

READING LIST:

Training Session
on IPCC WGII
Contribution to
AR5



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November 2014



**EVIDENCE
ON DEMAND**

CLIMATE & ENVIRONMENT
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Your feedback helps us ensure the quality and usefulness of all knowledge products. We would be grateful if you could complete a short online survey to provide feedback on this reading list: <https://www.surveymonkey.com/s/NKWVRWK>. Alternatively, please email enquiries@evidenceondemand.org and let us know whether or not you have found this material useful; in what ways it has helped build your knowledge base and informed your work; or how it could be improved.

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Report Summary

This reading list has been compiled to support DFID's internal training sessions on the Intergovernmental Panel on Climate Change (IPCC) Working Group II (WG II) contribution to the IPCC Fifth Assessment Report (AR5). The reading list is an annotated bibliography with a synopsis of content for each material and it is divided into three sections. The first section contains a short list of pre-session reading materials. The second section is focused on resources to fill evidence gaps from a development perspective. While these resources are aimed at development practitioners, they are mainly drawn from grey literature. The third section contains a range of supplementary reading materials, mainly drawn from academic literature, that are designed to build and expand on the evidence base presented by WG II. They are grouped around the following themes: economic growth, poverty alleviation, food (including agriculture, livestock and fisheries), disasters, water, health, cities, human security and adaptation. Relevant resources for geographical regions and long term projections are also included.

We would be grateful if you could complete a short online survey to provide feedback on this reading list: <https://www.surveymonkey.com/s/NKWVRWK>.



SECTION A

Pre-Session Reading List

Resource type	Title	Description	How to access / full reference
Working Group II Contribution to IPCC AR5			
IPCC summary report	IPCC Working Group II Summary for Policymakers (SPM)	This summary forms the basis of the training session and is therefore essential reading. For more in-depth reading, consult the chapters below from 'Part A: Global and Sectoral Aspects' of the full WG II report. Each chapter contains a 2-3 page executive summary providing a quick overview of the evidence.	IPCC (2014) 'Summary for Policymakers' In: <i>Climate Change 2014: Impacts, Adaptation, and Vulnerability. Part A: Global and Sectoral Aspects. Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change</i> [Field, C.B., V.R. Barros, D.J. Dokken, K.J. Mach, M.D. Mastrandrea, T.E. Bilir, M. Chatterjee, K.L. Ebi, Y.O. Estrada, R.C. Genova, B. Girma, E.S. Kissel, A.N. Levy, S. MacCracken, P.R. Mastrandrea, and L.L. White (eds.)]. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA, pp. 1-32. https://ipcc-wg2.gov/AR5/images/uploads/WG2AR5_SPM_FINAL.pdf
Chapter from full IPCC report	Chapter 7 - Food Security and Food Production Systems	The chapter explores how far climate change affects current food production systems and food security and the extent to which it will do so in the future. Most work since AR4 has continued to concentrate on food production and has not included other aspects of the food system that connect climate change to food security e.g. food processing, distribution, access, and consumption. Many studies either do not examine yield variability or do not report it.	Porter, J.R. et al. (2014) 'Food Security and Food Production Systems' (same WG II Climate Change 2014 full report reference as above) http://www.ipcc.ch/pdf/assessment-report/ar5/wg2/WGIIAR5-Chap7_FINAL.pdf
Chapter from full IPCC report	Chapter 8 – Urban Areas	This chapter focuses on the possibilities for governments, companies and populations to adapt urban centres to the direct and indirect impacts of climate change. It draws two key conclusions. Firstly, the adaptive capacity of any city depends on the quality of provision and coverage of infrastructure and services. Secondly, municipal governments acting to incorporate climate change adaptation into their development plans and investments are critical stakeholders for building the foundations for city resilience. See pages 591-596 for profiles of current and indicative future climate risks,	Revi, A. and Satterthwaite, D. et al. (2014) 'Urban Areas' (same report reference as above) http://www.ipcc.ch/pdf/assessment-report/ar5/wg2/WGIIAR5-Chap8_FINAL.pdf



Resource type	Title	Description	How to access / full reference
		covering Dar es Salaam, Durban, London and New York. Each summarises the present, near-term (2030–2040), and long-term (2080–2100) climate risks and potential for risk reduction through adaptation.	
Chapter from full IPCC report	Chapter 13 – Livelihoods and Poverty	<p>Livelihoods and Poverty is a new chapter in the AR5. Although WGII AR4 mentioned poverty as contributing to vulnerability/hindering adaptation, it did not do a systematic assessment. The chapter assesses how climate change intersects with other factors to shape livelihood trajectories, poverty dynamics, and to reduce or exacerbate inequalities.</p> <p>Eight major research gaps are identified in terms of impacts of climate change and responses: poverty dynamics; livelihoods dynamics; effect of structural inequalities on vulnerability; poor people in middle-high income countries; small-scale disasters; shocks; effects of mitigation and adaptation policies on poverty and inequality; and how to build poverty alleviation into resilient pathways.</p>	<p>Olsson, L. et al. (2014) 'Livelihoods and Poverty' (same report reference as above)</p> <p>http://www.ipcc.ch/pdf/assessment-report/ar5/wg2/WGIIAR5-Chap13_FINAL.pdf</p>
Chapter from full IPCC report	Chapter 15 – Adaptation Planning and Implementation	<p>Since the publication of IPCC AR4, significant progress has been made on adaptation activities both quantitatively and qualitatively, particularly in development of national adaptation strategies and plans.</p> <p>This chapter focuses on the actions taken from international to local levels, to assess (1) the recent status of adaptation planning and implementation across the globe; (2) the characteristics of adaptation in different settings; (3) the strategies, approaches, and tools used in the adaptation practices; and (4) the governance of adaptation including building adaptive capacities.</p> <p>It also highlights concerns in the literature that an impact approach can overshadow the analysis of underlying stressors of hazards, the drivers of vulnerability, and opportunities for connecting development to climate change.</p>	<p>Mimura, N. et al. (2014) 'Adaptation Planning and Implementation' (same report reference as above)</p> <p>http://www.ipcc.ch/pdf/assessment-report/ar5/wg2/WGIIAR5-Chap15_FINAL.pdf</p>
CDKN Reports			
Grey literature	The IPCC's Fifth Assessment Report: What's in it for Africa?	<p>Compiled by CDKN and ODI experts, this general overview looks at how the impacts of climate change will affect food security, water availability and human health in Africa significantly. It explores these impacts in depth and examines how climate change will progressively threaten Africa's economic growth and human security. There is evidence that temperature changes have played a role in increased incidence of malaria in East Africa, and have already driven changes in the practices of South African farmers. Climate change has also had an impact on production of wheat and maize in parts of Africa, productivity of fisheries in the Great Lakes and Lake Kariba and fruit trees in the Sahel.</p>	<p>CDKN (2014) <i>The IPCC's Fifth Assessment Report: What's in it for Africa?</i> Executive Summary</p> <p>http://cdkn.org/wp-content/uploads/2014/04/J1731_CDKN_FifthAssesmentReport_WEB.pdf</p>
Grey literature	The IPCC's Fifth Assessment Report: What's in it for South	<p>Compiled by CDKN and ODI experts, this general overview notes the effects of rapidly rising sea levels on South Asia. Many Asian deltas are sinking as a result of groundwater extraction, floodplain engineering and trapping of sediments by</p>	<p>CDKN (2014) <i>The IPCC's Fifth Assessment Report: What's in it for South Asia?</i> Executive Summary</p> <p>http://cdkn.org/wp-content/uploads/2014/04/CDKN-IPCC-</p>



Resource type	Title	Description	How to access / full reference
	Asia?	dams. Climate change is also having an impact on human health in S. Asia. The incidence of many diseases increases at higher temperatures. Climate phenomena, such as El Niño, have been associated with cholera epidemics in Bangladesh.	Whats-in-it-for-South-Asia-AR5.pdf
Topic Guide on Adaptation and Decision Making			
EoD Topic Guide	Topic Guide, Adaptation: Decision making under uncertainty	See Executive Summary (pp. ix-xi) and/or Section II ('Climate Change, uncertainty and their implications for development decisions today', pp.17-31). This Topic Guide offers an overview of recent thinking on how to manage the changing and uncertain climate in development decisions. The key premise is that climate change will affect the long-term outcomes of many development interventions. It introduces a range of concepts and tools for dealing with uncertainty in designing and implementing development interventions.	Ranger, N. (2013) <i>Topic Guide, Adaptation: Decision making under uncertainty</i> , Evidence on Demand, UK. [DOI: http://dx.doi.org/10.12774/eod_tg02.june2013.ranger]

SECTION B

Post-Session List 1: Selected resources to fill evidence gaps from a development perspective

Note that the materials in this section are aimed at development practitioners but are mainly drawn from grey literature.

Resource type	Title	Description	How to access / full reference
World Bank Papers			
Grey literature	The Economics of Adaptation to Climate Change: Synthesis Report	This synthesis report brings together a global study and seven country case studies (Bangladesh, Bolivia, Ethiopia, Ghana, Mozambique, Samoa and Vietnam). The global study estimates the overall cost of adapting to a 2°C warmer world between 2010 and 2050 at \$70 - \$100 billion per year. The driest scenario entails lower total adaptation costs than the wettest scenario, due to lower costs for infrastructure. In either case, infrastructure, coastal zones, water supply and flood protection account for the bulk of the costs. The East Asia and Pacific region bears the highest adaptation costs, followed by Latin America and Caribbean and sub-Saharan Africa.	World Bank (2010) <i>The Economics of Adaptation to Climate Change: Synthesis Report</i> , Washington DC: World Bank. https://openknowledge.worldbank.org/bitstream/handle/10986/12750/702670ESW0P10800EACCSynthesisReport.pdf?sequence=1
Grey literature	World Development Report 2010: Development and Climate Change	This report covers the following themes as part of a call for action: links between climate change and development; reducing human vulnerability; managing land and water to feed 9bn people; integrating development into the global climate regime; generating funding for mitigation and adaptation; innovation and technology diffusion; and overcoming behavioural and institutional inertia. The report argues that climate policy cannot simply be framed as a choice between economic growth and climate change. Rather, climate-smart policies are those that enhance development, reduce vulnerability, and finance the transition to low-carbon growth paths.	International Bank for Reconstruction and Development and World Bank (2010) <i>World Development Report 2010: Development and Climate Change</i> , Washington DC: World Bank. http://siteresources.worldbank.org/INTWDR2010/Resources/5287678-1226014527953/WDR10-Full-Text.pdf
Grey literature	Adapting to Climate Change: Assessing World Bank Group Experience	Draws lessons from WB and IFC engagement in climate change adaptation (both current climate variability and future change) and looked beyond the activities that were labelled as focusing on adaptation to encompass activities that were expected to be adaptive. The report addresses climate adaptation at the WB Group (including country case studies of supporting adaptation at national and regional level); dealing with climate variability and anticipatory adaptation to climate change.	Independent Evaluation Group (2012) <i>Climate Change Phase III – Adapting to Climate Change: Assessing World Bank Group Experience</i> , Washington DC: World Bank. http://ieq.worldbankgroup.org/Data/reports/cc3_full_eval_0.pdf



Resource type	Title	Description	How to access / full reference
The Global Commission Report			
Grey literature	The New Climate Economy	Report informed by evidence and analysis of economists. Describing the next 15 years as critical for shaping the global climate system, this online report provides an action plan for how countries across the world can reduce the risks of climate change and achieve high-quality, resilient and inclusive economic growth. Chapters on cities, land use, energy, economics of change, finance, innovation and international cooperation. Country case studies are forthcoming.	The Global Commission on Climate and the Economy (2014) <i>The New Climate Economy</i> . http://newclimateeconomy.report/ and http://newclimateeconomy.report/misc/downloads/ (PDF)
DFID Review			
Grey literature	Convergence of Disaster Risk Reduction and Climate Change Adaptation	A study commissioned by DFID and intended for a DFID audience. The paper explores how and why disaster risk reduction and adaptation agendas should converge and outlines a set of recommendations for DFID.	Mitchell, T. and van Aalst, M. (2008) <i>Convergence of Disaster Risk Reduction and Climate Change Adaptation: A Review for DFID</i> . http://www.nirapad.org.bd/admin/soft_archive/1308126954_Convergence%20of%20Disaster%20Risk%20Reduction%20and%20Climate%20Change%20Adaptation.pdf
CDKN Paper			
Grey literature	Drivers and challenges for climate compatible development	Sets out CDKN's initial thinking on the drivers and challenges affecting climate compatible development policy processes. It presents a range of relevant examples drawn from the literature and CDKN's experience to date.	Ellis, K., Cambray, A. and Lemma A. (2013) <i>Drivers and challenges for climate compatible development</i> , CDKN Working Paper. http://cdkn.org/wp-content/uploads/2013/02/CDKN_Working_Paper-Climate-Compatible_Development_final.pdf
World Resources Institute Paper			
Grey literature	World Resources 2010–2011: Decision Making in a Changing Climate - Adaptation Challenges and Choices	Designed for government decision makers, the report is based on a broad research programme and consultations with experts from more than 30 countries. Includes case studies throughout.	World Resources Institute in collaboration with UNDP, UNEP and World Bank (2011) <i>World Resources 2010–2011: Decision Making in a Changing Climate - Adaptation Challenges and Choices</i> , Washington, DC:WRI. http://www.wri.org/sites/default/files/pdf/world_resources_report_2010-2011.pdf http://www.wri.org/sites/default/files/pdf/world_resources_report_2010-2011_executive_summary.pdf

SECTION C

Post-Session List 2: Supplementary reading grouped by theme

Resource type	Title	Description	How to access / full reference
Economic growth			
Academic paper	Economic impact of climate change on crop production in Ethiopia: evidence from cross-section measures	The analysis indicates that marginally increasing temperatures during summer and winter would significantly reduce crop net revenue per hectare whereas marginally increasing precipitation during spring would significantly increase net crop revenue per hectare. Moreover, the net crop revenue impact of predicted climate scenarios from three models indicated that there would be a reduction in crop net revenue per hectare by 2050 and 2100.	Deressa, T. T., and Hassan, R. M. (2009) 'Economic impact of climate change on crop production in Ethiopia: evidence from cross-section measures', <i>Journal of African Economies</i> , ejp002. http://jae.oxfordjournals.org/content/early/2009/04/16/jae.ejp002.short
Academic paper	The economic costs of extreme weather events: a hydrometeorological CGE analysis for Malawi	Based on repeated sampling from historical events, results indicate that at least 1.7% of Malawi's GDP is lost each year due to the combined effects of droughts and floods. Smaller-scale farmers in the southern region of the country are worst affected. However, poverty among urban and non-farm households also increases due to national food shortages and higher domestic prices.	Pauw, K., Thurlow, J., Bachu, M. and Van Seventer, D. E. (2011) 'The economic costs of extreme weather events: a hydrometeorological CGE analysis for Malawi', <i>Environment and Development Economics</i> , 16(02), 177-198. http://journals.cambridge.org/action/displayAbstract?fromPage=online&aid=8239407&fileId=S1355770X10000471
Academic paper	The impact of climate variability and change on economic growth and poverty in Zambia	The research used an integrated framework to link together hydrological, crop stimulation and economic models drawing on Zambia's historical data. The paper estimates that, on average, climate variability reduces Zambia's GDP growth rate by 0.4 percentage points per year, which costs the country US\$4.3 billion over a ten-year period. These losses reach as high as US\$7.1 billion under Zambia's worst rainfall sequence.	Thurlow, J., Zhu, T. and Diao, X. (2009) <i>The impact of climate variability and change on economic growth and poverty in Zambia</i> (No. 890), International Food Policy Research Institute (IFPRI). https://www.gtap.agecon.purdue.edu/resources/download/4425.pdf
Academic paper	The impact of future climate change on West African crop yields: What does the recent literature say?	A meta-database of future crop yields, built up from 16 recent studies, is used to provide an overall assessment of the potential impact of climate change on yields, and to analyse sources of uncertainty. Despite a large dispersion of yield changes ranging from -50% to +90%, the median is a yield loss near -11%.	Roudier, P., Sultan, B., Quirion, P., and Berg, A. (2011) 'The impact of future climate change on West African crop yields: What does the recent literature say?' <i>Global Environmental Change</i> , 21(3), 1073-1083. http://www.sciencedirect.com/science/article/pii/S0959378011000677
Poverty alleviation			
Academic paper	Climate volatility and poverty vulnerability in Tanzania	For Tanzania, where food production and prices are sensitive to climate, changes in climate volatility could have severe implications for poverty. This study uses climate model projections, statistical crop models, and general	Ahmed, S.A. et al. (2011) 'Climate volatility and poverty vulnerability in Tanzania', <i>Global Environmental Change</i> , 21(1), 46-55.



Resource type	Title	Description	How to access / full reference
		equilibrium economic simulations to determine how the vulnerability of Tanzania's population to impoverishment by climate variability could change between the late 20th century and the early 21st century.	http://www.sciencedirect.com/science/article/pii/S0959378010001007
IDS bulletin	The gender dimensions of poverty and climate change adaptation	Drawing on available literature on gender and climate change, this article seeks to examine the interlinkages between gender inequalities, poverty and the different capacity of women and men to adapt to the challenges posed by climate change.	Demetriades, J. and Esplen, E. (2008) 'The gender dimensions of poverty and climate change adaptation', <i>IDS Bulletin</i> , 39(4), 24-31. http://onlinelibrary.wiley.com/doi/10.1111/j.1759-5436.2008.tb00473.x/abstract
Academic paper	Policy misfits, climate change and crossscale vulnerability in coastal Africa: how development projects undermine resilience	The analysis presented in this paper is based on mixed methods empirical research exploring local perceptions of recent changes at four sites. Regional and international policy initiatives e.g. river basin management in Mozambique and South Africa, and development of a marine protected area in Tanzania – are perceived to further erode resilience and exacerbate vulnerabilities. The authors suggest that policies developed to address a specific issue do not take account of cross-scale dynamics of change, the interactions between multiple stressors, nor longer term climate change.	Bunce, M., Brown, K., and Rosendo, S. (2010) 'Policy misfits, climate change and crossscale vulnerability in coastal Africa: how development projects undermine resilience', <i>Environmental Science and Policy</i> , 13(6), 485-497. http://www.sciencedirect.com/science/article/pii/S1462901110000663
Academic paper	The poverty implications of climate induced crop yield changes by 2030	The paper considers three scenarios of agricultural impacts of climate change by 2030 (impacts resulting in low, medium, or high productivity) and evaluates the resulting changes in global commodity prices, national economic welfare, and the incidence of poverty in a set of 15 developing countries. Although the small price changes under the medium scenario are consistent with previous findings, the authors find potential for much larger food price changes than reported in recent studies.	Hertel, T.W., Burke, M.B. and Lobell, D.B. (2010) 'The poverty implications of climate induced crop yield changes by 2030', <i>Global Environmental Change</i> , 20(4), 577-585. http://www.sciencedirect.com/science/article/pii/S0959378010000609
Food (including agriculture, livestock and fisheries)			
Academic paper	Climate variability and vulnerability to climate change: a review	Briefly reviews the possible impacts of changes in climate variability and the frequency of extreme events on biological and food systems, with a focus on the developing world. Identified knowledge gaps include the interactions of different climatic stresses on plant growth, particularly at higher temperatures, and the impacts on crops, livestock and farming systems of changes in climate variability and extreme events on pest-weed-disease complexes.	Thornton, P. K., Ericksen, P. J., Herrero, M., and Challinor, A. J. (2014) 'Climate variability and vulnerability to climate change: a review', <i>Global Change Biology</i> , 20 (11), pp. 3313-3328. http://onlinelibrary.wiley.com/doi/10.1111/gcb.12581/full
Grey literature	Creating a Sustainable Food Future: A menu of solutions to sustainably feed more than 9 billion people by 2050	A report focused on solutions to meet the challenges of agriculture and the food gap. Each solution contributes to five key sustainability criteria: advancing rural development, generating benefits for women, protecting ecosystems, reducing greenhouse gas emissions, and avoiding overuse and pollution of freshwater. Suggested solutions fall into three categories: reduce growth in food consumption, increase food production on existing agricultural land, or reduce environmental impact of food production.	World Resources Institute (2014) <i>Creating a Sustainable Food Future: Interim Findings A menu of solutions to sustainably feed more than 9 billion people by 2050</i> , Washington DC: WRI. http://www.wri.org/sites/default/files/wri13_report_4c_wrr_online.pdf
Online resources/grey	Implications for Agriculture	Analyses findings from IPCC AR5 on agriculture, including a briefing, presentation and infographics.	University of Cambridge Institute for Sustainable Leadership Climate Change (2014) <i>Implications for Agriculture</i> http://www.cisl.cam.ac.uk/Resources/Climate-and-



Resource type	Title	Description	How to access / full reference
literature			Energy/Climate-Change-Implications-for-Agriculture.aspx
Academic paper	Global crop yield response to extreme heat stress under multiple climate change futures	This study applies the global crop model PEGASUS to quantify and project, for the first time at the global scale, impacts of extreme heat stress on maize, spring wheat and soybean yields resulting from 72 climate change scenarios for the 21st century.	Deryng, D., Conway, D., Ramankutty, N., et al. (2014) 'Global crop yield response to extreme heat stress under multiple climate change futures', <i>Environmental Research Letters</i> , 9 (3), 034011. http://iopscience.iop.org/1748-9326/9/3/034011/article
Rapid review	Climate smart agriculture: Mapping guidance on climate change	A rapid desk-based study reviewing 14 examples of guidance on agriculture and climate adaptation.	Downing, T.E. (2013) <i>Climate smart agriculture: Mapping guidance on climate change</i> , Evidence on Demand, UK. [DOI: http://dx.doi.org/10.12774/eod_hdoct2013.downing]
Grey literature	Climate-smart agriculture success stories from farming communities around the world	With examples from both the developed and developing world, the initiatives include innovative agricultural interventions, initiatives that address climate-related risks and policies and institutions that underpin adaptation to and mitigation of climate change.	Neate, P. (2013) <i>Climate-smart agriculture success stories from farming communities around the world</i> , CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS), Copenhagen, Denmark. http://r4d.dfid.gov.uk/pdf/outputs/CCAFS/Climate_smart_farming_successesWEB.pdf
Academic paper	Shrinking of fishes exacerbates impacts of global ocean changes on marine ecosystems	Both theory and empirical observations support the hypothesis that warming and reduced oxygen will reduce the body size of marine fishes. The research employed a model to examine the integrated biological responses of over 600 species of marine fishes. It shows that maximum body weight is expected to shrink by 14–24% globally from 2000 to 2050 under a high-emission scenario.	Cheung, W. L. et al. (2012) 'Shrinking of fishes exacerbates impacts of global ocean changes on marine ecosystems', <i>Nature Climate Change</i> 3: 254-258. http://www.nature.com/nclimate/journal/v3/n3/full/nclimate1691.html
Academic paper	Impacts of climate variability and change on fishery-based livelihoods	Drawing on research and available literature, and using a livelihoods framework, this paper synthesizes the pathways through which climate variability and change impact fishery livelihoods at the household and community level. It identifies current and potential adaptation strategies and explores wider implications for local livelihoods, fisheries management and climate policies.	Badjeck, M., Allison, E., Halls, A., and Dulvy, N. (2010) 'Impacts of climate variability and change on fishery-based livelihoods', <i>Marine Policy</i> , 34(3), 375-383. http://www.sciencedirect.com/science/article/pii/S0308597X09001237
Academic paper	The impacts of climate change on livestock and livestock systems in developing countries: A review of what we know and what we need to know	Briefly reviews the literature on climate change impacts on livestock and livestock systems in developing countries, and identifies some key knowledge and data gaps. Also lists some of the issues related to how smallholders and pastoralists might respond to climate change.	Thornton, P. K., Van de Steeg, J., Notenbaert, A. and Herrero, M. (2009) 'The impacts of climate change on livestock and livestock systems in developing countries: A review of what we know and what we need to know', <i>Agricultural Systems</i> , 101(3), 113-127. http://www.sciencedirect.com/science/article/pii/S0308521X09000584
Disasters			
IPCC report	Managing the risks of extreme events and disasters to advance	This report deals with extreme weather and climate events as an issue in decision making under uncertainty. The report consists of nine chapters, covering risk management; observed and projected changes in extreme weather	IPCC (2012) <i>Managing the risks of extreme events and disasters to advance climate change</i> , A Special Report of Working Groups I and II of the Intergovernmental



Resource type	Title	Description	How to access / full reference
	climate change	and climate events; exposure and vulnerability to as well as losses resulting from such events; adaptation options from the local to the international scale; the role of sustainable development in modulating risks; and insights from specific case studies.	Panel on Climate Change, Cambridge University Press. https://www.ipcc.ch/pdf/special-reports/srex/SREX_Full_Report.pdf
Grey literature	Adaptation to Climate Change: Linking Disaster Risk Reduction and Insurance	This paper is an initial attempt to consider the role in adaptation of insurance and related risk sharing and risk transfer methods, in the context of a comprehensive approach to risk reduction and risk management.	Warner, K., Ranger, N., Surminski, S., Arnold, M., Linnerooth-Bayer, J., Michel-Kerjan, E., Kovacs, P. and Herweijer, C. (2009) <i>Adaptation to Climate Change: Linking Disaster Risk Reduction and Insurance</i> , A paper prepared for the United Nations International Strategy on Disaster Reduction, UNISDR. http://www.preventionweb.net/files/9654_linkingdrinsurance.pdf
Grey literature	Report on the Status of Disaster Risk Reduction in the Sub-Saharan Africa Region	This report reviewed the status of DRR activities of the World Bank, including disaster risk and vulnerability assessments in the sub-Saharan Africa region from 2008-2010.	World Bank (2010) <i>Report on the Status of Disaster Risk Reduction in the Sub-Saharan Africa Region</i> , Washington DC: IBRD/World Bank. http://www.gfdr.org/sites/gfdr/files/publication/AFR.pdf
Water			
ODI paper	Adaptation to Climate Change in Water, Sanitation and Hygiene: Assessing risks, appraising options in Africa	The report looks at the context for adaptation decision-making in WASH and the risks to delivery of WASH in three countries: Malawi, Sierra Leone and Tanzania. Argues that given the uncertainties with rainfall projections, but also the known risks associated with existing variability, there are strong arguments for a vulnerability rather than an impact-led approach to risk assessment and planning.	Oates, N. et al. (2014) <i>Adaptation to Climate Change in Water, Sanitation and Hygiene: Assessing risks, appraising options in Africa</i> , ODI. http://www.odi.org/sites/odi.org.uk/files/odi-assets/publications-opinion-files/8858.pdf
ODI paper	The economics of climate change adaptation in Africa's water sector	This working paper summarises existing work on the costs and benefits of climate change adaptation for the water sector in Africa. It reviews adaptation cost estimates for the continent and the main economic appraisal methods used. It focuses on adaptation to climate impacts on the water sector, such as damage to water infrastructure, rather than impacts from water on other sectors, such as agricultural drought.	Doczi, J. and Ross, I. (2014) <i>The economics of climate change adaptation in Africa's water sector</i> , ODI Working paper. http://www.odi.org/sites/odi.org.uk/files/odi-assets/publications-opinion-files/8852.pdf
Grey literature	Decision Support Planning Methods: Incorporating Climate Change Uncertainties into Water Planning	The Water Utility Climate Alliance (WUCA) developed this white paper to present multiple outcome planning techniques to water utilities interested in incorporating climate change into their planning.	Water Utility Climate Alliance (2010) <i>Decision Support Planning Methods: Incorporating Climate Change Uncertainties into Water Planning</i> . http://www.wucaonline.org/assets/pdf/pubs_whitepaper_012_110.pdf
Health			
Academic paper	Valuing climate change impacts on human health:	There is a broad consensus that climate change will increase the costs arising from diseases such as malaria and diarrhoea and that the largest increases will be in developing countries. One of the problems is the lack of studies measuring	Markandya, A. and Chiabai, A. (2009) 'Valuing climate change impacts on human health: empirical evidence from the literature', <i>International journal of environmental</i>



Resource type	Title	Description	How to access / full reference
	empirical evidence from the literature	these costs systematically and in detail. This paper critically reviews a number of studies about the costs of planned adaptation in the health context.	<i>research and public health</i> , 6(2), 759-786. http://www.mdpi.com/1660-4601/6/2/759
Academic paper	Health effects of drought: a systematic review of the evidence	The main categories of findings from 87 papers include: nutrition-related effects; water-related disease (including E coli, cholera and algal bloom); airborne and dust-related disease (including silo gas exposure); vector borne disease (including malaria, dengue and West Nile Virus); mental health effects (including distress and other emotional consequences); and other health effects (including wildfire, effects of migration, and damage to infrastructure).	Stanke, C., Kerac, M., Prudhomme, C., Medlock, J. and Murray, V. (2013) 'Health effects of drought: a systematic review of the evidence', <i>PLoS Current Disasters</i> , June 5, Edition 1. http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3682759/
Academic paper	Climate variability and the outbreaks of cholera in Zanzibar, East Africa: a time series analysis	The paper develops a model that may be applied to forecast cholera outbreaks, and guide public health resources in controlling cholera in Zanzibar.	Reyburn, R. et al. (2011) 'Climate variability and the outbreaks of cholera in Zanzibar, East Africa: a time series analysis', <i>The American Journal of Tropical Medicine and Hygiene</i> , 84(6), 862-869. http://www.ajtmh.org/content/84/6/862.short
Cities			
Academic papers	Towards resilience and transformation for cities I & II	These two issues focus on what builds resilience to climate change in cities and what contributes to mitigation and the avoidance of dangerous climate change. Over the two volumes there are numerous examples of action taken to adapt to climate change and reduce disaster risk. Volume I includes case studies of climate change adaptation in Durban, Dar es Salaam and Rosario, and of flood risks in Surat and Bursa. The second volume specifically focuses on case studies in the context of the IPCC 5th Assessment. Six papers show the full spectrum of responses to climate change: by households and communities in Khulna, by local governments in Colombia and Mexico, through asset planning in Cartagena, through gendered resilience in Dhaka, and through water governance in Guarulhos, Arequipa, Lima and Durban.	IIED (2013/14) 'Towards resilience and transformation for cities I & II', <i>Environment and Urbanisation</i> London: IIED. Volume I: http://pubs.iied.org/10646IIED.html Volume II: http://pubs.iied.org/10701IIED.html?c=urban
Grey literature	Progress and Challenges in the Urban Governance of Climate Change: Results of a Global Survey	First systematic study to look at how cities are approaching climate change planning, adaptation and mitigation. It provides an overview of who is involved, measures they are taking, and barriers they are facing. It also explores how climate change work overlaps with other local government priorities.	Aylett, A. (2014) <i>Progress and Challenges in the Urban Governance of Climate Change: Results of a Global Survey</i> , Cambridge, MA: MIT. http://www.urbanclimatesurvey.com/
Grey literature	Shack/Slum Dwellers International	This website has substantial literature, publications and videos on how local governments are working with over 30 pro-poor organisations and federations on housing, planning and land issues.	Shack/Slum Dwellers International (SDI) website http://www.sdinet.org/
Human Security			
Academic paper	Climate change, human security and violent conflict	This paper integrates three disparate but well-founded bodies of research – on the vulnerability of local places and social groups to climate change, on livelihoods and violent conflict, and the role of the state in development and peacemaking, to offer new insights into the relationships between climate	Barnett, J. and Adger, W.N. (2007) 'Climate change, human security and violent conflict', <i>Political Geography</i> , 26(6), 639-655. http://www.sciencedirect.com/science/article/pii/S09626298



Resource type	Title	Description	How to access / full reference
		change, human security, and violent conflict.	0700039X
Academic paper	Quantifying the influence of climate on human conflict	Following a comprehensive synthesis of literature on climate and human conflict, the authors conclude that there is more agreement across studies regarding the influence of climate on human conflict than has been previously recognised.	Hsiang, S., Burke, M. and Miguel, E. (2013) 'Quantifying the influence of climate on human conflict', <i>Science</i> , 341 (6151). http://www.sciencemag.org/content/341/6151/1235367.short
Academic paper	Come rain or shine: an analysis of conflict and climate variability in East Africa	Using the parameter of rainfall variability to explore the marginal influence of the climate on conflict, the article claims that in locations that experience rebel or communal conflict events, the frequency of these events increases in periods of extreme rainfall variation.	Raleigh, C. and Kniveton, D. (2012) 'Come rain or shine: an analysis of conflict and climate variability in East Africa', <i>Journal of Peace Research</i> , 49(1), 51-64. http://jpr.sagepub.com/content/49/1/51.abstract
Adaptation			
Grey literature	Accommodating migration to promote adaptation to climate change	This paper explains how climate change may increase future migration, and which risks are associated with such migration. It also examines how some of this migration may enhance the capacity of communities to adapt to climate change.	Barnett, J. R., and Webber, M. (2010) <i>Accommodating migration to promote adaptation to climate change</i> , World Bank Policy Research Working Paper Series, No 5270, World Bank. http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1589284
Academic paper	Where the rain falls: evidence from 8 countries on how vulnerable households use migration to manage the risk of rainfall variability and food insecurity	The findings reveal that the vulnerability of the household and its sensitivity to climatic factors affect the interplay between climatic stressors and migration decisions and the degree to which migration improves the adaptive capacity of households. The data reveal for the first time in a comparable global study distinct HH profiles of 'resilience' and 'vulnerability'.	Warner, K. and Afifi, T. (2013) 'Where the rain falls: evidence from 8 countries on how vulnerable households use migration to manage the risk of rainfall variability and food insecurity', <i>Climate and Development</i> , 6(1) 1-17. http://www.tandfonline.com/doi/abs/10.1080/17565529.2013.835707#.VE99MGOQPKE
Academic paper	Adaptations to climate change, drought and desertification: local insights to enhance policy in southern Africa	This paper examines three interlinked drivers of adaptation: climate change, desertification and drought, assessing the extent to which international and national policy supports local adaptive strategies in three countries in southern Africa.	Stringer, L. C., Dyer, J. C., Reed, M. S., Dougill, A. J., Twyman, C. and Mkwambisi, D. (2009) 'Adaptations to climate change, drought and desertification: local insights to enhance policy in southern Africa', <i>Environmental Science & Policy</i> , 12(7), 748-765. http://www.sciencedirect.com/science/article/pii/S1462901109000604
Grey literature	Changing Climate Adaptation Strategies of Boran Pastoralists in Southern Ethiopia	This report contains information on a rapid field assessment of Boran pastoralists of southern Ethiopia to: (1) gauge local communities' perceptions of the need for local climate change adaptation strategies and their degree of satisfaction with existing interventions; (2) identify emerging climate risk adaptation strategies; and (3) evaluate how strategies including efforts by NGOs and the Ethiopian government might complement or be compromised by index-based livestock insurance (IBLI).	Hurst, M.; Jensen, N.; Pedersen, S.H.; Sharma, A.; Zambriski, J.A. (2012) <i>Changing Climate Adaptation Strategies of Boran Pastoralists in Southern Ethiopia</i> , CCAFS Working Paper No. 15., CGIAR Research Program on Climate Change, Agriculture and Food Security (CAAFS), Copenhagen:CGIAR. http://r4d.dfid.gov.uk/PDF/Outputs/CAAFS/ccafs-wp-15-adaptation_boran_pastoralists.pdf
Academic	The costs of	Adaptation cost research is still in its infancy. Global adaptation cost estimates	Fankhauser, S. (2010) 'The costs of adaptation', <i>Wiley</i>





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paper	adaptation	from more recent studies range from around \$25 billion a year to well over \$100 billion by 2015-2030. The wide range is symptomatic of the poor state of knowledge. It is likely that adaptation costs have been underestimated so far.	<i>Interdisciplinary Review Climate Change</i> , 1(1), 23-30. http://onlinelibrary.wiley.com/doi/10.1002/wcc.14/abstract
Geographical regions			
IPCC report	Part B of full WG II Report: Regional Aspects Chapter 22: Africa	Of nine climate-related key regional risks identified for Africa, eight pose medium or higher risk even with highly adapted systems. Research gaps identified include data management and development of climate change scenarios; monitoring systems to address climate change impacts in the different sectors; research and improved methodologies to quantify the impact of climate change; and socioeconomic consequences of the loss of ecosystems, of economic activities, of certain mitigation choices such as biofuels, and of adaptation strategies.	Niang, I. and Ruppel, O.C. et al. (2014) Africa (same WG II Climate Change 2014 full report provided in Section A) http://ipcc-wg2.gov/AR5/images/uploads/WGIAR5-Chap22_FINAL.pdf
IPCC report	Part B of full WG II Report: Regional Aspects Chapter 24: Asia	Warming trends and increasing temperature extremes have been observed across most of the Asian region over the past century. Extreme climate events will have an increasing impact on human health, security, livelihoods, and poverty to varying degrees across Asia. Compared to AR4, there is improved country coverage on observed and future impacts of climate change. There is also an increase in studies reflecting advances in research tools. More research is needed on impacts particularly in North, Central, and West Asia, and of vulnerability, and adaptation in urban settlements. Rice is the most studied crop but there are uncertainties in model accuracy and regional differences.	Hijioka, Y., Lin, E. and Pereira, J. at al. (2014) Asia (same report reference as Section A) http://ipcc-wg2.gov/AR5/images/uploads/WGIAR5-Chap24_FINAL.pdf
IPCC report	Part B of full WG II Report: Regional Aspects Chapter 29: Small Islands	Current and future climate-related drivers of risk for small islands during the 21st century include sea level rise, tropical cyclones, increasing air and sea surface temperatures, and changing rainfall patterns. Identified gaps include: lack of scenarios and data at the required scale for small islands; difficulties in detecting and attributing past impacts on small islands to climate change; need for climate-change projections beyond temperature and sea level; analysis of heterogeneity of small island states; and lack of environmental monitoring frameworks.	Nurse, L. A. and McLean, R.F. (2014) Small Islands (same report reference as Section A) http://ipcc-wg2.gov/AR5/images/uploads/WGIAR5-Chap29_FINAL.pdf
Grey literature	Surviving Climate Change in Small Islands: A guidebook	Explains why small island states are particularly vulnerable to climate change impacts, methods of assessing vulnerability and the process of developing and implementing an adaptation strategy, including legislation, enforcement and financing. Paper assumes no prior knowledge.	Tompkins, E. L. et al. (2005) <i>Surviving Climate Change in Small Islands: A guidebook</i> , Tyndall Centre for Climate Change Research, University of East Anglia. http://www.tyndall.ac.uk/sites/default/files/surviving.pdf
Long term projections			
Met Office data	Human Dynamics of Climate Change Poster	There are two types of information included in the poster - present-day human dynamics, and projected future changes in climate and population between a present day baseline (1981-2010) and the end of the 21st century (2071-2100), not including assumption on adaptive capacity.	Met Office (2014) http://www.metoffice.gov.uk/media/pdf/j/k/HDCC_map.pdf http://www.metoffice.gov.uk/media/pdf/m/e/HDCC_map_supplementary_information.pdf