

# Curriculum Vitae

## Dr. Prateep Kumar Nayak

Assistant Professor

School for Environment, Enterprise and Development  
Faculty of Environment, University of Waterloo  
200 University Avenue West, Waterloo, ON N2L3G1

Office: EV3 4221

Telephone: 519-888-4567 X. 33112

Fax: 519-746-0292

Email: [pnayak@uwaterloo.ca](mailto:pnayak@uwaterloo.ca)

### EDUCATION

**PhD in Natural Resources and Environmental Management** (Interdisciplinary), Natural Resources Institute, University of Manitoba, Canada, 2011.

**Certificate in Higher Education Teaching** (CHET), University of Manitoba, Canada, 2011.

**Masters in Natural Resources Management** (MNRM), Natural Resources Institute, University of Manitoba, Canada, 2006.

**Post Graduate Diploma in Rural Development** (recognised as MA in Sociology), Xavier Institute of Social Service, India, 1994.

**BA (Honours) in Political Science**, Sambalpur University, India, 1991.

### AWARDS, DISTINCTIONS AND FELLOWSHIPS

Best Early Career Scientist Award in recognition of commitment and dedication to outstanding scientific research, Integrated Marine Biogeochemistry and Ecosystem Research Group (IMBER) at the IMBIZO III conference (2013 - 2014)

Banting Fellow, Social Science and Humanities Research Council, Canada (2012 - 2014)

Governor General's Academic Gold Medal, University of Manitoba, Canada (2012)

Harvard Giorgio Ruffolo Doctoral Fellow in Sustainability Science, Center for International Development, Kennedy School of Government, Harvard University, USA, (2010)

Trudeau Scholar, Doctoral Scholarship, Pierre Elliott Trudeau Foundation, Canada (2006- 2010)

Faculty of Graduate Studies Travel Award, University of Manitoba, Canada (2009 and 2011)

University of Manitoba Graduate Fellowship, University of Manitoba, Canada, (2009, Declined)

CGIAR - CAPRI PhD Field-Research Fellowship, International Food Policy Research Institute, USA, (2006, Declined)

Alfred H. Shephard Scholarship, St John's College, University of Manitoba, Canada, (2006, Declined)

Faculty of Graduate Studies Travel Award, University of Manitoba, Canada (2006, Declined)

International Graduate Student Award, University of Manitoba, Canada (2005)

Donnie Eastwood Memorial Bursary, St John's College, University of Manitoba, Canada (2005)

Graduate Research Fellowship, Canada Research Chair in Community-Based Resource Management (2004 - 2006)

## **RESEARCH GRANTS AND SCHOLARLY ASSIGNMENTS**

Indigenous Peoples from the Global Commons: Networking for Social and Environmental Sustainability. SSHRC Connection Grant, *Co-applicant*, 50,000 (2015 - 2016).

Monsoon Harvests in rapidly changing landscapes: Understanding the role of the ancient tank irrigation systems in increasing climate change adaptability. UW Water Institute Seed Grant, Canada. *Co-applicant*, 20,000 (2015 - 2016).

Monsoon Harvests: Understanding the role of the ancient tank irrigation system in increasing climate change adaptability in rapidly changing landscapes. University of Waterloo – International Research Partnership Grant, Canada. *Co-applicant*, 20,000 (2015 - 2016).

Fishing for Power: Understanding the Paradox of Marginalisation through Local Metaphors and Political Ecology Narratives. UW SSHRC Travel Award, Canada. *Applicant*, 2200 (2015 - 2016).

Living with Climate Change: Mapping Experience and Adaptation in the Global South and North. Partnership Development Grant, SSHRC, Canada. *Co-applicant*, \$200,000 (2013 - 2015)

Social-Ecological Change, Thresholds and Governance in Aquatic-Terrestrial Systems. SSHRC, Canada. Additional funding from University of Waterloo through the Office of the Provost and the Canada Excellence Research Chair (CERC) in Ecohydrology, \$165,000 (2012 - 2015).

Consultant / Author, Governance of Tenure for Responsible Capture Fisheries, A UN/FAO Fisheries and Aquaculture Department Initiative, Rome. USD 4000 (2011).

Sustainability as connectedness: Conceptualizing the human-environment connections. Sustainability Science Program, Harvard University, USA. USD 25,000 (2010).

Community-based Management and Social Justice. Doctoral Scholarship, Pierre Elliott Trudeau Foundation, Canada. \$200,000 (2006 - 2010).

Ford Foundation Grant to Individuals for Research and Training, New Delhi, India. USD 11,000 (1999 - 2003).

## **REFEREED PUBLICATIONS**

### **Journal Articles**

**Nayak, P. K.**, D. Armitage and M. Andrachuk. 2015. Power and politics of social–ecological regime shifts in the Chilika lagoon, India and Tam Giang lagoon, Vietnam. *Regional Environmental Change* Online First: DOI 10.1007/s10113-015-0775-4

**Nayak, P. K.**, L. E. Oliveira, and F. Berkes. 2014. Resource degradation, marginalization, and poverty in small-scale fisheries: threats to social-ecological resilience in India and Brazil. *Ecology and Society* 19(2): 73. <http://dx.doi.org/10.5751/ES-06656-190273>

**Nayak, P. K.** 2014. The Chilika Lagoon social-ecological system: an historical analysis. *Ecology and Society* 19(1): 1. <http://dx.doi.org/10.5751/ES-05978-190101>

Weeratunge, N., C. Bene, R. Siriwardane, A. Charles, D. Johnson, E. H. Allison, P. K. Nayak and M. Badjeck. 2014. Small-scale fisheries through the wellbeing lens. *Fish and Fisheries* 15(2): 255-279 (Online First, DOI: 10.1111/faf.12016 in 2013)

**Nayak, P. K.** and F. Berkes. 2014. Linking global drivers with local and regional change: A social-ecological system approach in Chilika Lagoon, Bay of Bengal. *Regional Environmental Change* 14(6): 2067-2078 (Online First, DOI 10.1007/s10113-012-0369-3 in 2012)

Haque, E., M. S. Uddin and **P. K. Nayak**. 2012. Adoption of Sustainable Forest Management Criteria and Indicators in South Asia. *International Journal on Environmental Consumerism* 8: 35-44

**Nayak, P. K.** and F. Berkes. 2011. Commonisation and decommissionation: Understanding the processes of change in Chilika Lagoon, India. *Conservation and Society* 9 (2): 132-145

Robson, J. P. and **P. K. Nayak**. 2010. Rural out-migration and resource dependent communities: Lessons from Mexico and India. *Population and Environment* 32: 263–284

**Nayak, P. K.** and F. Berkes. 2010. Whose marginalisation? Politics around environmental injustices in India's Chilika Lagoon. *Local Environment* 15 (6): 553–567

**Nayak, P. K.** and F. Berkes. 2008. Politics of Co-optation: Community forest management vs. joint forest management in Orissa, India. *Environmental Management* 41(5): 707–718

**Nayak, P. K.** and C. E. Haque. 2005. Institutional approaches in natural resources management and sustainability: Lessons from joint forest management policy of India. *International Journal on Environmental Consumerism* 1(1): 37 - 46

**Nayak, P. K.** 2004. Adaptive community forest management: An alternate paradigm. *Forests, Trees and Livelihoods* 14 (2/3/4): 199-216

**Nayak, P. K.** 2003. Community-based forest management in India: The significance of tenure. *Forests, Trees and Livelihoods* 13: 135-160

### **Books and Book Chapters**

**Nayak, P. K.** 2015. Institutional Pluralism, Multilevel Arrangements and Polycentricism: The Case of Chilika Lagoon, India. In: M. Bavinck A. and A. Jyotishi (eds.) *Conflict, Negotiations and Natural Resource Management: A legal pluralism perspective from India*. London: Routledge. pp. 148-177.

**Nayak, P. K.** (In review). Fisher Communities in Transition: Understanding Change From a Livelihood Perspective. In: P. K. Nayak and S. Coulthard (eds.) *Living with environmental change: An analysis of social-ecological adaptations in lagoon systems across the world*. The Netherlands: Springer.

Armitage, D., Alexander, S., Andrachuk, M., Berdej, S., Dyck, T., **Nayak, P. K.**, Pittman, J., and Rathwell, K. (Revised and resubmitted). Emerging concepts in adaptive management. In C. Allen, A. Garmestani, and C. Smith, (eds.) *Adaptive Management of Natural Resources in Theory and Practice*. Berlin: Springer.

**Nayak, P. K.** 2011. Change and marginalization: Livelihoods, commons institutions and environmental justice in Chilika Lagoon, India. Thesis (PhD). University of Manitoba, Canada. Online: <http://hdl.handle.net/1993/5032>

**Nayak, P. K.** 2007. Adaptive community forest management: Some emerging trends in India. In: Lebel, L., X. Jianchu and A. Contreras (eds). *Institutional Dynamics and Stasis: How Crisis Alter the Way Common Pool Resources are Perceived, Used and Governed*. Volume III. Thailand: RCSD Series on Politics of Commons. pp. 89-109

Rai, A., A. Nayak, M. R. Mishra, N. M. Singh, **P. K. Nayak**, S. Mohanty, and Y. G. Rao. 2002. Gadabanikilo - An example of community forest management with a difference. In: Ravindranath, N., H, K. S. Murali and K. C. Malhotra (eds.) *Joint Forest Management and Community Forestry in India: An Ecological and Institutional Assessment*. New Delhi, India: Oxford and IBH Publishing

Singh, N. M. and **P. K. Nayak**. 2001. Up from the roots: Regenerating Dhani forest through community action. In: *World Resources 2000-2001. People and Ecosystems: The Fraying Web of Life*. Washington, DC: World Resources Institute. pp. 181-192

**Nayak, P. K.** 2001. United they work. In: Agarwal, A., S. Narain and I. Khurana (eds). *Making Water Everybody's Business: Practice and Policy of Water Harvesting*. New Delhi, India: Center for Science and Environment

### **Other Publications**

**Nayak, P. K.** and Armitage, D. 2015. Towards a social-ecological conception of regime shifts. An academic poster. Integrated Marine Biogeochemistry and Ecosystem Research (IMBER) / IMBIZO IV Conference, Trieste, Italy, October 2015.

**Nayak, P. K.** 2013. Social-ecological change, thresholds and governance in aquatic-terrestrial systems. Integrated Marine Biogeochemistry and Ecosystem Research Newsletter. Issue 24: 16-20.

**Nayak, P. K.** 2011. Conditions for Governance of tenure in lagoon social-ecological systems: Lessons from around the world. UN/FAO initiative on Governance of Tenure for Responsible Capture Fisheries. Rome: FAO

**Nayak, P. K.** (ed). 2003. Communities, forests and conflicts: Experiences from community forest management in Orissa, India. Ford Foundation and Winrock International, New Delhi, India

Singh, N. M., and **P. K. Nayak**. 2003. Adaptive community forest management: A case of Dhani Panch Mouza Jungle Surakshya Samity, Orissa, India. Ford Foundation and Winrock International, New Delhi, India

Conroy, C., A. Mishra, **P. K. Nayak**, A. Rai, and N. M. Singh. 2001. Factors influencing the initiation and effectiveness of community forest management: A discussion of hypotheses and experiences in Orissa. Report 2623 (5). Natural Resources Institute, University of Greenwich and DFID, UK

Singh, N. M., **P. K. Nayak**, and Y. G. Rao. 1996. India's Emerging Experiences with Joint Forest Management. In: Poffenberger, M. (ed). *Communities and Forest Management - A Report of the IUCN Working Group on Community Involvement in Forest Management*. Washington, DC, USA: IUCN

## CONFERENCE PAPERS AND PRESENTATIONS

**Nayak, P. K.** and Armitage, D. *Towards a social-ecological conception of regime shifts*. Integrated Marine Biogeochemistry and Ecosystem Research (IMBER) / IMBIZO IV Conference, Trieste, Italy, October 2015.

Nayak, P. K. et al. *Persistent Environmental Change: Can a Commons Approach Help to Better Respond?* World Symposium on Climate Change Adaptation, United Kingdom, September 2015.

Nayak, P. K. *Institutional challenges to the governance of small-scale coastal fisheries: The Case of Chilika Lagoon, Bay of Bengal, India*. MARE Conference, the Netherlands, June 2015.

Nayak, P. K. *Understanding the commons through commonisation and decommonisation*. 15th Biennial Conference of International Association for the Study of Commons, Canada, May 2015.

Nayak, P. K. *Why Commons Matter for Living with Climate Change: Connecting Experiences from Global South and North*. 15th Biennial Conference of International Association for the Study of Commons, Canada, May 2015.

Nayak, P. K. *Forced Response to Environmental Change: The Politics of Outmigration on the East Coast of India*. Canadian Association for Refugee and Forced Migration Studies, Toronto, May 2015.

**Nayak, P. K.** and Coulthard, S. *Lagoon systems as learning platforms for living with dynamic social and environmental change*. World Small-Scale Fisheries Congress, Mexico, September 2014.

Nayak, P. K. *Fishing for power: Influence of history and politics on environmental change and fishers' marginalization in Chilika Lagoon, India*. World Congress on Environmental History, Portugal, July 2014.

**Nayak, P. K.**, Oliveira, L. E. C. and Berkes, F. *Poverty, Degradation and Rebuilding Fisheries: Social-Ecological Resilience in India and Brazil*. Resilience Conference, France, May 2014.

**Nayak, P. K.**, Armitage, D. and Andrachuk, M. *Linking regime shifts and environmental governance for social-ecological resilience in coastal lagoon systems*. Resilience Conference, France, May 2014.

Nayak, P. K. *Abrupt Changes in Chilika Lagoon Social-Ecological System: An Historical Analysis*. Canadian Association of Geographer, Brock University, Canada, May 2014.

**Nayak, P. K.**, D. Armitage and M. Andrachuk. *Regime shifts in coastal lagoon systems and the implications for governance* at the Seventh Biennial Conference of the Centre for Maritime Research (MARE), University of Amsterdam, the Netherlands, June 2013

**Nayak, P. K** and D. Armitage. *Regime Shifts in Coastal-Marine Systems and the Implications for Community-based Conservation Policy and Governance* at the 14th Biennial Conference of International Association for the Study of Commons, Kita Fuji, Japan, June 2013

**Nayak, P. K** and D. Armitage. *Regime Shifts in Coastal-Marine Systems and the Implications for Governance* at the future of marine biogeochemistry, ecosystems and societies conference (IMBIZO III) organised by the Integrated Marine Biogeochemistry and Ecosystem Research (IMBER), Goa, India, January 2013

Nayak, P. K. *Institutional Options for Rebuilding Chilika Lagoon Human-Environment System, Bay of Bengal, India* at the International Symposium on Rebuilding Collapsed Fisheries and Threatened Communities, Norris Point, NL, Canada, October 2012

Nayak, P. K. *Economic 'History' Through Social-Ecological Lens: Making Sense of Changes in Chilika Lagoon Fisheries, India* at the XVIth World Economic History Congress, Stellenbosch, South Africa, July 2012

Nayak, P. K. *Environmental Change and Rural-Urban Migration: Implications for Human-Environment Connections in Marginalised Coastal Communities of India* as part of the special Session on Migration and Development organized by the International Migration Research Centre, Wilfrid Laurier University at the Canadian Association of Geographer's Annual Meeting, Waterloo, May 2012

**Nayak, P. K** and F. Berkes. *Linking global drivers with local/regional change: A social-ecological systems analysis in Chilika Lagoon, Bay of Bengal* at the Canadian Association for the Study of International Development Annual meeting, Waterloo, May 2012

**Nayak, P. K** and S. Coulthard. *Lagoon systems as platforms for sharing knowledge: Social-ecological responses to reduced access to commons, and dynamic environmental changes* at the 13th Biennial Conference of International Association for the Study of Commons, Hyderabad, India, January 2011

Robson, J. P. and **P. K. Nayak**. *Transforming ways of life: How out-migration affects changes in resource dependent societies* at the 13th Biennial Conference of International Association for the Study of Commons, Hyderabad, India, January 2011

**Nayak, P. K** and F. Berkes. *Whose marginalisation? Politics around environmental injustices in India's Chilika Lagoon* at the Coastal Zone Asia Pacific Conference and First World Small-scale Fisheries Congress, Bangkok, Thailand, October 2010

Coulthard, S. and **P. K. Nayak**. *A tale of two lagoons: Shaping of resilience and implications for human wellbeing in coastal India* at the Coastal Zone Asia Pacific Conference and First World Small-scale Fisheries Congress, Bangkok, Thailand, October 2010.

Nayak, P.K. *Sustainability as connectedness: Conceptualizing the human-environment connections in Chilika Lagoon, India* at 16th International Symposium on Society and Resource Management, Sam Houston State University, Corpus Christi, Texas, June 2010

**Nayak, P. K** and F. Berkes. *Perspectives on social-ecological marginalization in India's Chilika Lagoon*, Poster presentation at the Ocean Management Research Network (OMRN) National Conference, Ottawa, October 2009

**Nayak, P. K** and F. Berkes. *Fishing communities in transition: Understanding the social-ecological disconnect in India's Chilika Lagoon from a livelihood perspective* at the Fifth Biennial Conference of the Centre for Maritime Research (MARE), University of Amsterdam, the Netherlands, July 2009

Nayak, P. K. *Understanding fishers' marginalization through social-ecological disconnect* at the 15th International Symposium on Society and Resource Management, University of BOKU, Vienna, July 2009

Nayak, P. K. *Grappling with the notions of 'poor', 'poverty' and 'marginalization' in the context of Chilika Lagoon, India* at the Natural Resources Institute Research and Learning Forum, University of Manitoba, Winnipeg, Canada, November 2008

Nayak, P. K. *How to keep commons as commons in the long run: Formation and distortions of property regimes in Chilika Lagoon, India* at the 12<sup>th</sup> Biennial Conference of the International Association for the Study of Commons, Gloucestershire, UK, July 2008

Nayak, P. K. *Environmental injustice and community resilience in a lagoon social-ecological system: The case of Chilika lagoon in India* at the 14th International Symposium on Society and Resource Management, University of Vermont, USA, June 2008

Nayak, P. K. *Towards justice in natural resources governance: Application of environmental justice to coastal commons* at the Fourth Biennial Conference of the Centre for Maritime Research (MARE), University of Amsterdam, the Netherlands, July 2007

## **INVITED SPEAKER**

*How does a commons approach complement industrial ecology approach to resource sustainability?* In a special panel on 'Social Metabolism, institutional change and the commons' at the Biennial Conference of the International Association for the Study of the Commons (IASC), Edmonton, Canada, May 2015.

*Fishing for power: Understanding the paradox of marginalisation through local metaphors and political ecology narratives.* International Conference of the Commission on Legal Pluralism, Indian Institute of Technology, Mumbai, India, December 2015.

*Community conservation in India's Chilika lagoon: Some results and insights.* Community Conservation Research Network (CCRN) Network Meeting, Tofino, Canada, June 2015.

*"Telling" Stories: Understanding change in small-scale lagoon fisheries on the East Coast of India through fishers' metaphors.* Sustainability Science and Society (SSAS) Transdisciplinary Seminar, Brock University, Canada, October 2014.

*Understanding Human-Environment Change in India's Chilika Lagoon.* International Workshop on Living with Climate Change, Kathmandu, Nepal, August 2014.

*The Politics of Human-Environment (Dis)connections: Resource Management and Environmental Sustainability in India's Chilika Lagoon.* Rourkela Institute of Management Studies, Odisha, India, August 2014.

*Simplifying the 'complex': Misunderstood resilience and pseudo transformations in forest and coastal social-ecological systems, India* as a panel member 'Problem-oriented approaches to the sustainability of social-ecological systems' at the Resilience conference, Montpellier, France, May 2014.

*A social-ecological system in crisis: Power, politics and marginalization in Chilika Lagoon, Bay of Bengal, India* at the World Wetlands Day Symposium, Ecohydrology Research Group, University of Waterloo, January 2014

*Tracking Environmental injustice with the fishers of India's Chilika lagoon* at the International Development (INDEV 10) Seminar, University of Waterloo, Canada, February 2013

*Human-ocean-human interactions with respect to global change* as a Member, Panel of Experts at IMBIZO III - the Annual Meeting of the Integrated Marine Biogeochemistry and Ecosystem Research Group (IMBER), Goa, India, January 2013

*Creative resilience: Managing uncertainty, change and renewal in complex human-environmental systems* at the Trudeau Foundation Scholars' Workshop on 'ideas for change: Creativity in managing socio-ecological systems' at University of Saskatchewan, Saskatoon, May 2010

*Protected areas and sustainable development* at Harvard 16th Annual International Development Conference, Kennedy School of Government, Harvard University, Boston, April 2010

*Picking indicators from fishing as a way of life* at Oceans and Coastal Indicators Working Group of the Ocean Management Research Network (OMRN), Ottawa, October 2009

*Towards justice in natural resources management: Understanding social-ecological marginalization* at the Community University Research Alliance (CURA), Memorial University, St. John's, January 2009

*Making a research process work: Understanding social-ecological marginalization with the fishers* at a workshop on 'making sense of our research: Interactive, adaptive processes and making research on humans in the natural environment relevant for advocacy and policy change' organized by Trudeau Foundation, St John's, January 2009

*Politics of cooptation in an era of collaboration: Self-organized community forest management vs. joint forest management* at a National Consultation organized by Kalpavriksh, Vasundhara and Global Forest Coalition, India, January 2008

*Conservation and livelihoods in a complex lagoon social-ecological system* at a workshop organized by Foundation for Ecological Security and the British High Commission, India, March 2008

*Emphasizing the rights of fishing communities in inland coastal waters* at the National Consultation on a shadow report to the International Covenant on Economic, Social and Cultural Rights organized by Action Aid, India, December 2007

*Branding community forest management and politics of cooptation* at the Graduate Students Association (GSA) Lecture Series, University of Manitoba, Canada. October 2006



## RESEARCH EXPERIENCE

**Co-Investigator** - Indigenous Peoples from the Global Commons: Networking for Social and Environmental Sustainability. SSHRC Connection Grant, Canada (2015 - 2016).

**Co-Investigator** - Monsoon Harvests in rapidly changing landscapes: Understanding the role of the ancient tank irrigation systems in increasing climate change adaptability. UW Water Institute Seed Grant, Canada (2015 - 2016).

**Co-Investigator** - Fishing for Power: Understanding the Paradox of Marginalisation through Local Metaphors and Political Ecology Narratives. UW SSHRC Travel Award, Canada (2015 - 2016).

**Co-Investigator** - Monsoon Harvests: Understanding the role of the ancient tank irrigation system in increasing climate change adaptability in rapidly changing landscapes. International Research Partnership Grant, University of Waterloo, Canada (2015 - 2016).

**Co-Investigator** - *Living with Climate Change: Mapping Experience and Adaptation in the Global South and North*. Responsible for the Bay of Bengal, India part of the study. Partnership Development Grant, SSHRC, Canada (2013 - 2015)

**Principal Investigator** - *Social-Ecological Change, Thresholds and Governance in Aquatic-Terrestrial Systems*. Banting Postdoctoral Fellowship, SSHRC, Canada (2012 - 2015)

**Research Associate** - *Learning through Watershed Governance*. Natural Resources Institute, University of Manitoba, Canada (2011 - 2012)

**Principal Investigator** (PhD research project) - *Change and marginalisation: Livelihoods, commons institutions and environmental justice in Chilika Lagoon, India*. Pierre Elliot Trudeau Foundation, Canada and Canada Research Chair in CBRM (2006 - 2011)

**Consultant / Author** - Governance of Tenure for Responsible Capture Fisheries, A UN/FAO Fisheries and Aquaculture Department Initiative, Rome (2011)

**Principal Investigator** - *Sustainability as connectedness: Conceptualizing the human-environment connections*. Sustainability Science Program, Center for International Development, Kennedy School of Government, Harvard University, USA (2010)

**Research Associate** - *Governing small-scale fisheries for wellbeing and resilience*. A Canada-WorldFish Center Collaborative Research Program, Canadian International Development Agency (CIDA) Canada-CGIAR Linkage Fund project, Lead – Dr Derek Johnson, University of Manitoba, Canada (2009)

**Principal Investigator** (Masters Research Project) - *Politics of cooptation: Self-organized community-based forest management and joint forest management in Orissa, India*. Master's Thesis project, Canada Research Chair in CBRM (2004 - 2006)

**Coordinator and Series Editor** - *Monographs on adaptive forest management, conflicts and communities, and collaborative forums*. Ford Foundation-Winrock International Small Grants Programme, New Delhi (2003)

**Research Coordinator** - *Institutional issues and formation of federations of forest protection groups in Tangi-Ranpur, Orissa, India.* Ford Foundation, India (1997 - 2000).

**Team Leader** - *Traditional institutions in resource management.* Department for International Development (DFID), UK and Western Orissa Rural Livelihoods Project, India (1998).

**Team Member** - *Non-Timber Forest Products and rural livelihoods with special focus on existing policy and market constraints.* Department for International Development (DFID), UK and Western Orissa Rural Livelihoods Project, India (1998).

**Team Member** - *Effective local management of forests: Learning from self-initiated management organizations in India.* Natural Resources Institute, University of Greenwich, UK (1997 - 1999).

**Team Leader** - *Status, dynamics and management of fresh water resources in coastal Orissa, India.* World Wide Fund for Nature (WWF) - India (1997).

**Team Member** - *Ecological, institutional and economic assessment of community forest management.* Economic and Ecological Research Network, National Network on Joint Forest Management, India and Center for Ecological Sciences, Indian Institute of Science, Bangalore (1996 - 1997).

**Team Member** - *Gender differentiated impact of community forest management.* Gender and Equity sub-group of the National Network on Joint Forest Management, India (1996).

## **WORKSHOPS AND CONFERENCE PANEL ORGANIZATION**

Co-organised a panel on ‘Framing Commons as a Process: Exploring the concepts of commonisation and decommonisation for theory, policy and practice of Governance’ at the International Association for the Study of the Commons (IASC), Edmonton, Canada, May 2015

Organised a panel on ‘Living with Climate Change through Commons Governance’ at the International Association for the Study of the Commons (IASC), Edmonton, Canada, May 2015

Co-organizer with Sarah Coulthard, University of Northumbria, UK of a panel on ‘Living with environmental change: An analysis of social-ecological adaptations in lagoon-based small-scale fishery systems across the world’ at the World Small-Scale Fisheries Congress, Merida, Mexico, September 2014

Organized a panel on ‘Living with social-ecological change: Experiences from global South and North’ at the conference of the Canadian Association of Geographers, Brock University, Canada, May 2014

Organised a two day policy workshop on ‘Human-environment relationship in Chilika Lagoon, India’ in collaboration with the Chilika Lagoon Fisher Federation and development NGO NIRMAN at Bhubaneswar, India, February 2013

Organized a panel on ‘Looking Back and Looking Ahead: International Perspectives on Rebuilding Social-Ecological Systems of Fishing Communities and their Resources’ at the International Symposium on Rebuilding Collapsed Fisheries and Threatened Communities, Bonne Bay, Newfoundland and Labrador, Canada, October 2012

Organizer of a policy panel on ‘Between the Sea and the Land: Complex commons at the interface of marine-terrestrial systems’ with Dr. Elinor Ostrom as the chair, at the 13th Biennial Conference of the International Association for the Study of the Commons, Hyderabad, India, January 2011

Co-organizer with Sarah Coulthard, University of Ulster, UK, of a panel on ‘Coastal Lagoons as complex human-environment systems: Implications for sustainability’ at the 13th Biennial Conference of the International Association for the Study of the Commons, Hyderabad, India, January 2011

Co-organizer with James Patrick Robson, University of Manitoba, Canada, of a panel on ‘Rural out-migration and resource dependent communities in a globalized world’ at the 13th Biennial Conference of the International Association for the Study of the Commons, Hyderabad, India, January 2011

Co-organizer with Sarah Coulthard, University of Ulster, UK, of a special panel on ‘Coping with change in lagoon, lake and river’ at the Coastal Zone Asia Pacific Conference and World Small-Scale Fisheries Congress, Bangkok, Thailand, October 2010

Co-organized with Sarah Coulthard, University of Ulster, UK, a panel on ‘Coastal Lagoons as complex adaptive systems’ at the Fifth Biennial Conference of the Centre for Maritime Research (MARE), University of Amsterdam, the Netherlands, July 2009

Co-organized with Barbara Neis, Memorial University, a session on ‘Making sense of our research: Interactive, adaptive processes and making research on humans in the natural environment relevant for advocacy and policy change’ at a Public Interaction Program organized by the Trudeau Foundation, St. John’s, January 2009

Co-organized with Derek Armitage, Wilfrid Laurier University, Canada and K. T. Thomson, Cochin University, India, a panel on ‘Coastal lagoons as complex commons’ at the 12<sup>th</sup> Biennial Conference of the International Association for the Study of Commons, Gloucestershire, UK, July 2008

Co-organized with Ann Dale, Royal Roads University, Canada, a workshop on ‘Governance for sustainable community development’, Royal Roads University, Victoria, January 2007

## **TEACHING EXPERIENCE**

### **Current Teaching**

- INDEV 100: Introduction to International Development: Concepts, Theories and Actors
- INDEV 101: Introduction to International Development: Issues, Challenges and Approaches
- INDEV 602/ GEOG 635: Theories and Practices of International Development
- ERS 675: Commons in a Changing World (Reading Course)
- ENBUS 306: Qualitative Research Design

### **Past Teaching**

- Environmental Sustainability: A Global Dilemma (IDS/ENV 2603/3-002), Menno Simons College and Faculty of Environment, University of Winnipeg (Winter 2011)

### **Past Courses Partially Taught / Guest Lecture**

- Environmental Sustainability: A Global Dilemma (IDS/ENV 2603/3-050), Menno Simons College and University of Winnipeg (Summer 2011)
- Master Thesis Research (NRI 7262), University of Manitoba
- Crisis, Humanitarian Aid and Development (IDS 2171/3-050), Menno Simons College and University of Winnipeg
- Human Dimensions of Natural Resource and Environmental Management (NRI 7222), University of Manitoba
- Qualitative Methods in Community-Based Natural Resource & Environmental (NRI 7360), University of Manitoba
- Participatory Local Development (IDS 2110), Menno Simons College and University of Winnipeg.
- Environmental Issues (ENV 2000), University of Manitoba
- Environmental Justice and Ecosystem Health (NRI 7340), University of Manitoba

### **GRADUATE STUDENT SUPERVISION**

- Currently supervising / co-supervising one MEd in Sustainability Management thesis student in SEED and one Master's in Environment and Resource Studies and one PhD student in ERS.
- Serving as a member on three Doctoral Advisory Committees (one student in GEM and the second in ERS) and one two Thesis Advisory Committee (Natural Resources Institute, University of Manitoba, Canada).
- Have served as a reader / external examiner of four graduate thesis for the Master of Applied Environmental Studies (MAES) in Local Economic Development, SEED, GEM and ERS, University of Waterloo, Canada.

### **PROFESSIONAL WORK EXPERIENCE**

**August 1999 – August 2004: Senior Project Officer**, Foundation for Ecological Security (FES), India (a development and environmental NGO, <http://www.fes.org.in>)

- Coordinated the implementation of projects on Natural Resource Management and Animal Husbandry; Integrated Watershed Development; Ecological Security and Livelihoods.
- Conceptual and operational support to the FES project teams through Project Planning, Implementation, Monitoring and Evaluation.
- Designed and coordinated projects on promoting stability of ecosystems through the protection and restoration of land and water resources, and the biological diversity associated with them, by working with and through a range of democratic village institutions, their federal bodies, civil society organizations, and the government.
- Coordinated the Research and Documentation Unit including administration of the Small Grants Program for research and advocacy support to external organizations and individuals.

**July 1995 – July 1999: Senior Program Officer**, VASUNDHARA, Bhubaneswar, India (a development and environmental NGO, <http://www.vasundharaorissa.org>)

- Research, documentation, dissemination, public policy advocacy, capacity building and networking on issues of sustainable community-based natural resource management and rural livelihoods.
- Facilitated and supported processes of strengthening community forest management institutions and their federation building processes in order to prepare local communities to negotiate their rights over local forests.

- Coordinated advocacy efforts for facilitating pro-people policy changes in the direction of increased community control over resources and secure tenure rights.
- Core member of the capacity building team for training forest department and NGO staff on the concepts of participatory natural resources management.

**July 1994 – June 1995: Program Coordinator**, NYSASDRI, Bhubaneswar, India (a rural development NGO, <http://www.nysasdri.org>)

- Coordinated, monitored and evaluated integrated rural development projects focused on tribal development and poverty alleviation.

## **OTHER SCHOLARLY / PROFESSIONAL WORK AND SERVICE TO COMMUNITY**

### **Review Support**

**Reviewer** for referred journals (since 2007): *Proceedings of the National Academy of Sciences (PNAS)*; *Ecology and Society*; *Human Ecology*; *Development and Change*; *Environmental Management*; *International Forestry Review*; *Human Ecology Review*; *Journal of Development Studies*; *Journal of Ecology and the Natural Environment*; *International Journal for Social Science Research*; *Population and Environment*; *International Journal of Commons*; *Regional Environmental Change*; *Conservation Letters*; *Biological Conservation*; *Conservation and Society*; *Environmental Science and Policy*; *Journal of Public Administration and Policy Research*; *International Journal of Biodiversity Watch*; *Wetlands*; *Journal of Ethnobiology*

Assessor / Evaluator of grant proposals for the Social Science and Humanities Research Council (SSHRC) Canada

**Reviewer**, MARE Book Series, Springer, The Netherlands – Book chapter review 2014

**Editorial Board Member**, International Journal on Biodiversity Watch, since 2014 ([http://www.biodiversity-watch.com/index.php?act\\_id=14](http://www.biodiversity-watch.com/index.php?act_id=14))

**Evaluator** of research funding applications, Oregon Sea Grant Social Science and Human Dimension Research, Oregon Sea Grant Research Program, Oregon State University, USA, 2014 (<http://seagrant.oregonstate.edu/research/special-rfps>)

**Reviewer** of Research Capacity Strengthening Fellowship applications, Ecosystem Services for Poverty Alleviation (ESPA), Natural Environment Research Council (NERC), UK, Economic and Social Research Council, UK and the Department for International Development (DFID), UK, 2014 (<http://www.nerc.ac.uk/funding/>)

**Member, Panel of Reviewers** for the 14th Biennial Conference of the International Association for the Study of the Commons (IASC), 2013.

**Member, Panel of Reviewers** for the 13th Biennial Conference of the International Association for the Study of the Commons (IASC), 2011.

**Reviewer** for book chapters on Environmental Health, Forestry and Watershed, Hesperian Foundation, Berkeley, USA, 2005.

### **Committee Membership**

- **Co-Chair**, Organizing committee, XVth Biannual Conference International Association for the Study of the Commons, 2014 - 2015 (<http://www.iasc2015.org/>)
- **Chair**, Academic Review Committee, XVth Biannual Conference International Association for the Study of the Commons, 2014 - 2015 (<http://www.iasc2015.org/>)
- **Member**, Search Committee for Principal of the St. Paul's University College, University of Waterloo, (2015)
- **Member**, Faculty Hiring Committee for a position in Environmental Governance and Policy, Faculty of Environment, University of Waterloo, Canada.
- **Member**, Organizing Committee, XVth Biannual Conference International Association for the Study of the Commons, 2013 - 2015 (<http://www.iasc2015.org/>)
- **Member**, Governing Board, NIRMAN – An Initiative for Sustainable Development, India (NGO), Continuing since 2012 (<http://www.nirmanodisha.org/index.php>)
- **Member**, Student Affairs Committee, International Association for Society and Natural Resources (IASNR), USA (2008 - 2010).
- **Member**, Search Committee for the Director of Natural Resources Institute, University of Manitoba (2006).

### **Leadership Role**

**Founding Coordinator, since 2007**, (with Dr. Sarah Coulthard, University of Northumbria, UK) of an *International Forum of Lagoon Scholars* who are working together to understand coastal lagoons as biophysically and socially unique and complex systems, the nature of uncertainty and change represented by this complexity and the specific challenges they pose for policy, and examples of adaptation approaches and its implications for sustainability and governance.

### **Association with Professional Institutions and Research Communities**

- International Association for the Study of Commons (IASC)
- Harvard Sustainability Science Program (SSP)
- Trudeau Foundation Association (TFA)
- Environmental Change and Governance Group (ECGG)
- Integrated Marine Biogeochemistry and Ecosystem Research (IMBER)
- Center for Maritime Research (MARA), Amsterdam
- Environmental Change and Governance Group (ECGG), Waterloo
- Community Conservation Research Network (CCRN)
- Too Big to Ignore (TBTI) – Global Partnership for Small-Scale Fisheries Research
- International Association for Society and Natural Resources (IASNR).
- Canadian Association of Geographers (CAG).