World Journal of Pharmaceutical and Life Sciences <u>WJPLS</u>

www.wjpls.org

SJIF Impact Factor: 5.008

PERCEPTIONS OF LOCAL COMMUNITIES TOWARDS SACRED FORESTS IN PITHORAGARH DISTRICT OF KUMAUN HIMALAYA, INDIA

Brij M. Upreti*, Naveen Chandra Pandey and Lalit M. Tewari

Department of Botany D.S.B. Campus Kumaun University Nainital.

*Corresponding Author: Brij M. Upreti Department of Botany D.S.B. Campus Kumaun University Nainital.

Article Received on 10/12/2018

Article Revised on 01/01/2019

Article Accepted on 22/01/2019

ABSTRACT

'Sacred' has different meanings to different communities. At the basic level it denotes deep respect and 'set aside' for purposes of the spiritual or religious. The key challenges for the future will be deciding how to protect these natural places which are often influenced by strong belief system, linked closely to rituals, stories and legends of local communities. Survey was conducted to achieve authentic information, an extensive dialogue with the inhabitants of Villages around six sacred forests. Observations shows that the in-built mechanism in SF of Pithoragarh, their social and cultural tradition have made them thrifty on over exploitation and contributed towards protection of the forests. Rules related to sacred forests were also made by ancestors; these rules are still believed and followed by local inhabitants of villages near sacred forests in Pithoragarh. The challenges for the future will be deciding how to protect these natural places which are often influenced by strong belief system.

KEYWORDS: Sacred forests, Kumaun Himalaya, Belief system, Conservation.

INTRODUCTION

'Areas of land or water having special spiritual significance to peoples and communities' (Oviedo and Jeanrenaud, 2007). 'Sacred' has different meanings to different communities. At the basic level it denotes deep respect and 'set aside' for purposes of the spiritual or religious. Sacred natural sites are part of a broader set of cultural values that different social groups, traditions, beliefs or value systems attach to places and which 'fulfil humankind's need to understand, and connect in meaningful ways, to the environment of its origin and to nature' (Putney, 2005). The term 'sacred natural sites' implies that these areas are in some way holy, venerated or consecrated and so connected with religion or belief systems, or set aside for a spiritual purpose. Sacred natural sites are just one of many domains where religions or belief systems interact with nature. There are important elements to take into account regarding indigenous or traditional spirituality. The growing recognition of the political status of indigenous peoples provided in 2007 by the United Declaration on the Rights of Indigenous Peoples (UNDRIP, 2007) has significantly increased awareness of the deeper dimensions of oppression and also of resilience. The first scholar to document sacred groves of the State was D. Brandis, the first Inspector General of Forests, who wrote about occurrence of sacred groves in 1897 (Rao, 1996). The first authentic report on the sacred groves is the Census report of Travancore of 1891 in which Ward and Conner (1927) reported 15,000 sacred groves in Travancore. Historical records, legends and the folk songs, particularly certain devotional songs like "Thottampattu" sung in praise of Lord Ayyappan throw light on sacred groves of ancient Kerala. Thottampattu" (believed to have been composed during 500-600 AD) names 108 major "Ayyappan Kavus" and mention about numerous "Ayyappan Kavus" distributed all over Kerala. In Uttarakhand Sacred groves play an important role in the religious and socio-cultural life of the local people. Rituals and ceremonies are often carried out in the sacred groves to propitiate ancestral spirits and deities for enhancing agricultural yields and for well-being of animals and human beings (Singh. 2011, Seema et al., 2007, Ashish et al., 2010). The main objective of this study is to understand and explore local inhabitant's perceptions toward the sacred forests in Pithoragarh district, Uttarakhand. The main goals are to document peoples knowledge and perception of benefits and change of sacrd forests to understand the role that these forests plays in people's lives.

METHODS

Site: The study was conducted in 6 sacred forests located in Pithoragarh district of Uttarakhand state, India. Six sites represents sacred forests: (1) Haat Kalika sacred forest Situated in Gangolihat (2) Chamunda Devi sacred forest Gangolihat (3) Pasupatinath sacred forest Chandak (4) Betal devta sacred forest Kanalichina (5) Golu devta sacred forest ratwali (6) Thal kedar sacred forest Badabe. The approximate area of the six sacred forests ranges from 120 -195 ha and are located at an elevation range of 1497-2603 m above sea level (Table1).

Survey: Survey was done during year 2015 month of February, June and October. In order to achieve authentic information, an extensive dialogue with the inhabitants of Villages around sacred forests conducted. The respondents comprised young and old, male and female diversified in five age group 0-15, 16-30, 31-60, 60-80 and above 80 year. The survey was standardised and included sections that covered the following topics: Socieo-economic characteristics; use of sacred forests; knowledge about the sacred forests; attitude towards the sacred forests; and perceptions of changes. (Table 1, 2).

RESULTS

Sacred forests

- 1. Haat Kalika Sacred Forest: Haat Kalika sacred forest is tribute to Maa Kalika, situated near Rawal goan in Gangolihat tehsil, of Pithoragarh district at an altitude of 1695 m asl covered with forest of *Cedrus deodara Roxb. ex D.Don.* It is rich in folk culture and religious traditional culture and established by Sankaracharya. Local communities such as Rawal, Pant, Joshi, Pathak, Mehta, Bhandari, Karki and Negi worship goddess Kalika and enforce the rules for sacred forest (Table1).
- 2. Chamunda Devi Sacred Forest: Chamunda Devi sacred forest is devoted to Maa Chamunda, situated near Hanera village in Gangolihat tehsil, of Pithoragarh district at an altitude of 1795m asl covered with forest of *Cedrus deodara Roxb. ex D.Don*, Established by Sankaracharya. Local

communities such as Pant, Joshi, Upreti, Bhandari, Tamta and Pathak worship goddess Chamunda (Table 1).

- 3. Betal Devta Sacred Forest: Sacred forest is tribute to God Betal, situated near Siroli village Kanalichina tehsil, of Pithoragarh district at an altitude of 1504m asl covered with forest of *Quercus glauca*. It is rich in folk culture like songs, worship methods and established by local ensisters of village Siroli about 750 year ago (Table1). Local communities Sirola, Upadhyay, Joshi, Bhandari and Arya found in nearby villages such as Satgad, Bhandarigaon and Gudoli.
- 4. Thal Kedar Sacred Forest: Sacred forest is tribute to Lord Shiva, situated near Badabe village in of Pithoragarh district at an altitude of 2602m asl covered with forest of *Quercus semicarpifolia J.E.Smith.* Local communities such as Bhatt, Joshi, Ram, Oli, and Negi worship god Shiva since about more than 800 years (Table1).
- 5. Golu Devta Sacred Forest: Sacred forest situated near Ratwali village in Pithoragarh district at an altitude of 1823m asl covered with forest of *Quercus leucotrichophora*. This Sacred forest devoted to God Golu believed as God of justice. Local communities such as Joshi, Pandey and Mehta worship god Golu since about 600 years (Table1).
- 6. Pasupatinath Sacred Forest: Sacred forest is tribute to God Pasupatinath, situated near Dunga village Chandak, of Pithoragarh district at an altitude of 1906m asl covered with forest of *Rhododendron aeboreum Smith*. Local communities such as Joshi and Bisht worship god Pasupatinath since about 250 years (Table1).

	Thal	Chamunda	Kalika	Pasuptinath	Betal	Golu			
	Kedar SF	Devi SF	Devi SF	SF	Devta SF	Devta SF			
Male	46.3±0.32	47.1±0.38	44.0±0.31	41.7±0.20	46.9±0.24	50.0±0.25			
Female	53.7±0.25	52.9±0.27	56.0±0.30	58.3±0.62	53.1±0.30	50.0±0.15			
Age group									
0-15	9.3±0.26	19.6±0.26	8.0±0.51	0.0	21.9±0.33	11.1±0.31			
16-30	20.4±0.38	23.5±0.32	36.0±0.35	33.3±0.32	25.0±0.51	11.1±0.36			
31-60	44.4±0.22	25.5±0.26	36.0±0.21	50.0±0.57	31.3±0.34	38.9±0.23			
61-80	20.4±0.27	17.6±0.23	8.0±0.15	0.0	12.5±0.40	27.8±0.15			
81+	5.6±0.28	11.8±0.37	12.0±0.31	16.7±0.18	9.4±0.19	0.0			
Proffesion									
Agriculture	86.7±0.24	81.8±0.27	60.0±0.36	75.0±0.57	63.6±0.32	62.5±0.25			
Service class	13.3±0.27	18.2±0.30	40.0±0.15	25.0±0.35	36.4±0.32	37.5±0.15			
Energy									
Wood	7.7±0.32	6.3±0.29	14.9±0.15	6.5±0.27	7.0±0.44	5.7±0.23			
LPG	92.3±0.60	93.8±0.28	85.1±0.26	93.5±0.20	93.0±0.22	94.3±0.32			
Fuel wood /day in kg from non sacred forest	14.3±0.22	14.3±0.24	16.3±0.22	23.3±0.38	15.2±0.20	9.4±0.25			

Table 1: Authentic information from inhabitants of	villages around sacred forest and non sacred forests.
--	---

NSF: Non Sacred Forest, SF: Sacred Forest

Socio-economic characterisation: Respondents were categorised into five age groups i.e., 0-15 year, 16-30year, 31-60year, 61-80year and above 80 year. Half of total respondents were women. Observations shows that villages near around sacred forests have most respondents (25 -50%) between age group 31-60, while inhabitants of age group above 80 year were only 5.6-16.7 % (Table 2).Their professions were diversified with agriculture and service class. Majority of households participated in agriculture (maximum in SF Thal Kedar about 86.7% while minimum in SF Haat Kalika about 60%) Table 2.

Knowledge and management: Studies shows that about 47.4% population (maximum in SF Pasupatinath) while only 30.7% (minimum in SF Chamunda Devi) knew the meaning of sacred forest (Table 3).The majority of population did not know the creation story of the sacred forest, more than 62% respondents said there are rules regarding the sacred forest and rules are formed by ancestors (Oral History). Few respondents (maximum 7% in SF Golu Devta while minimum 0-0.5 % in SF Betal devta and Haat Kalika) said that the villages or government makes the rules. The most common response to who enforce the rules was that each person is responsible for enforcing the rules (maximum 81.1% in SF Pasupatinath) (Table 3).

Perceptions of benefits and problems: Mostly respondents like the sacred forests and that it had benefits, which primarily religious. A few people also

mentioned that extraction (leaves and fertilizers) was a benefit while some respondents mentioned aesthetic benefits (Fig 1).Some respondents mentioned that they cannot collect fuel wood from sacred forests that's why they have to go far other non sacred forests to collect wood for domestic use. Respondents said that they use fuel wood for domestic purposes. Our survey results shows that the single household use 23.3kg fuel wood per day maximum in SF Pasupatinath while minimum 9.4 kg/day in SF Golu Devta (Table2).

Future: Few respondents think that the sacred forests had changed over time maximum 16.7% from SF Pasupatinath. Most respondents said they are worry about the future of sacred forests (Fig 1), many said that the forests are a part of everyday life and religion and they cannot imagine life without the sacred forests.

Age and gender differences: Knowledge about the area, older peoples were more likely to know the meaning of sacred forests especially those categorised in age group 61-80 and above 80 year. Older persons were the more likely know the creation story and rules related the sacred forests. Respondents between age group 31-60 year know the creation story very little, while no one under the age group 0-15 and 16-30 year said they knew the story even a little. In terms of benefits, of the few who said the sacred forests had no benefits, most were under 30 year old. Respondents under 30 year were also the least likely to mention that the area had religious benefits (Table 2).

 Table 2: Socio economic status of different sacred forests (Respondents in percentage).

	SF Thal	SF	SF	SF	SF Betal	SF Golu					
	kedar	Chamunda	Kalika	Pasupatinath	devta	devta					
Do you know the meaning of Sacred forests?											
Something	37.7±0.19	30.7±0.17	32.6±0.44	42.4±0.54	31.6±0.44	35.9±0.36					
Does not know	62.3±0.32	69.3±0.32	67.4±0.45	57.6±0.56	68.4±0.25	64.1±0.27					
Do you know the creation story?											
Know	9.5±0.25	12.6±0.39	14.8±0.25	15.9±0.31	11.3±0.25	5±0.47					
Know a little	30.2±0.35	33.2±0.23	36±0.84	32±0.30	38.5±0.35	27±0.30					
Does not know	60.3±0.29	54.2±0.63	49.2±0.24	52.1±0.38	50.2±0.27	68±0.43					
Who makes the rule											
Historical/ancestors	66.2±0.24	70.7±0.26	73.2±0.32	77±0.40	68.5±0.61	62.3±0.21					
Village	30±0.28	25.3±0.32	26.3±0.60	21±0.28	31.5±0.56	30.7±0.25					
Government	3.8±0.10	4±0.25	0.5±0.15	2±0.40	0	7±0.25					
Who enforce the rules?											
Village head	29.8±0.22	24.6±0.23	21±0.35	18.9±0.36	27.3±0.44	32.6±0.18					
Each person	70.2±0.35	75.4±0.26	79±0.52	81.1±0.65	72.7±0.17	67.4±0.24					
Do you know the rules?											
Yes	35.2±0.29	41.5±0.40	42.4±0.56	46.2±0.290.44	37.4±0.35	31.2±0.46					
No	64.8±0.25	58.5±0.17	57.6±0.30	53.8±	62.6±0.38	68.8±0.32					



Fig. 1: Graphical representation of attitude and forest change survey results.

DISCUSSION

1. One dimension of meaning: Studies show that Sacred forests of Pithoragarh district have one dimension of meaning for local inhabitants. It is a place to light incense and worship for good luck. local inhabitants believe that Haat Kalika and Chamunda Devi is goddess of Sacred forest which is dominated by *Cedrus deodara Roxb. ex D. Don* trees, so peoples are not concern about conservation they concern about these trees because they believe these trees are of Goddess Haat Kalika and Chamunda. Respondents do not link the environment or conservation values to these sacred forests. Our observations also shows that the in-built mechanism in SF of Pithoragarh, their social and cultural tradition have made them thrifty on over exploitation and contributed towards protection of the forests. Rules related to sacred

forests were also made by ancestors (Oral history), these rules are still believed and followed by local inhabitants of villages near sacred forests in Pithoragarh. Previous studies also recorded from Yunnan, China (Allendrof et al., 2014) and Arunanchal Pradesh (Gibji et, al., 2011).

2. Management implication: Our studies shows that very few inhabitants from sacred forests know the creation story (Maximum 15.9 % in SF Pasupatinath while minimum 5% in SF Golu Devta) and rules related to the sacred forest(Maximum 46.2 % in SF Pasupatinath while minimum 31.2% in SF Golu Devta), which is a problem because the knowledge and culture of sacred forest will not pass from one generation to another generation this problem can bring these areas towards threat. Our results highlights some issue to consider regarding the integration of these sacred forests into

conservation strategies, while areas are under threat in many places (Dudle et al., 2005; Verschuuren et al., 2010), it is important to consider the local context before recommending if any how sacred areas should be incorporated into conservation strategies (Bhagwat and Rutte, 2006; Ormsby, 2013, 2011, Allendrof et al., 2014).

The key challenges for the future will be deciding how to protect these natural places which are often influenced by strong belief system, linked closely to rituals, stories and legends of local communities.

REFERENCES

- Allendrof D.Teri Jodi S.Brandt and jian m. Yang. Local perceptions of Tibetan village sacred forest in northwest Yunnan, Biological Conservation, 2014; 169; 303 -310.
- Anthwal Ashish., Gupta Nutan, Sharma Archana, Anthwal Smriti and Kim Ki-Hyun, Conserving biodiversity through traditional beliefs in sacred groves in Uttarakhand Himalaya, India. Resources, Conservation and Recycaling, 2010; 54: 962-971.
- 3. Bhagwat, S.A., Rutte, C., Sacred groves: potential for biodiversity management Front. Ecology Environment, 2006; 4: 519-524.
- Dhaila-Adhikari S & Adhikari B S, Veneration of deity by restoration of sacred grove in village Minar, Kumsun region of Uttarakhand: A case study. Journal of American Science, 2007; 3(2): 45-49.
- Dudley, N., Zogib Higgins-, Mansourian L., S., Beyond Belief: Linking faiths and protected areas for biodiversity conservation. WWF international and Alliance on Religions and conservation, gland and Bath, 2005.
- Hazarika Manjil, Sacred Groves: Linking Cobservation with Religion in North East India. Eco Whisper, 2015; 2(1): 33-38.
- Nimachow Gibji, Joshi RC and Dai Oyi, Role of indigenous knowledge system in conservation of forets resources-AA case study of the Aka tribe of Arunanchal Preadesh. Indian ournal of Tradicinal knowledge, 2011; 10(2): 276-280.
- Ormsby A.Alison, The impact of global and national policy on the management and conservation of sacred groves of India, Hum ecol, 2011; 39: 783-793.
- Ormsby, A.A., The impact of Global and national policy on the management and conservation of sacred groves in India.Human Ecology, 2011; 39: 783-793.
- Ormsby, A.A., Analysis of local attitudes toward the sacred groves of Meghalaya and Karnataka, India, Conserv. Soc., 2013; 11: 187.
- 11. Oviedo, G. and Jeanrenaud, S., 'Protecting sacred natural sites of indigenous and traditional peoples', in Mallarach, J.M. and Papayannis, T. (eds) (2007) Protected Areas and Spirituality, IUCN and Publications de l'Abadia de Montserrat, Gland, Switzerland, 2007.

- Putney, A., 'Building cultural support for protected areas through sacred natural sites', in McNeely, J. (2005) Friends for Life, IUCN, Gland, Switzerland and Cambridge, 2005.
- Rao B.R.Prasad, Babu M.V.Suresh, Reddy M.Sridhar, Reddy A.Madhusudhana, Rao V.Srinivasa, Sunitha S. and Ganeshaiah K.N., Sacred groves in southern eastern Ghats, India:Are they better managed than forest reserves? Tropical Ecology, 2011; 52(1): 79-90.
- 14. Rao. P., Sacred groves and conservation. WWF-india Quarterly, 1996; 7: 4-8.
- 15. Singh Harsh, Floristic Diversity of Sacred Groves of Pithoragarh, Uttarakhand. Ph.D Thesis submitted to Kumaun University Nainital, 2011.
- 16. UNDRIP 2007; 'Declaration on the rights of indigenous peoples, United Nations', General Assembly, 61st session, agenda item 68, Report of the Human Rights Council.
- Upreti Brij M Tewari Lalit, Tewari Ashish and Joshi Neeta.2016; Physiochemical Characterization of Soil Collected from Sacred and Non Sacred Forests of Uttarakhand: A Comparative Study; J. Chem. Eng. Chem. Res. Vol. 3, No. 11, 2016, pp. 989-992.
- Upreti Brij M, Tewari Lalit, Tewari Ashish. 2017; Role of Plants Used in Religious and Cultural System by Local Inhabitants of Sacred Forests of district Pithoragarh, Kumaun Himalaya. Biolife. 5(1), pp 7-11.
- 19. Upreti Brij Mohan; 2018; Eco –taxonomical exploration of major sacred forests in Pithoragarh district of Kumaun Himalaya and their significance in phytodiversity conservation. Ph.D Thesis submitted to Kumaun University, Nainital, Uttarakhand.
- Verschuuren, B., Wild, R., Mcneely, J., Oviedo, G.(Eds), 2010; Sacred Natural sites: Conserving Nature and Culture, Routledge.
- 21. Ward and Conne 1927; Memmoirs of the survey of Travancore and cochin states.cited from census report of Travancore, 1891