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| **DR. ANKUR ARUN PATWARDHAN** | Vice- Principal & Head  Annasaheb Kulkarni Department of Biodiversity  MES Abasaheb Garware College  Deccan Gymkhana, Karve Road  Pune – 411004, Maharashtra, INDIA  Cell : +91-9823812653  E-mail: ankurpatwardhan@gmail.com  URL: [www.mesbiodiversity.in](http://www.mesbiodiversity.in), www.ankurpatwardhan.com |

**Date of Birth:** 29th May 1975 **Nationality:** Indian **Marital Status:** Married

**Education**

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| 1998 – 2004 | **Ph.D.** (University of Pune, India) **Subject :** Environmental Sciences  Topic : Diversity and bio-control potential of aquatic fungi and their relation with water quality |
| 1995 – 1997 | **M.Sc.** (Department of Environmental Sciences, University of Pune, India)  **Subject :** Environmental Sciences |
| 1992 – 1995 | **B.Sc** (Sir Parshurambhau College, University of Pune, India)  **Major subject :** Botany |

**Work experience**

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| 2015 – Present | **Vice Principal and Director, Non Grant Unit**, MES Abasaheb Garware College, Savitribai Phule Pune University |
| 2009 – Present | **Head, Department of Biodiversity, Abasaheb Garware College, University of Pune. India** |
| 1998 – 2003 | **Research and action in Natural Wealth Administration (RANWA)**  Position: Research Coordinator |
| 2000 – 2001 | **National Chemical Laboratory, Pune, India**  Position: Project Assistant |
| 1999-2000 | **Department of Environmental Sciences, University of Pune. India**  Position: Teaching Assistant |
| 1997 – 1998 | **Industrial Hygiene Laboratory, Lokmanya Medical Research Foundation, Pune, India** Position: Research Associate |

**Affiliations**

* **Policy :**

\* **Chairman,** High Level Monitoring Committee constituted by MOEFF&CC for Eco-Sensitive

Zone of Mahabaleshwar-Pachgani

\* **Member,** Maharashtra State Biodiversity Board (MSBB), Maharashtra

* **Academic & Research :**

**\* Chairman,** Board of Studies (Ad-Hoc Board in Biodiversity), Savitribai Phule Pune University

**\* Member,** Editorial Board, Biodiversity International Journal (BIJ), African Journal of Environmental Science and Technology (AJEST), BIODIVERSITAS : Journal of Biological Diversity, Science Research and Essays (SRE), International Journal of Biodiversity Bio- prospecting and Development (IJBBD).

**\* Life Member,** Maharashtra Education Society, Pune. ([www.mespune.in](http://www.mespune.in)).

* **NGO :**

**\*** Honorary Secretary,Research & Action in Natural Wealth Administration,(RANWA) Pune.

([www.ranwa.org](http://www.ranwa.org))

**Grants and awards :** More than 1.2 Crores.(Total financial outlay of various research projects executed till date). These research projects are supported by National and International agencies of repute such as Ministry of Environment, Forests & Climate Change (MOEFCC, GOI), Department of Biotechnology (DBT, GOI), ISRO-UoP, BCUD (Savitribai Phule Pune University), State Forest Department, Ruffords Small Grants, UK, GIZ-SNM.

**Other skills/interests/social commitment(s)**

I am associated with various grass root level Community Based Organizations, State Forest Department, Municipal Corporations working in the field of environmental awareness and conservation.

**Research**: My current research projects focus on recovery, including ex-situ and bioprospecting of threatened plant taxa from Western Ghats of India, one of the 34 global biodiversity hot-spots. It includes quantification of plant resources of Western Ghats and mapping of biodiversity, besides documenting traditional knowledge and community conservation practices. Assessment of ecosystem services and understanding impact of climatic factors on phenological changes in plants are other key areas I am interested in. I also undertake Environmental Impact Assessments (EIA) projects and Biodiversity Management Plans for industries and developmental projects.

**Teaching and supervision**: I am heading Dept. of Biodiversity at Abasaheb Garware College, Pune. I am also involved in undergraduate and post graduate teaching for Biotechnology and Environmental Sciences respectively. I am currently supervising three doctoral students, two research fellows and Masters’ dissertations.

**Memberships**: In honorary capacities, I coordinate research activities at Research & Action in Natural Wealth Administration (RANWA), Pune, a NGO dedicated to Environmental Protection. I am an editorial board member of some of the peer reviewed journals listed above.

**Projects :**

**(i) Industry Supported :**

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| Development and expansion of Biodiversity Department  **(*Trio Trend Exports Pvt. Ltd. & Yamai Fashions Pvt. Ltd.*)** | One time development grant |
| Rapid biodiversity survey and biodiversity management plan of  ***Volkswagen India Pvt., Ltd.****, (VW, India) Chakan, Pune* | *Sept 2014 - Jan 2015* |
| Authentication of ‘Flora and Fauna’ of***Reliance Glycol Pvt. Ltd.****,* Kurkumbh MIDC | *Feb 2008 – Apr 2008* |

**(ii) International Conservation Agencies :**

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| Conservation and promotion of endangered medicinal plant species from Western Ghats of India. *(****Ruffords Small Grants, UK****)* | *Jan 2009 – Dec 2010* |
| Plants and their Uses:Botany of the Sahyadris  *(****National Geographic, US****) - with Dr. Jog, Univ. of Texas at Tyler, US)* | *May 2008 – Apr 2009* |
| Domestication of Nothapodytes nimmoniana (Grah.) Mabb. : An endangered medicinal tree from Western Ghats of India *(****Ruffords Small Grants, UK****)* | *Dec 2006 – May 2008* |
| Eco-Sensitive Areas : ‘Pros and cons’ - Matheran Case study*. Forestry Programme Supported by* ***Winrock International India (WII)*** | *Sept 2006 – Mar 2007* |
| Recovery of Endangered Nothapodytes foetida (Wight) Sleumer through community participation*. (****Rufford Maurice Laing Foundation, UK****)* | *May 2005 – Dec 2006* |
| IURMA (Indian Urban Resource Millennium Assessment) of  ***Millennium Ecosystem Assessment (MA) Programme*** | *2005 - 2006* |
| Ecosystem Assessment and Management Inputs for Northern Western Ghats  *(****UNDP-CEE-SGP Programme****)* | *2003 - 2004* |

**(iii) National Level Agencies :**

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| All India Coordinated Research Project on Sacred Grove Ecosystem Service Assessment from Northern Western Ghats of Maharashtra  (***Ministry of Environment, Forests & Climate Change, GoI***) | *Mar 2012 – Mar 2017* |
| Biotechnological interventions for conservation and utilization of forest  resources (***Department of Biotechnology, GoI***) | *Mar 2010 – Mar 2015* |
| Development and Demonstration of Sustainable Methods of Harvesting of *Nothapodytes nimmoniana* under different Agro forestry Systems for optimizing the production of Camptothecin and related high value metabolites.  (***Department of Biotechnology, GoI***) | *May 2010 – Mar 2013* |
| Identification of critical areas of conservation concern using RS-GIS technique from northern Western Ghats of India (***ISRO-UoP***) | *Aug 2011 – July 2013* |
| Application of GIS-RS in Mapping and Conservation of Threatened Medicinal Plant Species from NWG, India (***ISRO-UoP***) | *May 2008 – Apr 2010* |
| Mapping and Quantitative Assessment of Geographic Distribution and the Population Status of Plant Resources of Western Ghats  (***Department of Biotechnology, GoI***) | *June 2005 – Mar 2010* |

**(iv) State Level Agencies :**

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| Inventorization, Mapping and identification of biodiversity rich sacred groves from proposed ecosensitive zone of Sawantwadi & Dodamarg Talukas of Maharashtra **(*Maharashtra State Biodiversity Board*)** | *Apr 2018 – Dec 2019* |
| Biodiversity Audit of State Reserve Police Force (SRPF, Gr II), Wanowari, Pune **(*State Reserve Police Force*)** | *Oct 2016-Mar 2017* |
| Standardization of protocol for sustainable harvesting of plant resources in commercially important medicinal plants(***Forest Department***) | *Apr 2013-Mar 2014* |
| Developing sustainable harvest techniques of commercially important RET medicinal plant species (***Forest Department***) | *April 2012 - Mar 2014* |
| Assessing camptothecin content & evaluating anti-diabetic activity from two RET medicinal plant species (***Forest Department***) | *Apr 2013-Mar 2014* |
| Documenting butterfly diversity, population & study of nectar plant choices from northern Western Ghats (***Forest Department***) | *April 2012 - Mar 2013* |
| Status survey report on medicinal plants of Pune district (***Forest Department***) | *2008* |

**(v) Local and University Level bodies :**

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| Ecological assessment and determination of endophytic diversity of marine macroalgae (Seaweeds) from the Western Coast of Maharashtra  ***(BCUD, Univ. Of Pune)*** | *April 2013 – Mar 2015* |
| Camptothecin (CPT) distribution in *Nothapodytes nimmoniana* and *Ophiorrhiza rugosa* : Endangered medicinal species from Western Ghats of India ***(BCUD, Univ. Of Pune)*** | *Jan 2008 – Dec 2009* |

**(vi) Development sector supported :**

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| Biodiversity Assessment, Ecological Survey and Conservation Proposal at KP-IVEN ‘Life Republic’ Township, Jambhe, Pune ***(Kolte-Patil Developers)*** | *Aug 2018 – Feb 2019* |
| Ecological assessment of ‘Sanjeevani Integrated Township’, Urse, Maval  ***(Kolte-Patil Developers)*** | *Aug 2012 – Feb 2013* |
| Ecological Assessment of KP-Iven’s ‘Life Republic’ Township Project, Marunji, Pune ***(Kolte-Patil Developers)*** | *Nov 2011 – Feb 2012* |
| Ecological Assessment and Biodiversity Management Plan of proposed ‘Nanded City’ Project Pune ***(Nanded City Corporation)*** | *June 2008 – Nov 2008* |

**(vii) NGO supported :**

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| Rapid biodiversity assessment of Anjarle, Velas and Kelshi  ***(GIZ-Sahyadri Niasarg Mitra)*** | *July- Nov 2016 &*  *July – Nov 2014* |
| A report on floral diversity of Gaganbavda area with a note on conservation & promotion of rare species of medicinal importance  ***(Janabharati Nyas)*** | *Oct 2009 – Nov 2009* |
| A baseline survey of the floral and faunal wealth of proposed Biodiversity Park (BDP) at Baner, Pune  *(Lotus Environments)* | *Aug 2007 – Sept 2007* |
| A report on floral and faunal survey of MIT College Hill  ***(Lotus Environments)*** | *Nov 2004 – Dec 2004* |

**(viii) Private entrepreneurs :**

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| Report on Eco-planning : Girivan Private Hill Station, Maval, Pune | *May 2010* |

**Research-related activities**

***Organisation of workshops / conferences***

* National Biodiversity Conference (Feb 2012). Involving over 350 academicians,

students, forest officials and NGOs

* Sacred Natural Sites workshop involving over 75 participants.
* Evolutionary Ecology workshop (Feb 2009). Involving over 100 participants

(teachers and students)

***Peer-review of journal papers***

Ecotropica, Edinburgh Journal of Botany, Environmental Policy and Governance (EPG), Journal of Threatened Taxa (JOTT), Scientific Research and Essays, Current Science. Journal of Protected Area Network, Ecography, Biodiversitas, AJEST

**Environmental Awareness-related activities**

Published over 100 popular articles in local media and conducted several radio programmes related to environmental education and biodiversity conservation.

**Selected Publications :**

1. Athreya A., Pimpale S., Borkar A. S., Surve N., Chakravarty S., Ghosalkar M., **Patwardhan A.** and Linnell J. D. C. (2018). Monsters or Gods? Narratives of large cat worship in western India. ***Cat News*** 67, 23-26. (<http://www.catsg.org/index.php?id=611>)
2. R. Tewari, M. Gupta, F. Ahmad, P. Rout, L. Misra, **A. Patwardhan** and R. Vasudeva (2017). Extraction, quantification and antioxidant activities of flavonoids, polyphenols and pinitol from wild and cultivated *Saraca asoca* bark using RP-HPLC-PDA-RI method. ***Industrial Crops and Products*** 103 (2017) 73–80.

(<http://www.sciencedirect.com/science/article/pii/S0926669017301942>)

1. Ganeshaiah K. N., R. Vasudeva, S. R. Yadav, C. G. Kushalappa, A. R. R. Menon, R. Ganesan **Ankur Patwardhan**, H.P. Raghavendra and R. Uma Shaanker (2017). Mapping Plant Resources of the Western Ghats, India: a Unique Exercise in a Global Biodiversity Hotspot. ***Proceedings of the National Seminar on Bioresource Conservation and Utilization,*** May 13-14, 2017. (Eds. Vasudeva R., Santosh Sutar and H. Basappa) College of Forestry, Sirsi, Karnataka, India. Published by University of Agricultural Sciences, Dharwad. pp 1-260.
2. Patwardhan Ankur, Honwad Ganesh, Ganpat Kale and Amit Bansude (2017). Ecology Or Economy? - A Riddle of Toddy Tapping : Social Review of NTFP Ecosystem Service from a Sacred Forest. ***Proceedings of theNational Seminar on Bioresource Conservation and Utilization,*** May 13-14, 2017. (Eds. Vasudeva R., Santosh Sutar and H. Basappa) College of Forestry, Sirsi, Karnataka, India. Published by University of Agricultural Sciences, Dharwad. pp 1-260.
3. **A. Patwardhan**, M. Pimputkar, M. Mhaskar, P. Agarwal, N. Barve, R. Gunaga, A. Mirgal, C. Salunkhe and R. Vasudeva (2016). Distribution and population status of threatened medicinal tree *Saraca asoca* (Roxb.) De Wilde from Sahyadri–Konkan ecological corridor. ***Curr. Sc.*** Vol. 111 (9) : 1500-1506. (<http://www.currentscience.ac.in/Volumes/111/09/1500.pdf>)

# P. Koparde, P. Mhaske and A. Patwardhan (2015). Habitat correlates of Odonata species diversity in the northern Western Ghats, India. *Odonatologica* 44(1/2) 2015: 21-43.

(<https://www.academia.edu/12857306/Habitat_Correlates_of_Odonata_Diversity_in_the_Northern_Western_Ghats_of_Maharashtra_India>)

1. A. Joglekar, M. Tadwalkar, M. Mhaskar, B. Chavan, K. N. Ganeshaiah and **A. Patwardhan** (2015). Tree species composition in Koyna Wildlife Sanctuary, Northern Western Ghats of India. ***Curr. Sc.*** Vol. 108 (9) : 1688- 1693. (<http://www.currentscience.ac.in/Volumes/108/09/1688.pdf>)
2. **A. Patwardhan**, M. Pimputkar and R. Joshi (2015). *Salacia chinensis* L. – Utility and Propagation Techniques. ***Medplant : ENVIS Newsletter on Medicinal Plants***. Vol. 8 (1-4) : 12-13. (<http://envis.frlht.org/newsletters/Envis_Newsletter_April_2015.pdf>).

# P. Koparde, M. Mhaskar, P. Mhaske and A. Patwardhan (2015). Spatial distribution and habitat coorelates of Nilgiri Wood-pigeon (*Columba elphinstonii*) in north Western Ghats, India. *Taprobanica.* Vol. 7 (1). Pp 20-28.

# (<http://tapro.sljol.info/articles/abstract/10.4038/tapro.v7i1.7497/>)

1. **Patwardhan Ankur**, Pimputkar Makarand, Mhaskar Monali, Agarwal Prerna, Barve Narayani and Vasudeva R. (2014). Status of Saracaasoca: An Endangered Medicinal Plant Species of

Conservation Concern from Northern Western Ghats Biodiversity Hotspot. ***Biodiversity Watch.*** Vol. 3 : 90-102. (<http://www.biodiversity-watch.com/Biodiversity_Watch_Vol-3.pdf>)

1. **A. Patwardhan.** (2014). Economic incentives and conservation : A case study of Ajeevali Sacred grove. In Sacred Groves of India, A Compendium. Eds. Nanditha Krishna and M. Amrithlingam.
2. **A. Patwardhan,** M. Pimputkar and R. Joshi (2014). Evaluation of anti-diabetic property of extracts of different plant parts of *Salacia chinensis* Linn. ***J. Biodivers Biopros Dev.*** Vol 1(1).

(<http://www.omicsgroup.org/journals/evaluation-of-antidiabetic-property-of-extracts-of-different-plant-parts-of-salacia-chinensis-linn-ijbbd.1000107.pdf>)

# P. Koparde, P. Mhaske and A. Patwardhan (2014). New records of dragonflies and damselflies (Insecta : Odonata) from the Western Ghats of Maharashtra, India. *Journal of Threatened Taxa.* Vol 6(5) : 5744-5754.

# (<http://www.threatenedtaxa.in/index.php/JoTT/article/view/236>)

# Patwardhan, A. , Mhaskar, M. , Joglekar, A. , Tadwalkar, M. , Wagh, R. and Vasudeva, R. (2014). Propagation and cultivation techniques of *Embelia ribes* (Vidanga) in *Future Crops*. Vol. II, pp 237–256. (Eds. K. V. Peter), published by Daya Publishing House, N. Delhi.

# **N Marathe**, **M Rasane**, **H Kumar**, ****A Patwardhan****, **Y Shouche** and **S Diwanay. (2013).** In vitro antibacterial activity of Tabernaemontana alternifolia (Roxb) stem bark aqueous extracts against clinical isolates of methicillin resistant Staphylococcus aureus. Annals of Clinical Microbiology and Antimicrobials. 12:26. (<http://www.ann-clinmicrob.com/content/12/1/26>)

1. Mhaskar, M. Joglekar, A., Tadwalkar, M., Wagh, R., Patil, R., Chavan, B., Joshi, S., Gunaga, S., Manjunath, A., Thriveni, H., Vasudeva, R. and **Patwardhan, A.** (2013). Nursery techniques of Embelia ribes (Vidanga) : A red listed medicinal plant species. ***Vansanshodhan Patrika.***Vol. 1/1:35-40
2. A Padhye, **A Patwardhan**……A Patwardhan. (2013). Butterflies of Northern Western Ghats: A Compilation of Checklists. ***Ela Journal.*** Vol.2 (1) : 3-22. (<https://www.academia.edu/4793056/Butterflies_of_northern_Western_Ghats_a_compilation_of_checklists>)
3. S Pande, A Mahabal….. **A Patwardhan**. (2013). Biodiversity of the Parvati-Pachgaon Hills : A ‘habitat island’ in Pune Metropolis. ***Ela Journal.*** Vol.2 (1) : 23-41.

((<https://www.academia.edu/4793056/Butterflies_of_northern_Western_Ghats_a_compilation_of_checklists>)

1. M. Tadwalkar, A. Joglekar, M. Mhaskar, R. Kanade, B. Chavan, A. Watve, K. N. Ganeshaiah and **A. Patwardhan**. (2012). Dispersal modes of woody species from the northern Western Ghats, India. ***Tropical Ecology****.* 53(1): 53-67. (<http://www.tropecol.com/pdf/open/PDF_53_1/Art-06.pdf>)
2. A. Kulkarni, **A. Patwardhan**, A. Upadhye, and N. Malpathak. (2011). Pharmacognostic evaluation of *Chonemorpha grandiflora*, an endangered medicinal plant. ***International Journal of Pharmaceutical Sciences and Research (IJPSR)****.* Vol. 2(10): 2690-2693.

(<http://www.ijpsr.com/V2I10/32%20Vol.%202(10),%20IJPSR-834,%20Paper%2025.pdf>)

1. M. Mhaskar, S. Joshi, B. Chavan, A. Joglekar, N. Barve and **A. Patwardhan**. (2011). Status of *Embelia ribes* Burm f. (Vidanga), an important medicinal species of commerce from northern Western Ghats of India. ***Curr. Sc.***100 (4) : 547-552.

(<http://www.ias.ac.in/currsci/25feb2011/547.pdf>)

1. Kulkarni, A., **Patwardhan, A.** and Malpathak, N. (2011). In vitro studies and secondary metabolite production in *Tabernaemontana alternifolia* L. in ***Scholarly Articles in Botany***.
2. A. Kulkarni, **A. Patwardhan**, U. Lele and N. Malpathak. (2010). Production of Camptothecin in cultures of *Chonemorpha grandiflora*. ***Pharmac. Res.***2(5) : 296-299. (<http://www.phcogres.com>)
3. Gharpure, G., Chavan, B., Lele, U., Hastak, A., Bhave, A., Malpure, N., Vasudeva, R., **Patwardhan, A.** (2010). Camptothecin accumulation in *Ophiorrhiza rugosa* var. *prostrata* from northern Western Ghats. ***Curr. Sc.***98 (3) : 302-304.

(<http://www.ankurpatwardhan.com/camptothecin_curr_sc.pdf>)

###### Kanade, R., Tadwalkar, M., Kushalappa, C. and **Patwardhan, A.** (2008). Vegetation composition and woody species diversity at Chandoli NP, northern Western Ghats, India. ***Curr. Sc.***95 (5) : 637-646*.* (<http://www.ias.ac.in/currsci/sep102008/637.pdf>)

1. Kanade, R., Goturkar, S., Pathak, N. and **Patwardhan, A.** (2008). Social and economic linkages of biodiversity conservation. A case study of *Ajeevali* sacred grove. In Nanditha Krishna (eds.) Ecological Traditions of Maharashtra. C.P.R.Environmental Education Centre. 93-98.
2. **Patwardhan, A.,** Sahasrabuddhe,K., Mahabaleshwarkar,M., Joshi,J., Kanade, R. and Goturkar, S. (2006). Changing Status Of Urban Water Bodies And Associated Health Concerns In Pune, India. In Sandipa Lahiri Anand (eds*.*)Global Water Pollution : Perspectives and Cases. ICFAI University Press, Hyderabad. 206-212.
3. **Patwardhan, A.,** Gandhe, R., Ghole, V. and Mourya, D. (2005). Larvicidal activity of the fungus *Aphanomyces* (oomycetes : Saprolegniales) against *Culex quinquefasciatus.* ***J Commun Dis.*** 37(4):269-74. (<http://europepmc.org/abstract/MED/17278656>)
4. **Patwardhan, A.** (2005). in Ecosystems and Human Well Being. Vol. 4. Multiscale Assessments : Findings of the Sub-global Assessments Working Group, Millennium Ecosystem Assessment. Island Press, Washington, DC.

(<http://www.millenniumassessment.org/documents/document.347.aspx.pdf>)

1. Ghate, U., **Patwardhan, A.** and Waran, A. (2005). Reduced urban consumerism and enhanced rural bio-enterprises for food, water and climatic security. ***Curr. Sc.*** 88(2): 213-214. (<http://www.ias.ac.in/currsci/jan252005/213.pdf>).
2. **Patwardhan, A.,** Kanade, R., Sahasrabuddhe, K., Nalavade,S., Ghotge, N., and U. Ghate. (2003). Social review of pastoral ecosystem services in Western India. ***African Journal of Range and Forage Science.*** Vol. 20. Pp.194-197.
3. **Patwardhan, A.,** Nalavade,S., Sahasrabuddhe, K. and Utkarsh, G. (2001). Urban wildlife and protected areas in India. *Parks.* ***The international journal of protected area managers***. Vol. 11. No. 3. : 28-34. (<https://cmsdata.iucn.org/downloads/parks11_3.pdf>)

**Selected conference / symposia contributions**

2014 – Sub-Global Millennium Ecosystem Assessment Workshop – Assessing trends and scenarios of Ecosystem Services. **Dubai,** (Nov 2014).

2010 - Lead Indian team to **Pretoria, South Africa** (May 2010) for the development of **‘Ecosystem Services Assessment Proposal’** under the **IBSA** (India-Brazil-South Africa) Trilateral Programme.

2008 – Delivered a talk titled ‘Indian Urban Resource Millennium Assessment (IURMA)’ at the follow up meeting of ***Millennium Ecosystem Assessment (MA) at Kuala Lumpur, Malaysia in March 2008*** *.*

2005 – Delivered a talk entitled ‘Recovery Prospecting Of Endangered *Nothapodytes foetida* Through Community Participation’ at ***Society for Conservation Biology’s Asia Conference at Kathmandu, Nepal in November 2005.***

2003 – Delivered a talk entitled ‘Social Review Of Pastoral Ecosystem Services in Western

India’ at ***VII th International Rangeland Congress, held in Durban, South Africa in***

***July 2003.***

**Referees *Available on request***