

Institution: Durham
Unit of Assessment: 24 Anthropology and Development Studies
Title of case study: Transport and Mobility in Africa
<p>1. Summary of the impact</p> <p>Durham Anthropology's innovative and influential DfID-funded work on transport and mobility in Africa has resulted in the international development community and national governments recognising that transport and mobility challenges must be addressed to improve economic and social wellbeing in rural communities in sub-Saharan Africa and elsewhere, particularly among vulnerable populations. Recommendations arising from our research have been adopted by the World Bank, Ghana's Education Service, Help Age International, DfID/Transport Research Laboratory and in key resources for policy-makers, teacher training workshops in Ghana, agenda-setting policy reports, including Tanzania's draft national transport policy framework, and workshops for transport policy makers and practitioners.</p>
<p>2. Underpinning research</p> <p><i>Summary</i></p> <p>Durham Anthropology's mobility in Africa research is led by Dr Gina Porter (a senior researcher in the department since 2001), with Dr Kate Hampshire (2006-to date), and Kathrin Blaufuss (2001-2013). Our research identified significant transport challenges faced by rural communities, which include the socio-economic, physical, and mental costs of travelling long distances in off-road areas. Children, women and the elderly are particularly affected. The negative health effects of carrying large loads by head are disproportionately borne by women and children (Outputs 1 and 4).</p> <p><i>Research narrative</i></p> <p>DfID-funded Durham research (R7149) before 2000 had highlighted that inadequate rural transport in Ghana created significant post-harvest losses for poor households unable to take their crops to market. In response, in 2000, with the Ghanaian Ministry of Food and Agriculture, Durham received further DfID funding (Grant 1) to evaluate the impact of Intermediate Means of Transport (IMT) interventions (e.g. hand-carts and bicycles) on post-harvest activities. Findings showed that IMT reduced women's carrying loads and facilitated family mobility, but that child labour increased as a result since children were recruited to push carts and operate other IMT equipment in addition to their usual domestic load-carrying work (with its reported negative education and health impacts) (Outputs 2 and 4). Crucially, our research also revealed a severe lack of knowledge about child mobility more broadly and transport challenges within Ghana's government, including the Ministries of Transport and Education (Output 1).</p> <p>As a result of these findings, we received pilot funding in 2004 from DfID (Grant 2), followed by full funding in 2006 from ESRC/DfID (Grant 3), to study the particular challenges of child mobility and load carrying. Using action research, and training 70 young people across 24 field-sites (from urban to remote rural locations) in Ghana, Malawi and South Africa to work as co-researchers alongside experienced researchers, we provided evidence of the implications of routine mobility constraints for livelihoods, life chances, education, health and gender equity. This research showed that child portage, especially among girls, is economically important for areas such as water, sanitation, energy and agriculture but also confirmed that labour responsibilities combined with long, dangerous journeys undermine individual educational achievement and life chances: a failure to understand <i>why</i> children were often late for school because of transport problems led to regular, harsh punishments by teachers. Again, the negative effects were more evident upon girls (Outputs 2, 3, and 4). Research also highlighted frequent dissonances between donor understandings of how rural groups operated and empirical evidence, which resulted in ineffective interventions (Output 5).</p> <p>A further finding of research conducted under Grants 2 and 3 was the importance of satisfactory transport infrastructure for older people. Building on this, DfID awarded us further funding in 2012 to address transport and mobility problems of older people in rural Tanzanian communities (Grant 4). Again using action research and trained peer researchers, we demonstrated, in collaboration with HelpAge Tanzania, how lack of access to good transport has negative effects on the health, livelihoods and caring responsibilities of older people (Output 6). Since the last is a vital element of</p>

household and community economies, there are significant ramifications of the inability of an older generation to care for children.

3. References to the research

Competitively-awarded, peer-reviewed grants

Grant 1. Action research to evaluate the impact on livelihoods of a set of post-harvest interventions in Ghana's off-road settlements: focus on Intermediate Means of Transport (DFID, 2000-2003, R number R7575) <http://r4d.dfid.gov.uk/Project/2376/Default.aspx> (full list of publications, interim reports and papers).

Grant 2. Improving children's mobility and access: development of a participatory child-centred methodology/Toolkit (DFID, 2004- 2005) <http://r4d.dfid.gov.uk/Project/60331/Default.aspx>

Grant 3. Children's transport and mobility: developing a child-centred evidence base to improve policy and change thinking across Africa (ESRC/DfID, May 2006- January 2010). <http://r4d.dfid.gov.uk/Project/60331/Default.aspx>. The end-of-award report was judged by the peer-review process as '**outstanding**'. The comments included: "*Scientific and economic and societal impact: Dr Gina Porter's work both within the frame of this project and in the field in general has systematically addressed the mobility challenges of Africa's youth within a comparative framework. She has produced a high level of academic visibility for a set of policy issues which have been greatly underrated within the field and within the policy discourse.*" and "*Dr Gina Porter's work in this project provides an example of best practice in better integrating the detailed charting of local patterns with developing the strategic directions necessary for policy development.*"
A full list of reports and outputs are available here: <https://www.dur.ac.uk/child.mobility/>

Grant 4. Learning with older people about their transport and mobility problems in rural Tanzania (DfID, Jan-Sept 2012). <http://r4d.dfid.gov.uk/Output/192020/Default.aspx>

Peer-reviewed underpinning research outputs in international journals

Output 1: Porter, G., (2002), 'Living in a walking world: rural mobility and social equity issues in sub-Saharan Africa', *World Development*, 30 (2):285-300. DOI: [10.1016/S0305-750X\(01\)00106-1](https://doi.org/10.1016/S0305-750X(01)00106-1) (118 citations).

Output 2: Porter, G. Hampshire, K., Abane, A., Munthali, A., Robson, E., Mashiri, M., Tanle, A., Maponya G. and Dube, S., (2012), Child portage and Africa's transport gap: evidence from Ghana, Malawi and South Africa. *World Development* 40(10):2136-2154. DOI: [10.1016/j.worlddev.2012.05.004](https://doi.org/10.1016/j.worlddev.2012.05.004)

Output 3: Porter, G. (2011), 'I think a woman who travels a lot is befriending other men and that's why she travels': Mobility constraints and their implications for rural women and girl children in sub-Saharan Africa. *Gender, place and culture: a journal of Feminist Geography* 18: 65-81. DOI:[10.1080/0966369X.2011.535304](https://doi.org/10.1080/0966369X.2011.535304)

Output 4: Porter, G., Hampshire, K., Dunn, C., Hall, R. Levesley, M., Burton, K., Robson, S., Abane, A., Blell, M. & Panther, J. (2013). Health impacts of pedestrian headloading: a review of the evidence with particular reference to women and children in sub-Saharan Africa. *Social Science & Medicine* 88: 90-97. DOI: [10.1016/j.socscimed.2013.04.010](https://doi.org/10.1016/j.socscimed.2013.04.010)

Output 5: Porter, G., and F. Lyon (2006), Groups as a means or an end? Social capital and the promotion of cooperation in Ghana. *Society and Space* 24, 2:249-262. DOI:[10.1068/d0303](https://doi.org/10.1068/d0303)

Output 6: Porter, G., Tewodros, A, Bifandimu, F.; Gorman, M.; Heslop, A.; Sibale, E.; Abdul Awadh; Kiswaga, L., (2013), Transport and mobility constraints in an aging population: health and livelihood implications in rural Tanzania. *Journal of Transport Geography* 30, 161-169. DOI: [10.1016/j.jtrangeo.2013.05.001](https://doi.org/10.1016/j.jtrangeo.2013.05.001).

4. Details of the impact

Conceptual impact

The fundamental recognition, by governments and NGOs, as a direct result of Durham's research in Section 2, that mobility problems for vulnerable populations existed at all, is a conceptual impact of considerable reach and significance across Sub-Saharan Africa. This step change was enabled through sustained engagement with sub-Saharan African communities, governments and international development agencies; the inclusion of the International Forum for Rural Transport and Development (ITFRD) and Country Consultative Groups on our projects (Grants 1-3); and the translation and uptake of our research into user contexts via, amongst other such publications, Fernando, P. and G. Porter (eds.), (2002), *Balancing the Load: Women, Gender and Transport*, London: Zed Books based on case study material from Output 1, interim reports (Grant 1, Source 1).

Results have been (a) the drive by the World Bank and DfID to 'mainstream gender in transport policy' using our research (Source 1) as a key resource for government officials and transport professionals and (b) invitations to contribute to key global policy discussions, including congresses organised by the World Bank and influential pan-African research organisations such as The Council for the Development of Social Science Research in Africa (CODESRIA). Such conceptual change led to the following instrumental impacts where NGO and policy improvements to the social and economic well-being of vulnerable populations in rural communities are being enacted.

1. *Influencing Ghanaian teacher training.* In early 2013 a workshop involving the University of Cape Coast (UCC) Institute of Education, the Ghana Education Service (GES) Directorate and teacher training college staff from across Ghana focused on our research showing that transport difficulties affect pupil punctuality, children's performance in the classroom, and safety and security on the journey to school (Outputs 1-4, Grants 1, 2 and 3). As a result of the workshop, UCC and the GES Directorate are now committed to **curriculum interventions to reduce harsh school punishments for pupil lateness. These interventions affect 24,000 trainee teachers annually and, by extension, many thousands of school pupils in Ghana** (Source 3).

2. *Inspiring NGO action in Tanzania to address mobility*

Our collaborative research with HelpAge International (HAI) on the transport challenges faced by older people (Grant 4) prompted HAI to **develop plans to address the mobility and transport needs of older people**, including exploring the potential for new technologies to support their needs (Grant 4, end of grant report); **HAI Tanzania** is in discussion with institutional donors and private funders to roll this out further. The HAI Director for Tanzania commented that "... *the mobility study has given us the authority... to join the mHealth promoters as we have been able to speak with evidence*" [mHealth (mobile health) involves medical and health initiatives supported by mobile devices] (Source 4). Additionally, "*Aging in the Twenty-first Century: A celebration and a challenge*" a (2012) report by the United Nations Population Fund (UNFPA) and HelpAge International cites Porter's work on the mobility needs of older people in sub-Saharan Africa (Source 5) and inadequate transport as a major barrier to accessing health care.

3. *Policy change in Tanzania recognising and responding to gender and age-related issues in transport*

The **Tanzania Draft National Transport Policy Framework** (Source 6) explicitly acknowledges, for the first time, that children and older people's mobility needs, as well as those of women more broadly, need to be addressed, on the basis of our research evidence in Outputs 1-4, 6 (Source 2). Section 8.1, 'Gender', notes that '*Government will ensure that national gender policies are mainstreamed in the provision of transport infrastructure and services*' and that '*social inclusion... refers to the needs of women (who) are most responsible for looking after the family's domestic needs (in rural areas this often involves spending a great deal of time collecting firewood and water), for providing care and ... having and raising children*'.

4. *Case studies for training transport policy makers in DfID's African Community Access Programme (AFCAP)*

As a result of our research, DfID invited Dr Porter to advise on the previously neglected Transport Services component of AFCAP (Source 7). Porter's consultancy ensured a strong focus on participatory work with users, in line with Output 5, and emphasised the need to provide accurate data for decision makers. The Transport Research Laboratory (TRL), a global engineering company, won the AFCAP tender to deliver training to tackle transport challenges. TRL produced a Transport

Services Training Manual (Source 8) for use in a **comprehensive programme of regional workshops with transport policy makers and practitioners across sub-Saharan Africa**. The Manual prominently presents our research findings on mobility constraints and its effects both as case studies and as evidential data disaggregated by age and gender. The Manual was first used by TRL in April 2013 at a pilot training workshop in Tanzania, for 22 people from eight African countries. Two more regional programmes will occur in 2013. The training programme is currently being rolled out to all remaining Anglophone African countries (Source 9).

5. Sources to corroborate the impact

Source 1: Fernando and Porter's *Balancing the Load* and other Durham publications are featured prominently in:

- a) <http://www4.worldbank.org/afr/ssatp/Resources/HTML/Gender-RG/module6/index-p3.html>, the World Bank's Gender and Transport Resource Guide, Module 6 Resources for Mainstreaming Gender in Transport
- b) http://www.transport-links.org/transport_links/publications/publications_list.asp?keywords=asia DfID's Transport for Development' website,
- c) <http://r4d.dfid.gov.uk/Output/5212/Default.aspx> (DfID's Research for Development website)
- d) *Mainstreaming Gender in Road Transport: operational guidance for World Bank Staff*, (March 2010), The World Bank, Washington, D.C., available on request or can be downloaded from <http://siteresources.worldbank.org/INTTRANSPORT/Resources/336291-1227561426235/5611053-1229359963828/tp-28-Gender.pdf>

Source 2: Letter from former Senior Rural Transport Specialist at World Bank, former Senior Transport Policy Adviser to Ministry of Transport, Tanzania, and Consultant to Transport Research Laboratory which highlights the use of Porter's work in the World Bank Report "*Mainstreaming Gender in Road Transport: Operational Guidance for World Bank Staff*", 2010, (Source 1d) and in the draft Tanzanian transport policy (Source 6 below), to which Porter's research contributed directly, but which contains no references. Letter available on request.

Source 3: Letter from Ghana Education Service 22nd July 2013 confirming that key aspects of research findings on children, mobility and transport will be incorporated into the curricula for training teachers, following April 2013 workshop in Ghana with GES, Porter and Hampshire. Letter available on request.

Source 4: Statement from HelpAge International emailed 18 July 2013 on impact from collaborative work with Durham in 2012. The statement, available on request, describes in detail how Durham's research evidence has provided the basis for developing interventions using mobile phone technology with Tigo, a major mobile service provider in Tanzania. The statement also notes that a Californian NGO called Switchboard, became aware of the Tanzanian mhealth initiatives through the visibility provided by research evidence. Switchboard has offered HelpAge Tanzania's health care workers free airtime and sms options to connect to other health workers as a result.

Source 5: "*Aging in the Twenty-first Century: A celebration and a challenge*" (2012) Report by United Nations Population Fund (UNFPA) and HelpAge International (ISBN 978-0-89714-981-5), available at: <http://www.helpage.org/resources/ageing-in-the-21st-century-a-celebration-and-a-challenge/>

Source 6: Draft Tanzanian Transport Policy Framework– p55, Section 8.1 on gender. Available on request.

Source 7: Letter from Senior Infrastructure Adviser, Growth Research Team, DfID. Confirms Dr Porter's role in AFCAP programme of services research and knowledge sharing and details Durham Anthropology's research publications which were used in formulating Source 9. Letter available on request.

Source 8: TRL's Transport Services Training Course CD training manual and training course participant list for pilot course held in Arusha, Tanzania 15-19 April 2013. Both available on request.

Source 9: Letter from the International Deputy Group Manager of TRL (Transport Research Lab) verifying the use of Durham research in the Transport Services Training Course (Tanzania April 2013) and in future such courses in Ghana and Malawi in 2013. Available on request.