

Impact case study (REF3b)

Institution: University of Cambridge
Unit of Assessment: 24 Anthropology and Development Studies
Title of case study: Management of pastoralism in Inner Asia
<p>1. Summary of the impact (indicative maximum 100 words)</p> <p>Pastoralism supports the livelihoods of over 5 million people in Inner Asia. Comparative examination of the effects of specific pastoral policies on outcomes in Inner Asia has benefited supranational agencies and national policymakers responsible for pastoral management and reform, by providing them with empirically-based recommendations for policy. This has supported policy decisions such as the <i>Pasture Land Utilization Law</i> in Mongolia and the reintroduction of indigenous cattle in Buryatia. The research also led directly to the establishment of the charity CAMDA, which has provided direct aid of £200,000 to Mongolian pastoralists since 2008.</p>
<p>2. Underpinning research (indicative maximum 500 words)</p> <p>The research underpinning the impact was led by Professor Caroline Humphrey (University of Cambridge Lecturer 1983-95, Reader 1995-98 and Professor since 1998) and Dr David Sneath (University of Cambridge, British Academy Fellowship 1994-97, Lecturer at University of Oxford 1998-2000, Lecturer then Reader at University of Cambridge since 2000). After a pilot phase, data gathering began in 1993 followed by analysis leading to publications from 1996.</p> <p>The research examined the social and environmental effects of the replacement of socialist pastoral economic systems in Inner Asia – specifically People’s Communes in China, and State/Collective Farms in Russia and Mongolia – with (to different degrees) various more “free market” alternatives. These changes were accompanied by significant increases in human and herd populations and also by increased desertification and pastoral degradation.</p> <p>The research involved collaboration with four research institutes and universities across Inner Asia (Mongolian Research Institute of Animal Husbandry; Baikal Institute for Natural Resource Management, Buryatia; Xinjiang Normal University; and Inner Mongolia Normal University), each of which contributed a senior adviser and one or two researchers to aid in the comparison of twelve sites across the grassland regions of China, Russia and Mongolia.^{ii & vi}</p> <p>By examining historical materials in the wider political economy of pastoralism, the study helped explain the unexpected turns found in the post-collective era and identified lessons for future practice. In particular, the research showed that several key assumptions about pastoral economic change were not supported empirically – with implications for policy and practice. For example, it challenged Western assumptions about the “tragedy of the commons” and the “inevitable” destructive environmental and cultural consequences of collectivisation, as well as the presumption that privatisation would have positive impact.^{i, ii, iii & v}</p> <p>The research showed that one effect of the “free market” privatisation of livestock and individualisation of land use had been a reduction in the amount of movement undertaken by many pastoral households, with significant negative impacts. In regions (such as Mongolia and Tuva [Russia]) where land use most closely resembled earlier pre-socialist practices – and where the collectives made fewest changes to earlier patterns and kept, or even enhanced, pastoral mobility for certain types of herds – the research found relatively good environmental conditions; the same was found to be true for districts in China that had retained State Farms. Regions with high herd mobility had significantly lower reported levels of pastoral degradation than those with fenced household pastures (China) or static, highly mechanised agro-industrial techniques (Russia), introduced to support more productive European breeds. These required processed fodder produced by ploughing up fragile grassland areas, resulting in widespread degradation.^{i, ii, iii, v & vi}</p> <p>The research also showed that with modern technical support, the mobility of herds remained</p>

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compatible with desired social development that involved most of the population being settled in villages (for access to schools, services, communications, etc.)^{ii & iv}

The study's main conclusion was that sustainable pastoralism in Inner Asia could not be achieved without retaining livestock mobility; and that larger-scale collaborative land use, in combination with other forms of organisation and technical support, should be central to management policies.^{i, ii, iii} In addition, it recommended that native breeds could support more sustainable herding.^{ii, v & vi}

3. References to the research (indicative maximum of six references)

- i. Sneath, D. (1998). State Policy and Pasture Degradation in Inner Asia, *Science* 281(5380): 1147–8. (<http://www.sciencemag.org/content/281/5380/1147.full>) DOI: 10.1126/science.281.5380.1147
- ii. Humphrey, C & Sneath, D. (1999) *The End of Nomadism? Society, State and the Environment in Inner Asia*. Durham: Duke University Press. (available from authors)
- iii. Sneath, D. (2000). Sustaining the Steppe: The Future of Mongolia's Grasslands. In United Nations Development Programme, United Nations Environment Programme, World Bank, World Resources Institute. *World Resources 2000–2001: People and Ecosystems: The Fraying Web of Life*: 212–14. Washington: World Resources Institute. (downloadable at <http://www.wri.org/publication/world-resources-2000-2001-people-and-ecosystems-fraying-web-life>)
- iv. Sneath, D. (2003). Land use, the Environment and Development in Post-socialist Mongolia, *Oxford Development Studies* 31(4): 441–59. (downloadable from <http://www.tandfonline.com/toc/cods20/31/4#.UYKcJlLycvg>)
- v. Tulokhonov, A. K. & Humphrey, C. (eds.) (2001) *Khozyaistvo, Kul'tura i Okruzhayushchaya Sreda v Raionakh Vnutrennei Azii* (Economy, Culture and the Environment in Regions of Inner Asia). Novosibirsk: Russian Academy of Sciences, Siberia Section. (available from author)
- vi. Humphrey, C & Sneath, D. 1996. (eds) *Culture and Environment in Inner Asia: Volume 1, The Pastoral Economy and Environment, Volume 2, Society & Culture*. Cambridge: White Horse Press. (includes articles by Humphrey and Sneath; available from authors)

Follow-On Research Grants

- PI C. Humphrey. Program of International Cooperative Research on Environmental and Cultural Conservation in Inner Asia. MacArthur Foundation. 1992-95. Total Grant: \$510,456.
- David Sneath. British Academy Post-doctoral fellowship on pastoralism and land-use in Inner Asia. 1994-97. Total Grant: c. £55,000 (salary costs).
- PI B. Zhimbiev. Settlement, environment and protected areas in Inner Asia. World Conservation Monitoring Centre & Isaac Newton Trust. 1996-99. Total Grant: c. £60,000 (salary costs).
- C. Humphrey & B. Zhimbiev. Protected areas in West Tien Shan Central Asia. Fauna and Flora International. 1997-98. Total Grant: c. £10,000.
- D. Sneath and C. Humphrey. Social conditions of bribery in post-socialist societies. MacArthur Foundation, Chicago. 1998-2000. Total Grant: c. \$80,000.

4. Details of the impact (indicative maximum 750 words)

Much of the rural population of Inner Asia is directly reliant upon livestock husbandry, with pastoralism supporting the livelihoods of over 5 million people; the conservation of grassland resources is therefore an important issue. For example, nearly 42% of China is natural grassland, but 90% of usable grasslands are currently considered “degraded”. This rural population is vulnerable; twice in ten years the 700,000 herders of Mongolia, one-third of the population, have suffered the effects of extreme winters (-45°C), and this has resulted in some losing 100% of their herds.

By examining and comparing the effects and outcomes of different policies for the management of

pastoralism, and providing empirically-based recommendations, the research has **benefited supranational agencies and national policymakers in Inner Asia responsible for pastoral management and reform**, and has also led directly **to the establishment in 2008 of the charity, CAMDA, which has provided direct aid to pastoralists.**

The research has been disseminated through reports and publications in Mongolian, Russian, Chinese and English, and informed international policy debates; it was cited, for example, by the Committee for the 2009 Nobel Prize for Economic Governance.⁽¹⁾ Dissemination has included public lectures, debates with key stakeholders and involvement in international governmental discussion (e.g. Sneath was invited to address the Intergovernmental UK-Mongolia Round Table 13 March 2008 in Mongolia).

Direct beneficiaries of the outcomes of Humphrey's and Sneath's research on pastoralism in Inner Asia have been those supranational agencies which aim to reduce poverty and support sustainable development, such as the World Bank,⁽²⁾ the United Nations Food and Agricultural Organisation (FAO)⁽³⁾ and Development Programme (UNDP).⁽⁴⁾ All cite this research in their advisory reports on policy oriented towards improving the sustainability of pastoralism in Inner Asia, in particular cultural norms, livelihoods and land-use, and the role of mobility respectively.

The significance of the research to such bodies is attested, for example, by a senior World Bank official: *"I can confidently say that [Sneath's] work with Carrie Humphrey ... on Mongolian pastoralism over the last two decades, has been influential in shaping the approach of the World Bank and other donors (e.g. SDC, IFAD, FAO, UNDP) in supporting pastoral livelihoods, pasture land and risk management in contemporary Mongolia."*⁽⁵⁾

The influence of the research on policy makers within the area has also been confirmed by national stakeholders. In Mongolia, for example, the Chairman of the Governing Board of the Rural Investment Support Centre NGO made specific reference to The End of Nomadism (1999) and Sneath's 1998 Science paper as being *"highly influential and widely cited in the literature that policy makers... have drawn upon when developing policies towards pastoralists and environment in Mongolia"*.⁽⁶⁾ The Chairman of the Mongolian Government's Animal Husbandry Policy Implementation Regulation Office has stated that the The End of Nomadism research *"has directly influenced Pasture Land Utilization Law to be discussed during the Mongolian Parliament Spring session"*.⁽⁷⁾

Direct evidence of impact in China, and to a lesser extent Russia, is limited due to the nature of policy making in these countries. Despite the bias in published evidence, the advisor to the UNDP stated that *"the work has influenced thinking on grassland policy in Mongolia and China"* (Russia being outside his areas of expertise). However, he added that *"In China the findings are used to support opposition to current practices (see Ecology and Society paper [China's Grassland Contract Policy and its Impacts on Herder Ability to Benefit in Inner Mongolia: Tragic Feedbacks], 2011)"*.⁽⁸⁾

Humphrey and Sneath's research has also helped to establish a research methodology which has directly influenced international government policy. The Director of the Analysis Centre of the Government of Buryatia (Russia) stated in a letter of June 2012: *"the use of the methods realised in your project ... makes possible a proper evaluation of ongoing socio-economic processes and enables the results of the project to be taken up into practical actions."*⁽⁹⁾ One practical action being undertaken in Buryatia which reflects the recommendations made by Humphrey and Sneath is the reintroduction of indigenous cattle (from China) lost since collectivisation.⁽¹⁰⁾

The research has also led to direct aid provided through an NGO, Cambridge Mongolia Development Appeal (CAMDA). CAMDA has provided over £200,000 in direct aid to Mongolian pastoral households since 2008. In 2012 alone it funded the refurbishment or digging of 42 shallow wells in 4 provinces.⁽¹¹⁾

Cont.

5. Sources to corroborate the impact (indicative maximum of 10 references)

1. 2009. Economic Sciences Prize Committee of the Royal Swedish Academy of Science "Economic Governance: Scientific Background on the Sveriges Riksbank Prize in Economic Sciences in Memory of Alfred Nobel."
2. Fernandez-Gimenez, M. Batbuyan, B. & Batkhishig, B. 2012. Lessons from the Dzud: Adaptation and resilience in Mongolian pastoral social-ecological systems (World Bank, Centre for Nomadic Pastoralism Studies, Colorado State University), 128
<http://web.worldbank.org/WBSITE/EXTERNAL/TOPICS/EXTSOCIALDEVELOPMENT/0,,contenID:23253600~menuPK:199462~pagePK:64020865~piPK:51164185~theSitePK:244363,00.html>
3. Schulze, A. 2009. Land Legislation and the Possibilities for Pastoral Risk Management and Adaptation to Climate Change – The Example of Mongolia. Food and Agricultural Organization of the United Nations (FAO), Rome. 4, 5, 10, 11, 14, 15 and 18.
http://www.preventionweb.net/files/12529_al000e001.pdf
4. Anand, P.B. (Principal author). 2011. 'From Vulnerability to Sustainability: Environment and Human Development' The Mongolia Human Development Report 2011. Ulaanbaatar: NDP, Government of Mongolia, Swedish International Development Cooperation Agency. 35
http://hdr.undp.org/en/reports/national/asiathepacific/mongolia/NHDR_Mongolia_EN_2011_2.pdf
5. Email from Acting Sector Manager & Cluster Leader/Social Resilience, World Bank, 28 September 2012.
6. Letter from Chairman of the Governing Board of the Rural Investment Support Centre NGO, 30 April 2013.
7. Letter from Chairman of the Mongolian Government's Animal Husbandry Policy Implementation Regulation Office, 26 April, 2013
8. Email from UNDP Advisor, 20 August 2012.
9. Letter from Director of the Analysis Centre of the Government of Buryatia (Russia), 8 June 2012.
10. <http://www.infpol.ru/news/671/54087.php>
11. <http://www.camda.org.uk/Projects.html>