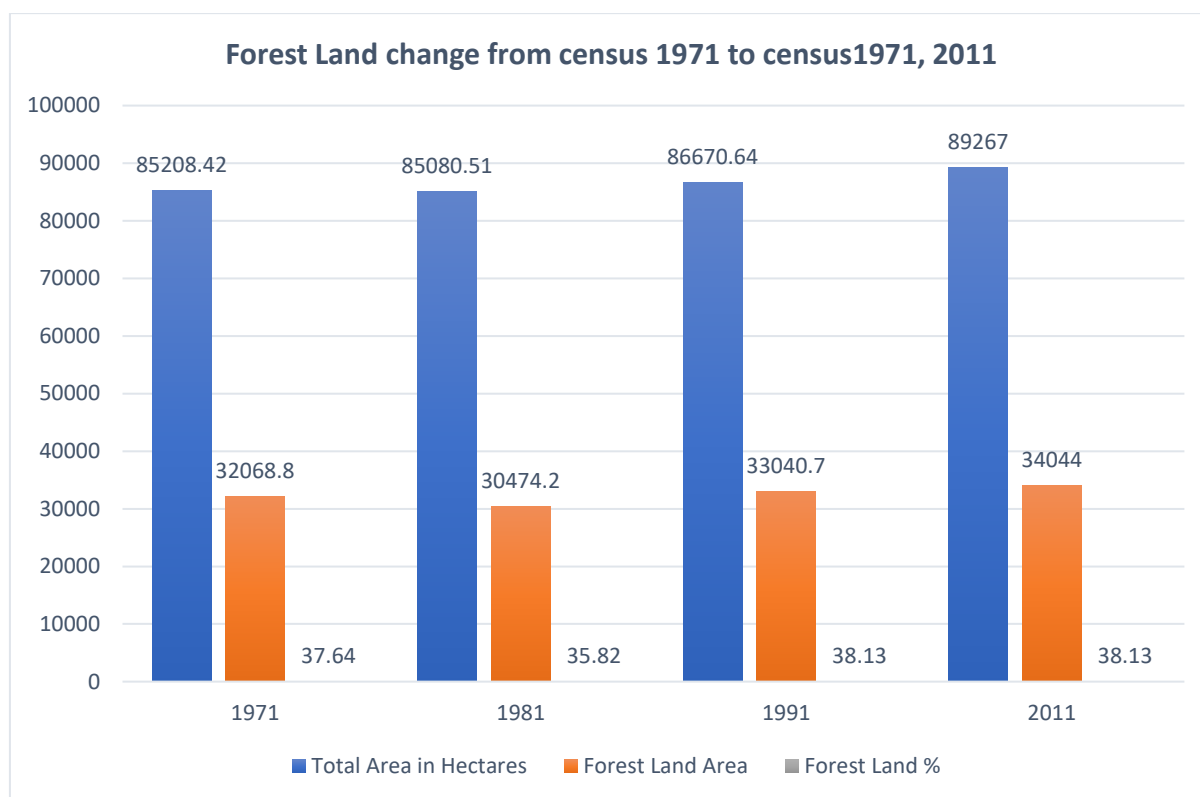


Kalwan tehsil came into existence as an independent tehsil in 1999 after being separated from Deola. To understand the changes in forest cover in Kalwan Tehsil, the land use data for the last decade has also been collected from the census period 1971 to 1991, 2011. For convenience, only the existing villages are considered for the 1971 and 2011 census.

Table No: - 3. Forest Land change from census 1971 to census 1971, 2011

Sr. No	Census year	Total Area in Hectares	No. of Village	Forest Land	
				Area	%
1	1971	85208.42	130	32068.8	37.64
2	1981	85080.51	132	30474.2	35.82
3	1991	86670.64	144	33040.7	38.13
4	2011	89267	150	34044	38.13

The area under forest in Kalwan tehsil was 37.64% in 1971; the forest has decreased by -1.82% from 1971 to 1981 due to forest land under cultivation. Forestland was stable from 1991 to 2011. Therefore, negative forest land change is a temporally significant area in this forest. Substantial areas of forest and hill slopes were under shifting cultivation. Between 1981 and 1991, after shifting cultivation was abandoned, forest growth began. Forest lands increased, thus positively changing the forest during this period



To understand the changes in forest use in Kalwan Tehsil, forest use data for the last decade from 1971 to 1991, and 2011 has also been collected.

Sr.No	Land use	Kanashi	Mokbhanagi	Abhona	Kalwan	Total
1	Forest	11181.3	6831.39	7944.07	7083.95	33040.71

The above table shows that Kanashi Mandal has the maximum forest area, which is 33.84% of the total forest area of Kalwan Tehsil. Abhona 24.04%, Kalwan 21.44%, and Mokbhangi 20.67% forest areas follow it. Forest restoration is central to the global conversation about carbon abolition and biodiversity conservation, but recent research hardly acknowledges the social dimensions related to its implementation or environmental justice implications.¹

Natural spaces and sustainable development are an

element that encourages sustainable development projects. It seeks to "preserve, restore and promote the sustainable use of natural resources in Kalwan"

Conclusion and Suggestions:

Forest resources and forest lands should be sustainably managed to meet the social, economic, ecological, cultural, and spiritual needs of present and future generations and should be protected against harmful effects of pollution, fires, pests, and diseases in order to maintain their full multiple values.

¹ Wilkie, Holmgren, and Castañeda, "Sustainable Forest Management and the Ecosystem Approach: Two Concepts, One Goal."



Sustainable forest use can emphasize better cross-sectoral integration and intersectoral cooperation. Interactions between forests and other biomes/habitat types can become landscape and biodiversity conservation issues.

A link has been established between forest utilization patterns and forest development. The main emphasis is on establishing the relationship between slope and land use. Substantial areas of forest and hill slopes were covered by shifting cultivation. Forests are very important for living creatures and we should give them as much attention as we need.

Reference:

Journals, Human, and Review Article. “Land Use Pattern and Agricultural Development in Kalwan Tahsil of Nashik District in Maharashtra State,” no. 1 (2016).
 Pattnaik, Pratap, and Shahrokh Daijavad. “IBM Journal of Research and Development: Preface.” *IBM*

Journal of Research and Development 54, no. 1 (2010): 1–2.
<https://doi.org/10.1147/jrd.2009.2037682>.

Registrar General And Census Commissioner India. “Census of India 2011: District Census Handbook Nashik,” 2014.
http://www.censusindia.gov.in/2011census/dchb/DCHB_A/27/2720_PART_A_DCHB_NASHIK.pdf.

Wilkie, Mette Løyche, Peter Holmgren, and Froylan Castañeda. “Sustainable Forest Management and the Ecosystem Approach: Two Concepts, One Goal.” *Forum American Bar Association*, no. December (2003): 31.

List of Villages in Kalwan Tehsil of Nashik (MH) | villageinfo.in

Maps of Kalwan Taluka villages in Nashik, Maharashtra | villagemap.in

Cite This Article:

* *Mr. Ahire N.B. & ** Dr. Jadhav R. A. (2023). Utilization of Sustainable Forest Resource Management in Kalwan Tehsil, **Electronic International Interdisciplinary Research Journal**, XII, Issues – IV, July -August, 2023, 119-122.*