

Curriculum Vitae of

Dr. C. N. Pandey, (*Indian Forest Service - retired*)

A. General

Name : Dr. Chhavi Nath Pandey, IFS (Retd.)

Service : Indian Forest Service, 1980 batch, Gujarat Cadre,
(Retired on Superannuation on 31st August. 2015)

Post held at the time of retirement: **Principal Chief Conservator of Forests
& The Head of the Forest Force, Gujarat.**

Present assignment: **Chairman,
Expert Appraisal Committee (Industry I),
Ministry of Environment, Forests and Climate Change,
Government of India.**

(Expert Appraisal Committee is a 14 member committee of experts, constituted by Government of India on 2nd Nov, 2015, for Environmental Impact Assessment of Industry I type of projects requiring environmental clearance under the Environmental Impact Assessment Notification-2006.)

Qualifications ; 1. M. Sc. (Physics). 1976, Lucknow University,
(First Division and First position in order of merit.)

2. Associate of Indian Forest College, 1982,

(Indian Forest Service 1980 batch, Associate of Indian Forest College - course 1980 -82 - now known as the Indira Gandhi National Forest Academy)

3. P. G. Diploma (HRD), Indira Gandhi Open University,

4. Ph.D Botany, (Reproductive Ecology of Mangrove -

Rhizophora mucrunata), North Gujarat University.

Address : K-14, Sector 20, Gandhinagar, 382020, Gujarat. India

E-Mail : cnpandey@gmail.com

Date of Birth : 9th August, 1955

Gender : Male

Marital Status : Married

Nationality : Indian

Language Known : English, Hindi and Gujarati.

B. Major Assignments held;

After successful completion of the probation period, held various posts in the Forest Department of Gujarat covering field execution, protection of forests, Tribal development, management of forest resources, management of territorial forests, implementation of Forest and wildlife laws, working plans, wildlife management, management of National Parks and Sanctuaries, Research, ecological education, functions of the Forest Corporation etc.

Handled the clearance of projects under the Forest Conservation Act in the capacity of Conservator of Forests (Forest Conservation Act) and as Principal Chief Conservator of Forests & Head of the Forest Force Gujarat.

Handled wildlife issues and wildlife related clearances as the Chief Wildlife Warden Gujarat.

The major assignments held while in the IFS are listed below.

Major Assignments held

Sr. No.	Post	Period
1	Principal Chief conservator of Forests & Head of the Forest Force - Gujarat	1.1.2015 to 31.8.2015
2	Chief Wild life warden and Principal Chief Conservator of Forests, Wildlife, Gujarat.	18. 5 2013 to 31.12.2014
3	Additional Principal Chief conservator of Forests (Development and Management), Gujarat	February, 2010 to May 2013
4	Director, Gujarat Ecological Education and Research (GEER) Foundation, Gujarat	June 2002 to Feb. 2010
5	Conservator of forests (Forest Conservation Act), Gujarat	May 1999 to June 2002
6	Conservator of Forests, Vadodara Territorial Circle, Gujarat	1994 to 1999
7	Dy. Conservator of forests, Valsad North Territorial Division, Gujarat	1988 to 1991

C. Special Assignments / Responsibilities

1. **Vice Chairman of the State Level Expert appraisal Committee -SEAC - Gujarat**, constituted under the provisions of the Environment (Protection) Act, for 6 years during the following two consecutive terms .

1st term; June 2007 to June 2010

2nd term; June 2010 to June 2013

- 2. Chief Wildlife Warden of Gujarat and the Member Secretary of the State Board for Wildlife , Gujarat** from 7th October 2012 to 17th May 2013 (additional Charge) and again from 18th May 2013 to 31st December 2014 (substantive Charge).
- 3. Chairman, Project Approval Committee for Watershed Projects in Gujarat,** constituted by the Rural Department, Gujarat (from 2012 to 2014)
- 4. Member of Gujarat Coastal Zone Management Authority** from 9.7.2009 to 31.8.2015
- 5. Director, Gujarat Ecological Education and Research (Foundation) from June 2002 to 2010.**

D. Special International Training attended,

10 week course on Agroforestry Systems at the Silsoe campus of Cranfield University, U. K. in 1999. The course included the following

- 1. Character and productivity of various Agro forestry systems ranging from grasslands to woodlands.**
- 2. Productivity calculation and optimisation.**
- 3. Managing various agro forestry systems for maximising productivity.**
- 4. Use of Remote Sensing and Global Positioning Systems.**
- 5. The course included a short duration programme of one week regarding the joint forest management and peoples' participation in natural resource management at Readings University, U. K.**

E. Participation in International events,

- 1. Part of a two member team that represented the Ministry of Environment and Forests, Government of India in 3 days International Workshop on Bamboos, organised by Japan at Yangon, Myanmar in 1994**

2. **Part of the team that represented Ministry of Forests and Environment, Government of India in 3 days International Symposium on Coral Reefs and marine bio diversity at Manila, Philippines.**
3. **Part of the team that represented the Ministry of Environment and Forests, Government of India at the “Scientific and Technical Symposium on Sustainable Mangrove Ecosystem Management” from 22nd-25th November, 2008, at Ranong, Thailand, Organised by the international MFF (Mangroves for Future) programme supported by IUCN (International Union for the Conservation of nature and Natural Resources). Presented a technical paper in this symposium on the Reproductive Ecology of Mangroves.**
4. **Participated in a two day worksop on developing tools for monitoring coral reef and marine ecosystems organised by IUCN at Maldives.**
5. **Participated in the one day seminar and consultative process the conservation of internationally migratory species organised-by IUCN in 2014 at Bangkok Thailand. The main countries participated in the seminar were India and Pakistan and the conservation of species which seasonally migrate across the international borders between two countries was deliberated upon.**

D. Direct involvement with Climate Change related research and studies.

I have been directly involved with the following Climate change related studies, carried out in Gujarat, as the Principal Investigator of the studies.

<i>Sr. No.</i>	<i>Aspect of Climate change</i>	<i>Study</i>	<i>Details</i>	<i>Status</i>
1	Carbon sequestration	Carbon sequestration by mangroves of Gujarat	This study has assessed the carbon content of different density classes of mangrove forests (vegetation and soil) of	Completed

<i>Sr. No.</i>	<i>Aspect of Climate change</i>	<i>Study</i>	<i>Details</i>	<i>Status</i>
			different regions of Gujarat. Forest Survey of India brings out status of forests report every two years which gives details about the change in the forest cover. Thus, the change in carbon content of mangroves of state can be tracked.	
2	Carbon sequestration	Carbon sequestration by trees outside forest areas of Gujarat	This study has assessed the carbon content of green cover created in urban and suburban areas of Gujarat. The Forest Department raises green cover in non forest areas under Social Forestry Programme. This study has assessed carbon sequestration potential of different girth classes of 74 tree species. Further, this study has also estimated the carbon sequestration by trees and shrubs of different districts of the State	Completed
3	Carbon sequestration by coral reefs of Gujarat	Carbon sequestration	This study has assessed the carbon content of coral reefs of Gujarat.	Nearing completion
4	Status of grasslands of Saurashtra and Central Gujarat	Productivity and carbon sequestration	This study has assessed the productivity and carbon content of grasslands of Saurashtra and Central Gujarat. This study has also indicated the role of rains in productivity and carbon content of those grasslands.	Completed
5	Potential area mapping for	Coastal security and by	These studies has surveyed the intertidal areas of State	Completed

<i>Sr. No.</i>	<i>Aspect of Climate change</i>	<i>Study</i>	<i>Details</i>	<i>Status</i>
	mangrove restoration in South Gujarat	development of coastal shelter belts	and identified the suitable regions where coastal shelter belts. The suitable regions are treated as potential areas. A details treatment plan has been developed for every potential areas. A total of 149 potential areas distributed over 3000 sq km area has been identified. This would also help in monitoring of development of shelter belts at those potential areas.	
6	Potential area mapping for mangrove restoration in Kachchh			
7	Potential area mapping for mangrove restoration in Saurashtra			
8	Impact of climate change on biodiversity	Impact of climate change on different ecosystems of the State	This study assessed the impact of change in temperature, sea level rise on different species a selected ecosystem.	Nearing completion
9	Carbon sequestration	Change in carbon content of mangrove forests of the State	This study is aimed at developing a software system which will assess the pattern of change in carbon content of mangrove forests of the state.	Nearing Completion
10	Carbon Sequestration	Assessment of carbon sequestration potential by the forest area in Gujarat	The study aims at assessing the Carbon sequestration potential by the forest area - covering all the forest Types and Sub - Types- of Gujarat.	Nearing completion.
11	Assessment of carbon dioxide emission by different development sectors in Gujarat.	Assessment of Carbon dioxide emission by different sectors in Gujarat.	The study aims at assessing the level of carbon emission by different sectors in Gujarat such as Power, Industry, Transport etc.	Nearing Completion.

E. Paper Publication

List of technical papers published in Peer reviewed international journals.

1. Pandey, R., Pandey, C. N. & Jain, B. K., (2010b) Reproductive phenology of *Rhizophora mucronata* Lamk. (Rhizophoraceae) in Gulf of Kachchh, Gujarat, India. ***Phytomorphology*, 60 (3&4), 91-100.**
2. Pandey, R., & Pandey, C. N. (2013a). Reproductive phenology of *Aegiceras corniculatum* (L) Blanco- a mangrove species in the Gulf of Kachchh, Gujarat, India, ***International Journal of Botany and Research*, 3:19-28.**
3. Pandey, R., & Pandey, C. N. (2013b). Spatial and temporal variations in floral visitors of a mangrove species - *Aegiceras corniculatum* (L.) Blanco – in the Marine National Park, Gujarat, India. ***International Journal of Botany and Research*, 3:1. 35-42.**
4. Pandey, R., & Pandey, C. N. (2013c). Carbon sequestration by mangroves of Gujarat, India. ***International Journal of Botany and Research*, 3:2. 57-70.**
5. Pandey, R., & Pandey, C. N., (2013). Microsporogenesis and Microgametogenesis in a Cryptoviviparous Mangrove Species- *Aegiceras corniculatum* (L.) Blanco, ***Journal of Plant Studies*, 2:2, 53-60.**
6. Pandey, R., & Pandey, C. N., (2013). Embryology of *Rhizophora mucronata* Lam.: A Mangrove Species, ***Research and Review, Journal of Botany*, 2:1. 1-10**
7. Pandey, R., & Pandey, C. N., (2013). Floral Biology and Pollination Ecology of *Rhizophora mucronata* Lamk. in Gulf of Kachchh, Gujarat, India. ***International Journal of Botany and Research*, 3(4): 39-50.**
8. Pandey, R. & Pandey, C. N. (2014). Reproductive strategy of *Aegiceras corniculatum* L. (Blanco.)- A mangrove species in MNP&S, Gujarat, India, ***Journal of Plant Science*, Vol. 3 (1). 1-21**
9. Pandey, R. & Pandey, C. N. (2013) *Comparison of reproductive biology, pollinator resource, reproductive success and natural*

recruitment of three mangrove species in the Gulf of Kachchh, Gujarat, India. Research and Review, Journal of Botany, 2(3):19-32.

F. Technical paper presentations in International Seminars

- Author of the paper Presented at “Scientific and Technical Symposium on Sustainable Mangrove Ecosystem Management” from 22nd-25th November, 2008, Ranong, Thailand, Organised by the MFF (Mangroves for Future), supported by IUCN.
- International Seminar on “Coastal Zone Environment and Sustainable Development, Vulnerability - Aadaptations and Beyond; organized by J. N. U. Delhi from 12th -14th February 2007.

G. Publications of Books

Authored / co authored the following books or reports on behalf of GEER Foundation or Gujarat Forest Department.

1. Gujarat Wood Balance Study - 1984
2. *A Window to the world of Mangroves,*
3. Wild Destinations of Gujarat
4. Medicinal Plants of Gujarat
5. Biodiversity of Shoolpaneshwar Sanctuary
6. Biodiversity of Vansda National Park

7. Biodiversity of Purna Sanctuary
8. Habitat of Great Indian Bustards
9. Impact of nature education camps in Gujarat
10. Birds of Indroda Nature Park, Gandhinagar Gujarat.
11. Raptors of Gujarat.
12. The wild Fauna of Gujarat
13. The status of heronaries in Gujarat – *a study sponsored by MoEFCC*
14. Impact assessment of Kachchh canal on Wild Ass Sanctuary
15. Status and recruitment of coral reefs in Gulf of Kachchh, Gujarat – *a study sponsored by MoEFCC*

Reports Published

16. *Evaluation Report on the Centrally Sponsored Scheme of the Conservation of Mangroves and corals. - Study sponsored by MoEF*
17. The status of Dugongs in India. - a national level study sponsored by MoEF.
18. The status of Vultures in Gujarat.
19. *Floristic diversity and natural recruitment of mangroves in selected habitats of South Gujarat,*
20. *Study of pollination biology and reproductive ecology of three major mangrove species of Gujarat – a study sponsored by MoEFCC*
21. *Potential Area Mapping for mangrove restoration in South Gujarat,*
22. *Carbon sequestration by mangroves of Gujarat.*
23. *Carbon stock assessment of selected tree species in urban and sub urban areas of Gujarat (Report I),*

24. *Carbon stock assessment of selected tree species in urban and sub urban areas of Gujarat (Report II),.*
25. *Potential Area Mapping for mangrove restoration in Kachchh,*
26. *Potential Area Mapping for mangrove restoration in Saurashtra*
27. *Status of grasslands of Saurashtra and Central Gujarat*

Co authored Chapters in Books

1. Pandey C. N. and R. Pandey, (2011). The status of mangroves in Gujarat, in *Towards Conservation and Management of Indian Mangroves* Editors. Bhatt J. R., D. Macintosh, T. S. Nayar, C. N. Pandey and B. P. Nilaratna, Pub. MoEF, GOI, pp. 89-102.
2. (2011) Mangrove Cover and Floristic Diversity ; *Towards Conservation and Management of Indian Mangroves* Editors. Bhatt J. R., D. Macintosh, T. S. Nayar, C. N. Pandey and B. P. Nilaratna, Pub. MoEF, GOI, pp. 187-196.
3. C. N. Pandey & Richa Pandey Afforestation of coastal mudflats in Gujarat, India 123-32 in Macintosh, D.J., Mahindapala, R., Markopoulos, M. (eds) (2012). *Sharing Lessons on Mangrove Restoration*. Bangkok, Thailand: Mangroves for the Future and Gland, Switzerland: IUCN

H. Directed following wildlife / Nature Education films on behalf of GEER Foundation.

FILMS:

1. **Born to fly** (Film on birds in English and Gujarati)
2. **The lesser Known mangroves of South Gujarat.**
3. **" Savaj Haatu Savada"** - a film (in Gujarati and Hindi) on Asiatic Lion Conservation.

CD ROM:

Developed a special CD Rom " **Wings of Nature** " - a tool for identification of birds with profiles of 525 birds of India.

I. Wildlife Conservation Award:

During the tenure as Director GEER Foundation, The Foundation was awarded the Rajeev Gandhi Wild life Conservation Award in 2006 – a national level award by the Ministry of Environment, Forest and Climate Change, Government of India.
