

## CURRICULUM VITAE

Debal Deb

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Date of birth: 16 January 1961

Citizenship: Indian

### Current Occupation

*Farmer-Conservator*, **Basudha** Farm, Odisha & Basudha Aaranya, West Bengal.

*Founder-Chair*, Centre for Interdisciplinary Studies, Kolkata; (<http://cintdis.org/>) and  
Basudha Laboratory for Conservation, Kolkata .

*Founder-Coordinator*, **Vrihi** (the largest non-governmental folk rice gene bank in India). [Recipient of the  
*National Plant Genome Saviour Recognition Award 2009*]

*Member-Advisor*, Eastern Zonal Review Committee, National Innovation Foundation, Ahmedabad. 2007-

*Professor of Eminence*, Centurion University of Technology and Management, Bhubaneswar. 2016-

### Professional Experience

*Guest Faculty*, Ecological Economics. Ashoka University, Sonapat, Haryana. 2022 –

*Guest Faculty*, Ecological Economics. World Learning India/School for International Training. Kathmandu. 2023.

*Guest Faculty*, Ecological Economics. World Learning India/School for International Training. Jaipur. 2015-2020.

*Guest Faculty*, Environmental Economics. Tata Institute of Social Sciences, Hyderabad. 2016 – 2017.

*Guest Faculty*, Political Ecology. BR Ambedkar University, Delhi. 2017 – 2020.

*Member*, Expert Committee on Agrobiodiversity, National Biodiversity Authority, Chennai. 2010-18

Consultant, Living Farms project on Food Security from Sustainable Agriculture and Forest Use (*supported by Rosa Luxemburg Stiftung and Brot für die Welt*) (January 2017- )

*Designed, supervised and published two studies on indigenous agricultural practices and forest foods for sustainable food and nutrition.*

Consultant, Terres des Hommes Germany – on SEWOH-DISHA Project on Food Sovereignty for Adivasi Communities in Odisha. Feb – May 2020

*Evaluation of project achievements and problems in the project sites in Sundergarh and Keonjhar districts.*

*Co-Investigator*, University of East Anglia/ATREE/DFID collaborative research in PEFESPA. Jan 2011–Dec 2014

*Developing methodologies for, and estimation of, forest ecosystem services under community forest management compared to statutory management regime in Nayagarh district, Odisha.*

*Consultant*, REDD+ Project, Regional Centre for Development Cooperation, Bhubaneswar. Apr 2012– July 2013

*Assessing change in forest carbon stock; and developing a sustainable management plan under Community Forest Management in REDD+ project area of Balangir district, Odisha.*

Consultant, World Wide Fund for Nature – India, New Delhi. Mar 2007–Feb 2010

*Advised farmers of the Sunderban to adopt zero-chemical, sustainable farming practices; set up a rice seed bank for Sunderban farmers.*

Coordinator, Sacred Groves Documentation Project, University of East Anglia, UK. Jan–Dec 2006.  
*Documented and prepared a report on sacred groves of West Bengal as a model of community forest management.*

Consultant, Greenpeace International, Amsterdam. Aug 2005 – Mar 2006  
*Trained Greenpeace activists in rice ecology and genetic diversity; Prepared international document for sustainable rice farming solutions for Asia.*

Member, Biodiversity Study Team, NEERI, Govt. of India Feb – Jun 2006  
*Assessed ecological impacts of proposed iron ore mining at Rawghat Forest Division, Chhattisgarh.*

Member, Biodiversity Assessment Team, NEERI, Govt. of India Mar – Jun 2005  
*Assessed impacts of proposed iron ore mining extension on biodiversity at Chiria Forest, Jharkhand and Rawghat Forest, Chhattisgarh.*

Ford Foundation Fellow, Institute of International Studies, University of California - Berkeley. Fall 2001  
*Wrote a monograph on sustainable development; giving seminars on sustainable development and indigenous conservation ethos; linking with Organic farmers in the US.*

Member, South Asia Network on Food Ecology and Culture (SANFEC), Dhaka. 1999-

Consultant, Research Foundation for Science, Technology & Ecology, New Delhi. Jan 1998-Dec 2000  
*Promoting indigenous crop genetic diversity and sustainable agriculture; galvanizing National Food Security Campaign in West Bengal; spearheading a campaign in east India against untested release of GM crops and seeds.*

Consultant, National Museum of Mankind, Bhopal. Apr1999-Mar 2001  
*Established sacred grove models on the Museum campus; consulting on indoor and outdoor exhibition on sacred groves; editing books on conservation of sacred groves in India.*

Consultant, SRISTI/ Indian Institute of Management, Ahmedabad. Mar 1999-Feb 2001  
*Designed ecological study for Jessore and Balaram-Ambaji Sloth Bear Sanctuaries; developed methodology for food web analysis; oversaw analysis of data and preparation of report for UNDP-GEF.*

Coordinator, National Food Rights Campaign (West Bengal), ActionAid India. Feb -Dec 1999.  
*Designed and organised farmer workshops, street plays, published handbills & posters for farmers' rights; held scientific seminars on Genetic Engineering and Food Security in Calcutta.*

Consultant, Joint Forest Management Project, Bengal Engineering College, Sibpur. Jan 1999-Mar 2000  
*Designed field survey for ecological and economic assessment of JFM in West Bengal; developed methodology for valuation of forest resources; overseeing preparation of report for World Bank.*

Consultant, Centre for Island Ecology, Mamallapuram. Feb 1998-Mar 1998.  
*Conducted rapid assessment of anthropogenic impact on biodiversity of Rani Jhansi Marine National Park, The Andamans; conducted ecological survey in Ritchie's Archipelago.*

Founder-Coordinator, Vrihi Beej Binimoy Kendra, Beliatare, West Bengal. 1997  
*Established the first (and only) non-government rice gene bank in east India to promote in situ conservation of folk rice varieties; documenting local biodiversity and folk knowledge; spearheading campaign for Sustainable Agriculture.*

Research Associate, Ministry of Environment and Forests, Govt. of India. Feb-Nov 1997.  
*Co-authored (with Dr. A.K.Ghosh) Status Report of India's Biodiversity.*

Senior Project Officer, World Wide Fund for Nature-India (Eastern Region). Aug 1992-Dec 1996.  
*Oversaw and monitored wildlife conservation projects in eastern India; coordinated studies in wildlife ecology; evaluated project proposals of NGOs for financial support; organised seminars and workshops on conservation issues; wrote project reports; published technical papers and monographs.*

Ecologist, Indian Institute of Bio-social Research and Development (IBRAD), Calcutta. Dec 1990-Jun 1992.  
*Supervised surveys and research in participatory forest management issues; conducted and monitored studies in joint forest management; developed methodology for quantifying flow of non-timber forest products; wrote technical papers.*

## Education

UNIVERSITY OF EAST ANGLIA, UK. Post-doctoral research in *forest ecology and valuation* (2011-13)

UNIVERSITY OF CALIFORNIA – Berkeley. Fulbright Post-doctoral Fellowship in *Ecological Economics* (2009)

UNIVERSITY OF CALIFORNIA – Berkeley. Ford Foundation Post-doctoral Fellowship in *Environmental Studies* (2001)

INDIAN INSTITUTE OF SCIENCE, BANGALORE. Post-doctoral research in *marine and estuarine resource use patterns in coastal Karnataka*. (1989-1990)

CALCUTTA UNIVERSITY, Ph.D.

Subject: Community ecology. Dissertation: *Seasonal studies of helezoooplankton community dynamics: environmental influences and trophic interactions*. (submitted 1989, awarded 1991)

CALCUTTA UNIVERSITY, M.Sc. with first class in zoology (1983). B.Sc. with honours in zoology (1981).

## Additional Experience and Awards

Member, National Steering Committee, Organic Farming Association of India, Goa. ([www.ofai.org](http://www.ofai.org))

Invited Speaker, Agroecology Department, Vermont University, USA (27 September 2019)

Invited Speaker, Department of Food and Nutrition, New York University (24-25 September 2019)

Invited Speaker at the International Conference on Integrating Knowledge Diversity for Sustainability at Al Bukhary International University, Alor Setar, Malaysia (5-7 October 2012).

Invited Speaker in the University of California-Irvine Summer Seminar Series: Empowering Sustainability on Earth (18-24 July 2011).

Keynote Speaker at the 2<sup>nd</sup> International Conference on Economic Degrowth, held in Barcelona (26-29 March 2010).

Panelist on Kew 250<sup>th</sup> Anniversary Debate “Whose Landscape Is It Anyway?” held by the Royal Botanic Garden, Kew (British Museum, 6 July 2009).

Guest Faculty, Indian Institute of Social Welfare and Business Management, Calcutta. 1999-2000.

Honorary Faculty, ISTE Summer School for Engineers, Indian Institute of Technology, Kharagpur. 1992-1995.

**Technical Referee:** *Oikos*, *Current Science*, *Journal of Biosciences*, *J. of Human Ecology*, *Geobios*, *Economic Botany*, *Ecological Economics*, *J. Sustainable Agri.*, *African J. Agri. Research*, *ACS Sustainable Chemistry & Engineering*, *Experimental Results*, *Food Bioscience*, *Genetic Resources & Crop Evolution*, *Cereal Chemistry*, etc.

Member of Editorial Board: *Agroecology and Sustainable Food Systems*.

**IFOAM Asia Organic Medal of Honour.** Dec 2023.

**Kirloskar Vasundhara Sanman** for work in agroecology. January 2020.

**Ananya Sanman** from 24 Ghanta/Zee TV Channel, Kolkata. Feb 2015.

**Kalpakam Award** from International House, UC-Berkeley, for Vrihi gene bank and Basudha demonstration farm. May 2010. <http://ihouse.berkeley.edu/p/kalpakam2010.html>

**National Plant Genome Saviour Recognition Award** from the Ministry of Agriculture, Government of India. Feb 2009.

**Fulbright-Nehru Environmental Leadership Fellowship** at University of California at Berkeley. Fall 2009.

**Ford Foundation Environment & Culture Residential Post-Doc Fellowship** at University of California at Berkeley. Fall 2001.

**USIA International Visitors Program Fellowship** on Environment: The Common Agenda. Aug-Sep 1996.

**Calcutta University Platinum Jubilee Young Scientist Award**, 1989.

**Languages known:** Bengali, English, Hindi, Odiya, German.

**Travels:** Bangladesh, Bhutan, China, Germany, Greece, Italy, Korea, Malaysia, Nepal, Philippines, Poland, Spain, Thailand, UK, USA.

## List of Publications (in English)

### Agroecology & Agronomy

- Deb, Debal & Sreejata Dutta 2022. The robustness of Land Equivalent Ratio as a measure of yield advantage of multi-crop systems over monocultures. *Experimental Results* 3, e2; doi: 10.1017/exp.2021.33
- Deb, D. 2021. Productive efficiency of traditional multiple cropping systems compared to monocultures of seven crop species: A benchmark study. *Experimental Results* 2, e18: 1-10. doi:10.1017/exp.2021.7.
- Deb, D. 2021. Genetic engineering in agriculture: Uncertainties and risks, pp. 133-142. In: D. Newton (ed), *GMO Food: A Reference Handbook*. 2nd edition. ABC Clio. Santa Barbara/ Denver.
- Deb, D. 2021. Every time Bengal loses a traditional rice variety, it loses a little bit of its culture. *Scroll.in* (Mar 6th). <https://scroll.in/article/988465/every-time-bengal-loses-a-traditional-rice-variety-it-loses-a-little-bit-of-its-culture>
- Deb, Debal 2020. Is the system of rice intensification (SRI) consonant with agroecology? *Agroecology and Sustainable Food Systems* 44: 1338-1369. doi: 10.1080/1683565.2020.1779165
- Deb, Debal 2019. Food Sovereignty: opposing the enclosure of land, seeds and knowledge commons (Ch.1), pp. 1-48. In Stefan Mentschel (ed), *Can Hunger be Defeated?* Yoda Press: New Delhi.
- Deb, Debal 2019. Restoring rice biodiversity. *Scientific American* 321(4) (October): 54-61.
- Deb, Debal 2017. Folk rice varieties, traditional knowledge and nutritional security in South Asia. In: G. Poyyamoli (ed), *Agroecology, Ecosystems, and Sustainability in the Tropics*. Studera Press, pp. 117-134.
- Deb, Debal, M. Kloft, J. Lässig & S. Walsh 2016. Variable effects of biochar and P solubilizing microbes on crop productivity in different soil conditions. *Agroecology and Sustainable Food Systems* 40 (2): 145-168.
- Deb, Debal 2014. Genetic engineering in agriculture: Uncertainties and risks, pp. 120-129. In: David Newton (ed), *GMO Food: A Reference Handbook*. ABC-Clio: Goleta, CA.
- Deb, Debal 2014. Folk rice varieties, traditional agricultural knowledge and food security, pp. 45-57. In: Claude Alvarez (ed.), *Multicultural Knowledge and the University*. Multiversity/ Citizens International: Penang, Malaysia.
- Deb, Debal 2012. Did you say 'High Yield'? pp. 22-25. In: *Where is Our Oryza?* Living Farms: Bhubaneswar.
- Deb, Debal, J. Lässig & M. Kloft 2012. A critical assessment of the importance of seedling age in the system of rice intensification (SRI) in eastern India. *Experimental Agriculture* 48 (3): 326-346.
- Deb, Debal 2009. Valuing folk rice varieties for agroecology and food security. *Bioscience Resource* (Commentary). URL: <http://www.independentsciencenews.org/un-sustainable-farming/valuing-folk-crop-varieties/> (26 October 2009).
- Deb, Debal 2008. Agriculture, pp. 67-81 In: A K Ghosh (ed.), *Status of Environment in West Bengal: A Citizens' Report*. ENDEV Society for Environment and Development: Kolkata.
- Borromeo, E. & **Debal Deb** 2006. *Future of Rice: Examining long term sustainable solutions for rice production*. Greenpeace International: Amsterdam & Bangalore. <http://www.greenpeace.org/international/en/publications/reports/future-of-rice/>
- Deb, Debal 2005. *Seeds of Tradition, Seeds of Future*. Research Foundation for Science Technology & Ecology: New Delhi.
- Deb, Debal 2004. *Industrial vs Ecological Agriculture*. RFSTE: New Delhi.
- Deb, Debal 2004. *Economics of multiple cropping: A study of multiple cropping farms of West Bengal*. Circolo Culturale Ambientescienze: Cremona, Italy. URL: [www.worldwewant.org/wordpress/images/economicsofmultiple.pdf](http://www.worldwewant.org/wordpress/images/economicsofmultiple.pdf)
- Deb, Debal 2001. An inventory of plant food resources from Bengal. pp. 293 to 298. In: V. Shiva & R. Holla-Bhar (eds), *An Ecological History of Food and Farming in India*. Vol. 1. RFSTE: New Delhi.
- Deb, Debal 2001. Bengal Famines. pp. 76 to 81. In: V. Shiva & R. Holla-Bhar (eds), *An Ecological History of Food and Farming in India*. vol. 2. RFSTE: New Delhi.

## List of Publications (contd.)

- Sen, D. & **Debal Deb** 2001. Peasant uprisings in Bengal. pp. 53 to 62. In: V. Shiva & R. Holla-Bhar (eds), *An Ecological History of Food and Farming in India*. Vol. 2. RFSTE: New Delhi.
- Ghosh, A.K. & **Debal Deb** (eds) 2001. *A Trainers' Training Manual on Sustainable Agriculture*. RFSTE: New Delhi.
- Deb, Debal 2000. *Folk Rice Varieties of West Bengal: Agronomic and Morphological Characteristics*. RFSTE: New Delhi.
- Deb, Debal 2000. The economics of multiple cropping systems. pp. 16-19. In: F. Mazhar (ed), *Proceedings of the International Workshop on Economics of Ecological Agriculture*. SANFEC: Dhaka.
- Deb, Debal 1999. Wild and uncultivated plants and animals as food resource: the Bengal paradigm. Pp. 18-19 & 109-113. In: *SANFEC Proceedings of South Asian Workshop on Uncultivated Food and Plants*. 2-4 OCT 1999. Bishnupur, Bangladesh.
- Deb, Debal 1999. In search of the forgotten rice varieties. *Down To Earth* 35: 122-123.
- Deb, Debal 1996. Combining farmer experience and professional knowledge. Pp. 31-38. In: *Proceedings of the Workshop on Conservation and Community Copyrights of Folk Crop Varieties*. WWF-India Eastern Region: Calcutta.
- ### Rice biology
- Deb, Debal 2024. Is the time of anthesis in rice (*Oryza sativa*) influenced by photoperiod? *Biologia Futura* 75(1), <http://doi.org/10.1007/s42977-024-00223-5>
- Deb, Debal, A. Paul & S. Bhattacharya 2024. Adjustments of flower opening time and duration in tropical rice (*Oryza sativa* ssp. *indica*) landraces in response to heat stress. *J. Agron. Crop Sci.* 210(3), e12706; <https://doi.org/10.1111/jac.12706>
- Deb, Debal, N.V. Joshi, D. Bhattacharya, M. Nauri & R. Ganguly 2023. Diversity of flower opening time and duration in rice (*Oryza sativa* ssp. *indica*) landraces of South and Southeast Asia in different cultivation seasons. *Journal of Botanical Research* 5(3): 36-48. doi: 10.30564/jbr.v5i3.5724
- Deb, Debal & D. Bhattacharya 2021. Unusually high frequency of cross pollination in rice landraces Shiuli and Kharah with coincident flower opening times. *Current Science* 121(1): 121-126.
- Das, S. P., R. Singh Jasrotia, **D. Deb**, M. A. Iquebal, S. Jaiswal & N. Dey 2020. Genomic analysis of polycarpellary rice (*Oryza sativa* L.) through whole genome resequencing. *J. Plant Biochem. Biotechnol.* doi: 10.1007/s13562-020-00602-8
- Das, S.P., **Debal Deb** & N. Dey 2019. Expression study of five genes involved in floral organ development in multiple seeded rice. *Journal of Plant Biochemistry and Biotechnology* doi: 10.1007/s13562-019-00526-y
- Das, S.P., **Debal Deb** & N. Dey 2018. Micromorphic and molecular studies of floral organs of a multiple seeded rice (*Oryza sativa* L.). *Plant Molecular Biology Reporter* doi: 10.1007/s11105-018-1116-9
- Das S.P., **Debal Deb** and N. Dey 2018. Reciprocal hybridization between a natural floral organ mutant and normal rice showed intervarietal barriers. *J. Soils and Crops* 28 (2): 438-439.
- Chakrabarti, D., **Debal Deb** & Avik Ray 2016. An analysis of variation of the aroma gene in rice (*Oryza sativa* L. subsp. *indica* Kato) landraces. *Genetic Resources and Crop Evolution* 63(6): 953-959.
- Priya, A, S.P. Das, S. Goswami, M.K. Adak, **Debal Deb** & N. Dey 2015. An exploratory study on allelic diversity for five genetic loci associated with floral organ development in rice. *American Journal of Plant Sciences* 6: 1973-1980.
- Ray, Avik, **Debal Deb**, R. Ray & B. Chattopadhyay 2013. Phenotypic characters of rice landraces reveal independent lineages of short-grain aromatic *indica* rice. *AoB Plants* 5: plt032; DOI:10.1093/aobpla/plt032
- Karmakar, J., R. Roychowdhury, R. K. Kar, **Debal Deb** & N. Dey 2012. Profiling of selected indigenous rice (*Oryza sativa* L.) landraces of Rarh Bengal in relation to osmotic stress tolerance. *Physiology and Molecular Biology of Plants* 18(2): 125-132.
- Deb, Debal & Debdulal Bhattacharya 2009. Two unique landraces from West Bengal. *Seed Research* 37 (1&2): 152-155.
- Deb, Debal 2006. Flowering asynchrony can maintain genetic purity in rice landraces. *Current Science* 91: 155-157.

## List of Publications (contd.)

### Rice Nutraceuticals

- Roy, P., **Debal Deb**, A. Suganya, B. Roy, T. Pradeep & T. Saha 2023. Endangered indigenous rice varieties as a source of B vitamins for the undernourished population. *Cereal Chemistry* 100 (3), doi: 10.1002/cche.10668
- Ray, S., **Debal Deb**, A. Nandy, D. Basu, A. Aich, S. Tripathy, S. Sen Roy & M. Poddar Sarkar 2021. Rare and neglected rice landraces as a source of fatty acids for undernourished infants. *Current Science* 121(5): 660-666. doi: 10.18520/cs/v121/i5/660-666
- Roy, P., **Debal Deb**, T. Pradeep, S. Talai Mukhopadhyay, A. K. Sinha & T. Saha 2021. Comparative analyses of the nutraceutical potentialities of selected Indian traditional black rice (*Oryza sativa* L.) landraces. *Oryza* 58(2): 320-334. doi: 10.35709/ory.2021.58.2.6
- Mandal, P., S. Datta & **Debal Deb** 2021. Agronomic and nutraceutical properties of indigenous rice varieties. Ch. 5, In: Dwaipayan Sinha (ed), *A Handbook of Agriculture and Plant Sciences*. ABS Books. New Delhi.
- Ray, S. **Debal Deb** & M. Poddar-Sarkar 2021. Colour based nutraceutical potentiality of some traditional rice (*Oryza sativa* ssp. *indica* L.) varieties of India. *Indian J. Nat. Prod. Res.* 12(1): 153-157.
- Suganya, A., **Debal Deb** & T. Pradeep 2019. Spatial distribution mapping of molecules in the grains of different rice landraces, using desorption electrospray ionization mass spectrometry. *Rapid Comm. Mass Spectrometry* doi: 10.1002/rcm.8397
- Sen Gupta, S, A. Baksi, P. Roy, **Debal Deb** & T. Pradeep 2017. Unusual accumulation of silver in the aleurone layer of an Indian rice (*Oryza sativa*) landrace and sustainable extraction of the metal. *ACS Sustainable Chemistry and Engineering* 5(9): 8310-8315.
- Deb, Debal, S. Sengupta & T. Pradeep 2015. A profile of heavy metals in rice (*Oryza sativa* ssp. *indica*) landraces. *Current Science* 109: 407-409.

### Community Ecology & Food Web Theory

- Deb, Debal 2009. Biodiversity and complexity of rice food webs: An empirical assessment. *The Open Ecology Journal* 2: 112-129.
- Deb, Debal 1997. Trophic uncertainty and parsimony in food web research. *Oikos* (Copenhagen) 78: 191-194.
- Deb, Debal 1996. Species coexistence in a competitive hierarchical system. *Proceedings of the Zoological Society of Calcutta* 49: 149-155.
- Deb, Debal 1995. Scale-dependence of food web structure: Tropical ponds as paradigm. *Oikos* (Copenhagen) 72: 245-262.
- Deb, Debal 1993. Size-selective hypothesis and size composition fluctuations in a heliozooplankton community. *Journal of the Assam Science Society* 35: 279-288.
- Deb, Debal & S Banerjee 1989. Unstable trophic position of the predatory rotifer *Asplanchna priodonta* in a heliozooplankton community. *Proceedings of the Indian National Science Academy* B55: 41-50.
- Deb, Debal, M K Ghosh & S Banerjee 1987. Synecology of a rotifer bloom in a freshwater pisciculture pond in West Bengal. *Proceedings of the Indian National Science Academy* B53: 61-68.

### Conservation Biology

- Deb, Debal, Bo Li, S. Chattopadhyay & A. Ray 2018. Identification of an endangered tree as a new record of *Cordia macleodii*, with an update of *Cordia* in West Bengal, India. *Webbia J. Pl. Taxon. Geog.* 73(1): 81-88.
- Deb, Debal 2016. Ecological ethos and indigenous traditions, pp. 32-36. In: Focus on the Global South/ The Sombath Initiative, *Humanity and Nature: Traditional, Cultural, & Alternative Perspectives*: Bangkok. [http://focusweb.org/sites/www.focusweb.org/files/HumanityAndNature\\_June\\_2016.pdf](http://focusweb.org/sites/www.focusweb.org/files/HumanityAndNature_June_2016.pdf)

## List of Publications (contd.)

Deb, Debal 2015. Sacred bamboo groves of the Rajbansi of north Bengal, pp. 45-62. In: M. Amrithalingam (ed), *Ecological Traditions of India*. vol. XII, *Sacred Groves of West Bengal*. C.P.R. Environmental Education Centre. Chennai.

Deb, Debal 2008. Sacred ecosystems of West Bengal, pp. 117-126. In: A K Ghosh (ed.), *Status of Environment in West Bengal: A Citizens' Report*. ENDEV Society for Environment and Development. Kolkata.

Deb, Debal 2007. *Sacred Groves of West Bengal: A Model of Community Forest Management*. Understanding Livelihood Impacts of Participatory Forest Management Implementation in India and Nepal. (Ser. Ed. Oliver Springate-Baginski). University of East Anglia, Norwich. <http://www.uea.ac.uk/dev/People/staffresearch/ospringate-baginskiresearch/PFM-Nepal-India/8-sacred-groves-west-bengal>

Spadoni, M. & **Debal Deb** 2005. Ethnoecology of sacred groves in West Bengal, India. pp. 143-160, In: *Himalaya: Environment, Culture and Sustainable Development*. Proceedings of Seminar. Cooperazione Italiana/ASIA Onlus/Zoological Museum. Rome.

Deb, Debal 2005. Water crisis in West Bengal, pp. 141-146. In: V. Shiva & K. Jalees (eds), *Water and Women*. RFSTE/ National Commission for Women. New Delhi. URL: [www.navdanya.org/publications/women-water.pdf](http://www.navdanya.org/publications/women-water.pdf) and <http://ncw.nic.in/pdfreports/Women%20&%20Water.pdf>

Deb, Debal et al. 2003. Sacred ponds, pools and rivers, pp. 54-57. In: NBSAP, *Culture and Biodiversity* vol. I. National Biodiversity Strategy and Action Plan, Govt. of India/ Kalpvriksh. <http://kalpvriksh.org/wp-content/uploads/2019/05/Culture-and-Biodiversity.pdf>

Deb, Debal 2003. The role of religious ethics in biodiversity conservation in India. pp. 68-77. In: NBSAP, *Culture and Biodiversity* vol. I. National Biodiversity Strategy and Action Plan, Govt. of India/ Kalpvriksh. <https://kalpvriksh.org/wp-content/uploads/2019/05/Culture-and-Biodiversity.pdf>

Deb, Debal 2001. The culture of conservation: sacred species and sacred habitats p. 35. In: V. Shiva & R. Holla-Bhar (eds), *An Ecological History of Food and Farming in India*. vol. 1. Research Foundation for Science Technology & Ecology: New Delhi.

Deb, Debal & K C Malhotra 2001. Conservation ethos in local traditions: the West Bengal heritage. *Society and Natural Resources* 14: 711-724.

Deb, Debal & A.K. Ghosh 1999. Land use practices in India: reinstatement and displacement of traditional knowledge. In: B.B. Basu (ed), *Proceedings of the National Colloquium on Natural Resource Management*. School of Fundamental Research: Calcutta.

Deb, Debal, K Deuti & K C Malhotra 1997. Sacred grove relics as bird refugia. *Current Science* 73: 815-817.

Deb, Debal, D Kar & S Sen 1996. *Nature Conservation Handbook*. WWF-India Eastern Region: Calcutta.

### Human ecology

Deb, Debal 2022. The erosion of biodiversity and culture: Bankura district of West Bengal as an illustrative locale. *Ecology, Economy and Society – the INSEE Journal* 5 (1): 5 (1): 139-176. doi: 10.37773/ees.v5i1.487

Deb, Debal 2021. Rice cultures of Bengal. *Gastronomica* 21(3) (Fall 2021): 91-101.

Deb, Debal 2021. Every time Bengal loses a traditional rice variety, it loses a little bit of its culture. *Scroll.in* (March 6, 2021). <https://scroll.in/article/988465/every-time-bengal-loses-a-traditional-rice-variety-it-loses-a-little-bit-of-its-culture>

Deb, Debal 2018. *Food and Nutrition from Forest: Relationships with Forest Ecological Status and Management System*. Bhubaneswar. Living Farms.

Deb, Debal 2007. Tapping food from the wild: human ecological adaptation to scarcity. *Proceedings of the International Symposium on Human Origins, Genome and People of India*. New Delhi. Anthropological Survey of India.

## List of Publications (contd.)

Deb, Debal & K C Malhotra 1997. Interface between biodiversity and tribal cultural heritage: a preliminary study. *Journal of Human Ecology* 8: 157-163.

Deb, Debal 1996. Of cast net and caste identity: Memetic differentiation between two fishing castes of Karnataka. *Human Ecology* 24: 109-123.

### Ecological developmental biology

Bateson, Patrick, David Barker, Timothy Clutton-Brock, **Debal Deb**, Bruno D'udine, Robert A. Foley, Peter Gluckman, Keith Godfrey, Tom Kirkwood, Marta Mirazón Lahr, John Mcnamara, Neil B. Metcalfe, Patricia Monaghan, Hamish G. Spencer & Sania E. Sultan 2004. Developmental plasticity and human health. *Nature* 430: 419-421.

### Forest Ecology & Management

Deb, Debal 2014. The value of forest: An ecological economic examination of forest people's perspective (Chapter 7), pp. 123-159, in: Trevor Fenning (ed), *Challenges and Opportunities for the World's Forests in the 21<sup>st</sup> Century*. Springer: Heidelberg/New York.

Deb, Debal 2008. Joint forest management, pp. 96-104. In: A K Ghosh (ed.), *Status of Environment in West Bengal: A Citizens' Report*. ENDEV Society for Environment and Development: Kolkata.

Deb, Debal 2007. Personal experience of researching sacred groves adjacent to joint forest management forests [Box article], pp. 254-255. In: O. Springer-Baginski & P. Blaikie (eds), *Forests, People and Power: The political ecology of reform in South Asia*. Earthscan: London.

Malhotra, K.C. & **Debal Deb**. 1998. 'History of Deforestation and Regeneration/ Plantation in Midnapore District of West Bengal, India, pp. 279–300. In: S.B. Roy, M.Chatterjee, G. Yadav & R. Mukherjee (eds.), *Policy to Practice of Joint Forest Management*. Indian Institute of Bio-Social Research and Development (IBRAD). Kolkata.

Deb, Debal 1993. Evolution of joint forest management in Southwest Bengal: a subaltern detail. *Social Action* 43: 368-374.

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Malhotra, K C, **Debal Deb**, M Dutta, et al. 1993. The role of non-timber forest products in village economies of southwest Bengal. *Rural Development Network Paper* 15d. (Summer 1993) ODI: London.

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