**CV- Haakon Lein**

Professor

Department of Geography, Norwegian University of Science and Technology-NTNU.

Edvard Bulls vei 1, N-7491, Trondheim, Norway.

Phone+47 91897634

E-mail: haakon.lein@ntnu.no

Web:<http://www.ntnu.no/ansatte/Haakon.Lein>

**Academic degrees**

Dr. Oecon (PhD). Norwegian School of Economics and Business Administration, Bergen Norway 1993.

 Thesis title: *Modernizing floodplain agriculture. A study of the green revolution in Bangladesh*

Cand. Polit (M. Phil) Geography, University of Bergen, Norway 1987.

 Thesis title: *Water to the fields. Technological change in Bangladesh Agriculture.*

Cand. Mag., University of Trondheim, Norway 1983

**Work experience**

Professor in Geography NTNU 2007-

Associate professor in Geography NTNU 1993-2007.

Head, Development Studies and Co-operation Initiative NTNU (50%) 2001-04**.**

Head, Department of geography NTNU 1996-98.

Research advisor, Centre for Environment and Development, University of Trondheim (20%) 1993-94.

Assistant professor in Geography, Department of Geography, University of Trondheim 1991-93.

Research fellow, Norwegian School of Economics and Business Administration/Norwegian Research Council for the Social Sciences 1987-91.

**Various assignments**

Visiting professor, Australian Centre for Cultural Environmental Research (AUSCCER)

 University of Wollongong, Australia 2015

Member, Royal Society of Science and Letters 2012-

Visiting research fellow, Hazards and Vulnerability Research Institute, University of South Carolina 2009-2010.

Member academic committee for funding within the fields of environment and development (FRIMUF), Research Council of Norway 2004-2010

Leader, Norwegian network for ICT and development 2002-2006.

Member of board, Faculty of social sciences and technology management NTNU 1996-98 and 2002-2005.

Member of the board, Norwegian Association for Development Research 1989-91 and 2002-2003.

Norwegian Geographers Association, Member of the board 1989, Chair 1996-98.

**Referee** for The Research Council of Norway (RCN), Danish Research Council for Development Research, Riksbankens Jubileumsfond, Centre for Advances studies, Social Sciences and Humanities Research Council of Canada, Norwegian Journal of Geography, Geografiska Annaler, Journal of Peace Research, Singapore Journal of Tropical Geography, Land Use Policy, International Journal of Biodiversity Science, Ecosystem Services & Management, International Journal of Disaster Risk Reduction, Polar Geography, Natural Hazards, Journal of East African Studies (guest editor), Internasjonal Politikk, Geoforum.

**Member promotional committee**s at: Norwegian University of Life Sciences, University of Ghana, University of Addis Ababa, University of Bergen, University of Makerere, University of Cape Town, NTNU.

M**ember PhD evaluation committees** at NTNU, University of Cape Town, Asian Institute of Technology, Norwegian University of Life Sciences, University of Dar es Salaam.

**Participation in projects**

*Environmental Risk Management under Increasing Extremes and Uncertainty*. Collaboration between Norwegian University of Science and Technology, Makerere University, Uganda Marty’s University, University of Dar es Salaam and Haramaya University. Funded by NORHED II 2021-2026. Project leader.

*Collaborative Action for Strengthening Training Capacities in Climate Risk and Natural Resource management (CoSTClim).* Collaboration between Department of Geography, Norwegian University of Science and Technology, Makerere University, Uganda Martyrs University and the Regional Universities Forum for Capacity Building in Agriculture. Funded by NORPART 2019-2023. Project coordinator.

C*apacity building to promote sustainable governance of petroleum resources, biodiversity and livelihoods in East African communities.* Funded by EnPe -The Norwegian Programme for Capacity Development in Higher Education and Research for Development within the Fields of Energy and Petroleum (2015-2020) Collaboration with University of Dodoma, Tanzania, Makarere University, Uganda and Norwegian University of Life Sciences. Norwegian project leader.

Af*ricanBioServices: Linking biodiversity, ecosystem functions and services in the Greater Serengeti-Mara Ecosystem (GSME) - drivers of change, causalities and sustainable management strategies***.** Horizon2020 2015-2019. Contribution to WP on Natural resource policies.

*NORDRESS; Nordic Centre of Excellence on Resilience and Societal Security*. Project led by University of Iceland in collaboration with partners in Norway, Sweden, Finland and Denmark. Funded by NordForsk (2014- 2020). Leader WP on community resilience in a Nordic comparative perspective**.**

*ClimRes: Climate Change and Natural Hazards. The Geography of Community Resilience in Norway* Funded by RCN 2014-2019. WP leader.

The dynamics of large infrastructure development in conservation of the Serengeti ecosystem - the case study of road through Serengeti national park. Capacity building project under IPBES Funded by Norwegian Environment Agency 2011-2014. Research on Socio-Economic aspects.

Comparative study of incentive options for forest-based emissions reduction, biodiversity conservation and livelihood improvement; Case of Kilwa and Lindi Districts. Collaboration with Department of Economics, University of Dar es Salaam. Funded by Tanzania Climate Change Impacts, Adaptation and Mitigation Program (CCIAM)’ 2011-2014. Norwegian researcher/partner.

The geography of social vulnerability, environmental hazards and climate change (VulClim). Funded by NRC 2007- 2012. Project leader.

'Harvest from wasteland'. Land, people and water management reforms in the drylands of Xinjiang, China. In collaboration with Xinjiang Institute of Ecology and Geography. Funded by RCN 2004-2009. Project leader.

Transfrontier conservation and local community development in Southern Africa. In collaboration with Department of Environmental & Geographical Science, University of Cape Town. Funded by RCN, National Research Foundation, South Africa and NTNU. 2004-2006. Norwegian partner

The spread, organization and management of irrigated agriculture in Pangani river basin, Tanzania. Funded by NORAD 1997-2004. Researcher on water management issues.

Biodiversity conservation and sustainable forest use in upland Madagascar 1999-2002. Funded by RCN and NTNU 1999-2002.

Natural Hazards and forced migration in Bangladesh. Funded by the Research Council of Norway (RCN) 1997-2000. Project leader

## Teaching and supervision

Extensive (since 1992) teaching experience in mainly in Human geography, development studies and African studies. Supervisor for c. 90 completed master students' theses.

**Supervision PhD s**

## Ritah Kigonya: A*spirations and realities of biodiversity offsetting: Social and ecological transformations of the Gangu Central Forest reserve in Uganda*. 2023 Main supervisor co-supervisor Charlotte Nakakaawa

## Teklehaymanot Weldemichel. *Livelihoods in Contested Lands: Natural Resource Policies and Poverty Alleviation in the Greater Serengeti-Mara Ecosystem*. 2021 Main supervisor, co-supervisor Tor A. Benjaminsnem

## Kyrre Groven *Kommunane og klimautfordringa. Ein studie av lokal klimagovernance*. 2017. Main supervisor, co-supervisor Carlo Aall.

## Karina Barquet *Transfrontier conservation and conflic*t. 2015. Main supervisor, co-supervisor Jan Ketil Rød.

## Ivar Holand *Scales of Vulnerability*. 2014 Co-supervisor, main supervisor Jan Ketil Rød.

## Mattias Tagseth*, Local Knowledge and development. Resource management in indigenous irrigation, North Eastern Tanzani*a. 2009. Main supervisor, co-supervisor Michael Jones.

## Ståle Angen Rye; *Conditions of Connectivity. The Internet and the time space of distant education in Indonesia.* 2008. Main supervisor, co-supervisor Anne Marie Støkken.

## Yuling Shen *The Water Dragon King. Water and land management in Xinjiang, China*. Main supervisor, co-supervisor Geir Vatne.

## Jørgen Klein *Deforestation and conservation in Madagascar: dominating discourses and local realities*. 2007. Main supervisor, co-supervisor Mary Edwards

## Caroline Rusten Rugomayo *The politics of conservation and development. On actors, interface and participation. The case of Ngorongoro Conservation Area Tanz*ania. 2000. Co-supervisor, main supervisor A. Baudouin.

**Publications**

*Books*

* Bye, LM, Lein, H & Rød, JK (eds.) 2013. *Mot en farligere fremtid? Klima, sårbarhet og tilpasning i Norge.* Akademika Forlag.
* Kulindwa K, Hemson D, Lein H, & Mascharenas A (eds) 2008. *Water and Poverty. Explorations of the Reciprocal Relationship*. London:Zed Press

*Book chapters*

* Lein, H 2020. Bekymret men ikke redd? Norske holdninger til klimaendringer. I Aasetre J. & Cruickshank J. (red). *Innføring i miljø- og ressursgeografi*. 163-179 Oslo: Fagbokforlaget
* Lein H, Nyahongo JW, Ntalwila J, Mwakatobe A, Kideghesho JR & Runyoro, V, 2017 Human populations and livelihoods along the Northern Serengeti Road. Chapter 8 in Fyumagwa, RD, Mfunda, IM, Ntalwila J & Røskaft E (eds) *Northern Serengeti Road Ecology*. Fagbokforlaget.
* Ntalwila J, Mwakatobe A, Kideghesho JR, Nyahongo JW, Runyoro, V & Lein H, 2017Human-Wildlife Interactions. Chapter 9 inFyumagwa, RD, Mfunda, IM, Ntalwila J & Røskaft E (eds) *Northern Serengeti Road Ecology*. Fagbokforlaget
* Nyahongo JW, Ntalwila J, Kideghesho JR, Mwakatobe A, & Runyoro, V & Lein H, 2017 Perceptions of stakeholders towards northern Serengeti road, Tanzania. Chapter 10 in Fyumagwa, RD, Mfunda, IM, Ntalwila J & Røskaft E (eds) *Northern Serengeti Road Ecology*. Fagbokforlaget*.*
* Lein, H 2014 The re-emergence of environmental causation in migration studies and its relevance for Bangladesh. In Brun C, Blaikie P & Jones, M (eds) *Alternative development*. *Unravelling Marginalization, Voicing Change.* pp.207-218. Farnham: Ashgate.
* Lein, H, 2013 Om klimaendringer, samfunn og naturkatastrofer i et globalt perspektiv. I Bye, LM, Lein, H & Rød, JK (eds.) *Mot en farligere fremtid? Klima, sårbarhet og og tilpasning i Norge.* Akademika Forlag.
* Lujala P, Bye LM, Lein H & Rosvoldaune R 2013. Kartlegging av klimarelatert sårbarhet på lokalt nivå. Eksempelet Verdal. I *Mot en farligere fremtid? Klima, sårbarhet og tilpasning i Norge*, Bye LM, Lein,H & Rød JK (eds.). Trondheim: Akademika Forlag.
* Lein, H, Jørgensen S., Lujala P, Rød JK 2013 Klima i endring – hjem i fare? Holdninger til klimaendringer og naturfare som trussel mot hus og hjem i Norge. In Brun, C. & Setten, G. (red.) *Hus, hjem og sted*. Akademika Forlag.
* Rød, J. K., Berthling I., Lujala P., Vatne, G. and Lein H. 2010. Hvor sårbare er vi i Trøndelag for flom og skredhendelser? *Forskning i Trøndelag 2010*, 145-162: Tapir Akademisk Forlag.
* Tagseth, M, and Lein H. 2010. Competing Models of Water Resource Management and Their Implications Using the Example of Pangani River Basin in Tanzania. In *Shared waters, shared opportunities. Hydropolitics in East Africa.* 19-36. Nairobi: Mkuki na Nyota Publisher
* Lein, H 2008 ‘Water, Agricultural Development and Rural Poverty in Bangladesh’. In Kulindwa K, Hemson D., Lein H., & Mascharenas A. (eds). *Water and Poverty.*
* Kulindwa, K & Lein H. 2008 ‘Water and poverty. The inextricable link. In Kulindwa K, Hemson D., Lein H., & Mascharenas A. (eds). 2008 *Water and Poverty.* Zed Press.
* Lein, H. 1998 Traditional versus modern water management systems in Pangani River Basin, Tanzania. In de Haan L, and Blaikie P., *Looking at Maps in the dark. Directions for geographical research in land management and sustainable development in rural and urban environments of third world*. 52-64 Utrecht/Amsterdam: Royal Dutch Geographical Society
* Lein, H. 1989 Infrastructural Development and Local Resource Mobilization in Faridpur. In Blair H. W (ed): *Can Rural Development be Financed from Below? Local Resource Mobilization in Bangladesh pp* 152-186, Dhaka: University Press Limited

*Journal articles*

* Aboda, C., Vedeld, P. O., Byakagaba, P., Lein, H., & Nakakaawa, C. A. (2022). Household capacity to adapt to resettlement due to land acquisition for the oil refinery development project in Uganda. *Environment, Development and Sustainability*. doi:10.1007/s10668-022-02607-w
* Räsänen, A., Kauppinen, V., Juhola, S., Setten, G., & Lein, H. (2020). Configurations of community in flood risk management. *Norsk Geografisk Tidsskrift - Norwegian Journal of Geography*, 1-16. doi:10.1080/00291951.2020.1754285
* Scherzer, S., Berg, N., Lein, H., & Setten G. (2020). The many faces of local community: Exploring lay conceptualizations of the Norwegian lokalsamfunn. *Norsk Geografisk Tidsskrift, 74*(3), 152-164. doi:http://dx.doi.org10.1080/00291951.2020.1791245
* Lujala, P., & Lein, H. (2020). The role of personal experiences in Norwegian perceptions of climate change. *Norsk Geografisk Tidsskrift - Norwegian Journal of Geography*, 1-14. doi:10.1080/00291951.2020.1731850
* Räsänen, A., Lein, H., Bird, D., & Setten, G. (2020). Conceptualizing community in disaster risk management. *International Journal of Disaster Risk Reduction, 45*,
* Weldemichel, T.G., Benjaminsen, T.A., Cavanagh C., Lein, H. (2019) [Conservation: beyond population growth.](http://dx.doi.org/10.1126/science.aax6056) [*Science.*](http://www.sciencemag.org/) vol. 365 (6449).
* Weldemichel, T. G., & Lein, H. (2019). "Fencing is our last stronghold before we lose it all." A political ecology of fencing around the Maasai Mara National Reserve, Kenya. *Land Use Policy, 87*.
* Setten, G & Lein, H (2019) “We draw on what we know anyway”: The meaning and role of local knowledge in natural hazard management. *International Journal of Disaster Risk Reduction*
* Bjerkli CL, Flemsæter F, Lein H, Rørtveit, HN, Setten, G, Aasetre, J, 2017 Integrering gjennom friluftsliv? *Plan. Tidsskrift for samfunnsforskning, byplan og regional utvikling*. no. 1, 36-39.
* Shen Y, Lein H, Chen X 2016 Water conflicts in Hetian, Xinjiang during the Republic of China period. *Water History* <http://dx.doi.org/10.1007/s12685-016-0153-2>
* Kulindwa, K, Lein, H, Hepelwa, A, Mshale B. 2016 Anthropogenic drivers of forest change in Miombo ecosystems' *Tanzania Economic Review.* Vol 6, 1&2, 57-79.
* Parsizadeh F, Ibrion M, Mokhtari,M, Lein, H, & Nadim, N 2015 Bam 2003 earthquake disaster: On the earthquake risk perception, resilience and earthquake culture – Cultural beliefs and cultural landscape of Qanats, gardens of Khorma trees and Argh-e Bam. *International Journal of Disaster Risk Reduction*. 14 4, 457-469.
* Lujala, P, Lein, H & Rød, JK 2015 Climate Change, Natural Hazards, and Risk Perception: The Role of Proximity and Personal Experience. *Local Environment* Vol. 20 4, 489-509.
* Lujala, P, Lein, H & Rosvoldaune R. 2014 Quantifying vulnerability to climate change induced flooding at local level. The case of Verdal, Norway. *Norwegian Journal of Geography.* 68 1, 34-49
* Rød JK, Berthling I, Lein H, Lujala P, Vatne, G, Bye, LM, 2012. Integrated vulnerability mapping for wards in Mid-Norway. *Local Environment.* 17 6-7, 695-716
* Shen, Y, and Lein H. 2010. Treating water as an economic good: policies and practices in irrigation agriculture in Xinjiang, China. *Geographical Journal* 176 2, 124-137.
* Lein, H. & Tagseth M. 2009. ‘Tanzanian water policy reforms – between principles and practical applications.’ *Water Policy* 11, 203–220*.*
* Lein, H 2009 The poorest and most vulnerable? On hazards, livelihood and labelling of riverine communities in Bangladesh.’ *Singapore Journal of Tropical Geography* 30, 98-113.
* Shen, Y & Lein H.2005 Land and water resources management problems in Xinjiang Uygur Autonomous Region, China’. *Norwegian Journal of Geography* 2005; 59(3):237-245
* Lein, H 2004 Managing the water of Kilimanjaro. Water, peasants and hydropower development’. *GeoJournal* 61:155-162
* Lein, H. 2000 Hazards and ‘forced’ migration in Bangladesh. *Norwegian Journal of Geography* Vol 52, pp.122-127.
* Lein, H. (1993). Floods and agricultural change. Some observations from Bangladesh 1986–1990. *Norsk Geografisk Tidsskrift - Norwegian Journal of Geography, 47*(4), 211-227. doi:10.1080/00291959308552315
* Lein, H. 1990 Persistence and polarization. The case of the "green revolution" in Bangladesh’. *Journal of Social Studies* pp 112-126.

*Reports, book reviews etc****.***

* Barquet, K & Lein, H. (2015) *The spatial distribution of transboundary protected areas in Africa* (mimeo).
* Ibrion, M., M. Mokhtari, F. Parsizadeh, H. Lein, F. Nadim 2015. Towards a Culture of Resilience and Earthquake Disaster Risk Reduction in Iran-"Lessons-Learned" from Earthquake Disasters. Paper presented at 7th International Conference on Seismology & Earthquake Engineering (SEE7), 18-21 May 2015, Tehran, Iran. Proceedings of SEE7, 2015 DOI: 10.13140/RG.2.1.3504.5280/1
* Benediktsson, K, Eckerberg, K Lein, H 2014 Review of Marte Qvenilds PhD thesis. Wanted and Unwanted Nature: Invasive Plants and the Alien-Native Dichotomy. *Norsk Geografisk Tidsskrift*; Volum 68.(1) s. 59-60
* Mfunda I.M., Bevanger B., Fyumagwa, R., Gereta, E., Graae, B, Keyyu, J., Lein, H., Magige, F., Ntalwila, J., Nyahongo, J., Shombe, H., R Skjærvø, G.R., Swenson J., and Røskaft, E. 2013. The dynamics of large infrastructure development in conservation of the Serengeti ecosystem - the case study of road through Serengeti National Park. Report for Phase II (Years 2012-2013). Tanzania Wildlife Research Institute
* Røskaft E., Fyumagwa R., Gereta E., Keyyu J., Magige F., Ntalwila J., Nyahongo J., Shombe Hes Bevanger K., Graae B., Lein H., Skjærvø G., Swenson J., Mfunda, I. 2012: The dynamics of large infrastructure development in conservation of the Serengeti ecosystem – the case study of a road through Serengeti national park. Phase 1 Report. Tanzania Wildlife Research Institute
* Agergaard J., Kibreab G., Lein, H. 2012. *Norsk Geografisk Tidsskrift*. Review of Suzanne Y.A Tete PhD thesis Protracted Displacement and Solutions to Displacement: Listening to Displaced Persons (Refugees and IDPS) in Ghana and Sri Lanka. Volume 66 3, 172-174
* Nieuwenhuys, O., Katz, C., Lein, H. 2008.*Norsk Geografisk Tidsskrift* Review of PhD thesis; Ethiopian Childhoods. A case study of the lives of Orphans and working children' by Tatek Abebe. Volume 624 305-306
* Lein, H & Shen Y. 2006 ‘The disappearance of the Karez of Turfan’Report from the project ‘Harvest from wasteland. Land, people and water management reforms in the drylands of Xinjiang’. *Acta Geographica* Series A ,no 15 Department of Geography, Norwegian University of Science and Technology. Trondheim 2006 <http://www.svt.ntnu.no/geo/Doklager/Acta/Serie%20A15%20Turfan.pdf>
* Solem, K E., Swayne, D. A.; Mayfield C., Lein H., Denko M., Denzer R., 2004 Commission 7: Environment, Information and Computer Technologies. In *WITFOR 2003 White Book. Proceedings of IFIF World Information Technology Forum*. Laxenburg: IFIF Press, s. 237-259.
* Lein, H. 2000 Disasters and society. Competing stories about floods in Bangladesh. In Proceedings from the conference “Recovery and Development after Conflict and Disaster “ 4-6 April. 131 - 142. Trondheim, Norwegian University of Science and Technology
* Lundah M., Eide I., Naustdalslid J., Talle A., Lein, H. 1998 Evaluation of Chr.Michelsen Institute. Oslo: The Research Council of Norway, division for Environment and Development.
* Lein, H. 1997 Defending whose interests? Some reflections over an attempt to introduce a new water management regime in Pangani river basin, Tanzania’. In Löfgren, A. Moe, M.(1997) and *Critical perspectives on society and discipline : the place of human geography in high modern society*. Proceedings from 17th Nordic Symposium on Critical Human Geography. Papers from the Department of Geography, University of Trondheim. New series. A.
* Lein, H. 1994 Agricultural Modernisation as a Risk Reducing Strategy. The Case of the Green Revolution in Bangladesh. In Hesselberg, J. (1994) "*Agriculture and food systems, fertility and urban economy* "Report 3 from the NADG conference Environment and Development in a North/South Perspective". Hadeland 20. sept - 3.okt 1993. Oslo: Department of Human Geography
* Lein, H. Eklo, F., Klein, J. and Rusten, C. 1994 Vern eller utvikling. Konflikter mellom vern av naturressurser og utvikling av lokalsamfunn i Nord-Tanzania.’ I Klemsdal ,T. (1994) *Geografiens innhold og anvendelse*. Rapport fra Norske geografers Forenings jubileumsseminar 1994.
* Lein, H. 1991 Review of Wood, G.D and R. Palmer Jones: ‘The Water sellers. A cooperative venture by the rural poor’. (Intermediate Technology Publications, London) *European Network of Bangladesh Studies Newsletter* no. 4.
* Lein, H. 1991 Best-seller Triggered Off Debate on Norwegian Aid’. *Nordic Development Studies Bulletin* nr 1 1991
* Lein, H. 1990 Appraisal of Plan of operation (draft 1) for the Rural Employment Sector Programme’. Report prepared for SIDA/NORAD. Dhaka, February 1990
* Lein, H. 1990 Fra politisk økonomi til politisk økologi? Trekk ved studiet av den grønne revolusjon i Bangladesh. I Gjessing, J og E. Barkved (eds) Miljø og Utvikling, geografiske forskningsbidrag. *Geografi i Bergen* no 145, 1990, pp 43-55.
* Lein, H. 1987 Infrastructure Development and the Rural Poor in Bangladesh. Chr. Michelsen Institute-DERAP publication no 231. Bergen: Chr. Michelsen Institute.