

Helpdesk Research Report: Climate Change and Social Exclusion

Date: 29/01/08

Query: What are the key issues and implications raised by climate change for excluded and vulnerable groups, with particular reference to disabled people, older people, children and young people?

Enquirer: DFID Equity and Rights Team

Contents

1. Overview
2. General
3. Children and young people
4. Older people
5. Disabled people
6. Gender

1. Overview

Very little serious research has been carried out on issues of climate change in relation to children, youth, older people, disabled people, and excluded groups more generally. There is a body of research on 'climate change vulnerability' which tends to conclude that poor people in developing countries are most vulnerable to the negative effects of climate change, due to their precarious socio-economic position which exacerbates their vulnerability to shocks and limits their adaptive capacities. However, very little research attempts to disaggregate 'the poor in developing countries' and look in detail at specific issues and implications for socially excluded groups, such as those mentioned in the query. At best, documents mention that the impacts of climate change will be disproportionately felt by vulnerable groups such as children and the rural poor. However, these resources do not generally go on to explain these impacts in detail or to provide supporting empirical evidence.

Children: Most of the resources that address climate change and children / young people are educational materials for use in schools or colleges. Of the few resources that consider key issues for children, most merely reiterate that children are more vulnerable than adults to increased problems as an indirect and direct consequence of climate change. In particular, several resources emphasise risks to public health and children's increased vulnerability to health problems as a result of climate change. Another recurring theme is the need to ensure Disaster Risk Reduction (DRR) strategies are child-focused and include the perspectives of children and young people.

Older people: Very little has been written on climate change and older people. A few documents from the public health literature are available on the increased health risks to older people as a result of climate change. The ability of older people to adapt to climate change may be affected by changes to family networks, migration, a lack of insurance or pension facilities among the rural poor and the need to care for orphaned grandchildren.

Disabled people: This seems to be the least researched area. Material found relates exclusively to estimating the increase in the number of people living with disabilities as a

result of natural disasters or health consequences of climate change. No resources were found that addressed the specific issues and implications of climate change for disabled people.

Gender issues: Gender analysis of climate change is a better researched area, with many more articles and websites available. Most resources argue that climate change has differential impacts on men and women, and gendered aspects of mitigation and adaptation must not be overlooked by policymakers. Authors also emphasise the importance of strengthening women's voice in national and international climate change negotiations. The section below presents a selection of the material available – a separate query would need to be commissioned to cover this theme more exhaustively.

2. General

The resources in this section address climate change in relation to excluded and vulnerable groups.

- IPCC, 2007, 'Climate Change 2007: Impacts, Adaptation and Vulnerability', Working Group II Report, Intergovernmental Panel on Climate Change:
<http://www.ipcc.ch/ipccreports/ar4-wg2.htm>
This large report generally asserts that socio-economic vulnerabilities expose certain groups to higher risks in relation to climate change. The 'Summary for Policymakers' suggests that sustainable development can reduce vulnerability to climate change, but little detail is given on this. Chapter 17 contains Box 17.5 entitled 'Gender aspects of vulnerability and adaptive capacity' (p.730) which emphasises that climate change has differential effects on men and women. Chapter 8 on 'Human Health' has short relevant sections from p. 412 entitled 'Vulnerable Populations and Regions', 'Vulnerable Urban Populations' and 'Vulnerable Rural Populations'.
- A Strategic Assessment of Equity and Justice Implications of Adaptation, July 2002 – Dec. 2003
This research project between FIELD, IIED, The Tyndall Centre and CSERGE focuses on both international justice and local distributive justice and equity from an entitlements and vulnerability standpoint. It may be relevant to your query in that the research outputs discuss ensuring equity and voice across developing country populations. Project information can be found at <http://www.iied.org/CC/projects/stratassess.html> and http://www.tyndall.ac.uk/research/theme3/summary_t2_34.shtml. There is a working paper available at http://www.tyndall.ac.uk/publications/working_papers/wp23.pdf

3. Children and young people

- The 'Children in a Changing Climate' Programme
CCC is a joint initiative between Plan International, the UK National Children's Board and the Institute of Development Studies. The programme aims to investigate the role children can play in reducing risks from disasters and adapting to climate change. Research will be conducted into the impacts of increasing numbers and intensity of disasters, changes to livelihoods in drought and flood-prone areas, new patterns of migration on children's futures and children's rights to climate change adaptation. For more details see:
<http://www.ids.ac.uk/index.cfm?objectId=19717DE1-C520-574A-6D749EF67764D927> or contact Dr. Tom Mitchell at IDS t.mitchell@ids.ac.uk

- UNICEF, 2007, 'Climate Change and Children', UNICEF, New York: http://www.unicef.org.nz/speaking-out/Climate_Change_and_Children.pdf
This report identifies 6 key risks to children and young people from climate change:
 - *Natural disasters*: children are most likely to die, find themselves orphaned or be unable to care for themselves following a natural disaster.
 - *Disease*: climate change has reportedly already resulted in an increase in the biggest childhood killers including malaria, diarrhoea and malnutrition. Increased asthma, the most common chronic disease among children, is also linked to climate change.
 - *Water and food scarcity*: As well as drought and hunger, the report refers to other impacts on children as a result of this increased risk, for example being taken out of school due to increased poverty levels or being forced into the sex industry.
 - *Deforestation*: Environmental damage as a result of deforestation includes increased flooding, desertification and soil erosion. These impact upon agriculture leaving children in developing countries vulnerable to malnutrition.
 - *Pollution from solid fuel energy sources*: The report argues that increased temperatures due to climate change exacerbate air pollution. Access to cleaner, modern energy sources lowers smoke in the home and improves childrens' access to education as time does not need to be spent collecting firewood.
- Save the Children, 2007, 'Legacy of Disasters: The Impact of Climate Change on Children', Save the Children UK, London
http://www.savethechildren.org.uk/en/docs/legacy_of_disasters.pdf
This report argues that the likely effects of global warming (natural disasters, temperature extremes and rises in sea levels) will have a disproportionately negative effect on children, especially those in developing countries. Climate change presents threats to children's health, food security, livelihoods, protection and education. The report specifically calls for donors to fund more Disaster Risk Reduction (DRR) work and argues that all DRR strategies should have adequate assessments of children's needs and rights violations. The authors state that children should be included in the design and implementation of all DRR solutions.
- Committee on Environmental Health, 2007, 'Global Climate Change and Children's Health', Pediatrics, volume 120, no. 5, pp.1149-1152:
<http://aappolicy.aappublications.org/cgi/content/full/pediatrics;120/5/1149#SEC2>
Children represent a particularly vulnerable group that is likely to suffer disproportionately from both direct and indirect adverse health effects as a result of climate change. Direct health effects include death or injury from natural disasters, whereas indirect health effects include respiratory problems due from increased air pollution. The article makes several recommendations to government including:
 - Prepare and invest in public health programmes including immunization programmes and disease surveillance
 - Ensure emergency management and disaster response programmes address the specific needs of children
 - Support public health education and awareness raising campaigns on the health threats from climate change

4. Older people

Very little material is readily available on the specific impacts of climate change on older people. The slim literature I was able to find in the time allowed for this query almost exclusively focused on older people's higher risk of death from extreme temperatures.

- O'Brien, K. and Leichenko, R., 2007, 'Human Security, Vulnerability and Sustainable Adaptation', Occasional paper for the Human Development Report 2007/08, UNDP: http://hdr.undp.org/en/reports/global/hdr2007-2008/papers/o'brien_karen%20and%20leichenko_robin.pdf
Page 24 onwards is a case study on climate change and 'elderly populations'. The authors argue that the vulnerability of older people to climate change is a challenge for human security. They emphasise that the global population of older people is growing and that they have a limited capacity for adaptation, partly due to changes in kinship networks meaning older people are less able to rely on younger family members for help. The paper emphasises the vulnerability of rural older women, who are affected by increased migration, the need to care for orphaned grandchildren and who are unlikely to have support from insurance or pension schemes.
- Dr. Neil Adger, Tyndall Centre for Climate Change Research (University of East Anglia)
Dr. Adger commented that the Tyndall Centre is currently conducting research into older people and temperature extremes as a result of climate change. Their work is presently unpublished. You can contact Dr. Adger directly on n.adger@uea.ac.uk. He also suggested the following two resources on this issue, both taken from public health literature:
 - Poumadere, M. et al, 2005, 'The 2003 Heat Wave in France: Dangerous Climate Change Here and Now', Risk Analysis, vol. 25, no. 6: abstract and purchase details available at: <http://www.blackwell-synergy.com/doi/abs/10.1111/j.1539-6924.2005.00694.x>
 - Kovats et al, 2005, 'Climate Change and Human Health: Estimating Avoidable Deaths and Disease', Risk Analysis, vol. 25, no. 6: abstract and purchase details available at: <http://www.blackwell-synergy.com/doi/abs/10.1111/j.1539-6924.2005.00688.x>
 - Haq et al, 2007, 'Greening the Greys: Climate Change and the Over 50s', Climate Talk: <http://www.climatetalk.org.uk/downloads/ClimateChangeandOver50s.pdf>
This research by the Stockholm Environment Institute and the University of York focuses on over 50s in the UK. The report focuses more on the impact of older people on climate change than on the impact of climate change on older people in the UK, however, some interesting points are made including:
 - The over 50s in the UK have a disproportionately large carbon footprint
 - They tend to have a limited understanding of the range of potential impacts of climate change
 - They have a wide range of different attitudes towards climate change

5. Disabled people

As stated in the Overview section, no relevant material was found on climate change and disabled people during the research period for this query, despite specific online and journal searches on the topic.

6. Gender

The July 2002 issue of Gender and Development (volume 10, no. 2) focused specifically on climate change:

- Dankelman, I., 2002, 'Climate Change: Learning From Gender Analysis and Women's Experiences of Organising for Sustainable Development':
[http://www.genderanddevelopment.org/display.asp?K=002J1062&m=14&dc=30&sort=sort_date/d&mw=1&q=\(FACET%20contains\(GAD\)\)&st_01=10&sf_01=volume](http://www.genderanddevelopment.org/display.asp?K=002J1062&m=14&dc=30&sort=sort_date/d&mw=1&q=(FACET%20contains(GAD))&st_01=10&sf_01=volume)
Dankelman argues that climate change is not gender-neutral because communities interact with their environments in a gender-differentiated way. Also there are gendered aspects of climate change mitigation and adaptation strategies that must not be overlooked. Climate change is not just a technical problem requiring technical solutions; socio-economic strategies are also required. The article closes by arguing that despite being inadequately represented in international decisions on climate change, women have successfully organised to present a coherent voice to the international community on a number of occasions.
- Denton, F., 2002, 'Climate Change Vulnerability, Impacts and Adaptation: Why Does Gender Matter?'
[http://www.genderanddevelopment.org/display.asp?K=002J1061&m=18&dc=30&sort=sort_date/d&mw=1&q=\(FACET%20contains\(GAD\)\)&st_01=10&sf_01=volume](http://www.genderanddevelopment.org/display.asp?K=002J1061&m=18&dc=30&sort=sort_date/d&mw=1&q=(FACET%20contains(GAD))&st_01=10&sf_01=volume)
This paper argues that climate change policy should be about ensuring a sustainable future by combining development and environmental issues and understanding. However, Denton states that climate change policy does not fully take account of women's interests and that women's voices are not heard in international climate change negotiations. These negotiations are generally structured so that poor people are unable to participate in a meaningful way, less so poor women. Gender mainstreaming has only been applied to climate change policy as an afterthought.

Other articles from the journal special edition that may be of interest include:

- Cannon, T., 2002, 'Gender and Climate Hazards in Bangladesh':
[http://www.genderanddevelopment.org/display.asp?K=002J1065&m=10&dc=30&sort=sort_date/d&mw=1&q=\(FACET%20contains\(GAD\)\)&st_01=10&sf_01=volume](http://www.genderanddevelopment.org/display.asp?K=002J1065&m=10&dc=30&sort=sort_date/d&mw=1&q=(FACET%20contains(GAD))&st_01=10&sf_01=volume)
- Skutsch, M., 2002, 'Protocols, Treaties and Action: The 'Climate Change Process Viewed Through Gender Spectacles':
[http://www.genderanddevelopment.org/display.asp?K=002J1063&m=12&dc=30&sort=sort_date/d&mw=1&q=\(FACET%20contains\(GAD\)\)&st_01=10&sf_01=volume](http://www.genderanddevelopment.org/display.asp?K=002J1063&m=12&dc=30&sort=sort_date/d&mw=1&q=(FACET%20contains(GAD))&st_01=10&sf_01=volume)
- Nelson, V., Meadows, K., Cannon, T. and Morton, J., 2002, 'Uncertain Predictions, Invisible Impacts, and the Need to Mainstream Gender in Climate Change Adaptations':
[http://www.genderanddevelopment.org/display.asp?K=002J1066&m=15&dc=30&sort=sort_date/d&mw=1&q=\(FACET%20contains\(GAD\)\)&st_01=10&sf_01=volume](http://www.genderanddevelopment.org/display.asp?K=002J1066&m=15&dc=30&sort=sort_date/d&mw=1&q=(FACET%20contains(GAD))&st_01=10&sf_01=volume)
- Roy, M. and Venema, H., 2002 'Reducing Risk and Vulnerability to Climate Change in India: the Capabilities Approach':
[http://www.genderanddevelopment.org/display.asp?K=002J1069&m=17&dc=30&sort=sort_date/d&mw=1&q=\(FACET%20contains\(GAD\)\)&st_01=10&sf_01=volume](http://www.genderanddevelopment.org/display.asp?K=002J1069&m=17&dc=30&sort=sort_date/d&mw=1&q=(FACET%20contains(GAD))&st_01=10&sf_01=volume)
- Boyd, E., 2002, 'The Noel Kempff Project in Bolivia: Gender, Power and Decision-Making in Climate Mitigation':
[http://www.genderanddevelopment.org/display.asp?K=002J1068&m=16&dc=30&sort=sort_date/d&mw=1&q=\(FACET%20contains\(GAD\)\)&st_01=10&sf_01=volume](http://www.genderanddevelopment.org/display.asp?K=002J1068&m=16&dc=30&sort=sort_date/d&mw=1&q=(FACET%20contains(GAD))&st_01=10&sf_01=volume)

- Gender and Climate Change website: <http://www.gencc.interconnection.org>
This UN website focuses exclusively on gender and climate change providing several resources and contacts.

Authors and contributors

This query response was prepared by Zoe Scott zoe@gsdrc.org

Contributors were:

Neil Adger (Tyndall Centre, UEA)
Siri Eriksen (University of Oslo)
Richard Klein (Stockholm Environment Institute)
Helene Admundsen (CICERO)
Robin Leichenko (Rutgers University).

Websites visited

Adelphi Research, Chatham House, Christian Aid, CICERO, Climatic Research Unit (UEA), ELDIS, ENVSEC Initiative, GENCC, Google, Global Development and Environment Institute (Tufts University), Global Environmental Change and Human Security, GSDRC, Ingenta journals, Intergovernmental Panel on Climate Change, Institute for Development Studies, International Alert, International Institute for Environment and Development (IIED), International Institute for Sustainable Development (IISD), International Longevity Centre, Linking Climate Adaptation Network, OXFAM, Stockholm Environment Institute, Tiempo, Tyndall Centre for Climate Change Research, University of Oslo, Woodrow Wilson International Center and various academic journals.

About Helpdesk research reports: Helpdesk reports are based on 2 days of desk-based research. They are designed to provide a brief overview of the key issues; and a summary of some of the best literature available. Experts are contacted during the course of the research, and those able to provide input within the short time-frame are acknowledged.

Need help finding consultants?

If you need to commission more in-depth research, or need help finding and contracting consultants for additional work, please contact consultants@gsdrc.org (further details at www.gsdrc.org/go.cfm?path=/go/helpdesk/find-a-consultant&)