## Margaret Alston Kerri Whittenbury *Editors*

# Research, Action and Policy: Addressing the Gendered Impacts of Climate Change



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Margaret Alston • Kerri Whittenbury Editors

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#### About the Book

This book is divided into five parts; the first is an introductory chapter by Margaret Alston discussing the significance of gender in the context of climate change. The second part on climate change and gender justice includes four chapters addressing the nature of knowledge and climate science. The first chapter by Nancy Tuana interrogates knowledge in the climate change space, the hidden value judgments and priorities inherent in climate discussions and proposed actions. Israel and Sachs' chapter further develops the notion of a feminist science, arguing there are several points where feminists can usefully intervene to challenge contemporary constructions of climate science. They note that scientific epistemology results in the separation of facts from values and politics, leading to an inherent failure to address the social justice issues implicit in global responses to climate change. Their call for feminist intervention at global levels is timely.

Bell takes the discussion on theoretical constructions further, arguing for the development of post-conventional theory to link gender, social justice and the environment. She criticises current approaches as being masculinist and imperialist. She draws on several feminist theorists including Vandana Shiva to argue for a theory of earth democracy incorporating a sustainable environment. The fourth chapter in this significant part is by well-known environmental activist Elaine Enarson, who argues for climate adaptation and disaster reduction efforts to come together in one 'big tent' rather than developing as 'two solitudes', or two varied disciplinary traditions. She urges the two to 'bridge' the gap drawing on the commonality of gender justice and environmental risk reduction.

Part III interrogates climate policy from a gender perspective. The first by Lena Dominelli notes the differential impacts of climate events on the poor and marginalized. In her chapter she focuses on gender relations in climate change and disasters, highlighting the neglect of women in climate policy. Her chapter draws on her research in Sri Lanka following the 2004 tsunami. She notes the gendered inequalities inherent in donor-related aid and advocates for a more transparent focus on gender in humanitarian aid situations. She notes that a failure to do this reduces women's rights and silences their claims.

Bee, Biermann and Tsachkert's chapter reinforces this call for gender-sensitive climate policy. They draw on a rights-based framework to highlight the need for social policies that address the needs of the most vulnerable. At the same time they resist the urge to view women as 'chief victims and caretakers' arguing that women's agency be recognised. They urge gender justice and positive social protection programs in order to address inequalities and promote structural change. Fletcher's chapter takes us to Canada and links the neoliberal notion of a free trade policy with its environmental inefficiencies and, ultimately, with the gendered impacts of these policies on Canadian farm women's lives. This chapter challenges policy from a different angle, noting the environmental and gendered consequences of a particular global policy framework. Jo Clarke's chapter moves us to Australia, where she critiques the farm exit policy adopted by the Australian government in response to climate events and reduced water. She notes the gendered consequences and uncertain outcomes of this policy.

Part IV addresses gendered climate change actions. Gotelind Alber, representing GenderCC, presents the findings of a campaign focused on gender and green energy use. She notes the motivations and barriers that challenge green energy adoption and makes recommendations on ways to further motivate adoption. Lorena Aguilar notes the work of the International Union for the Conservation of Nature (IUCN) in her discussion of gender inequalities in climate impacts and the need for the empowerment of women and the recognition of the work they undertake. She calls for gender-sensitive strategies to incorporate women and provides examples from across the globe. Rachel Goldsmith, Irina Feygina and John Jost discuss the way system justification can hamper efforts to adapt to climate change. They view this as a gender issue as men are more resistant to change, perhaps because they have more to lose. They raise the complex notion of psychological barriers to adoption of more sustainable practices and urge more attention to this limiting factor.

Part V draws on research from across the globe to note the gendered impacts of climate challenges. The first by Margaret Alston discusses the gendered impacts in Australia and the Pacific region. The second by Yianna Lambrou and Sibyl Nelson discusses outcomes in rural areas of India. The third by Kerri Whittenbury raises the issue of rising gender-based violence in the context of climate events. The fourth chapter in this part by Bettina Koelle discusses a project underway in South Africa engaged in a participatory action research project designed to empower women. Tatloghari and Paris discuss the issue of gender in the context of climate events in rice growing areas of the Philippines. Naomi Godden moves the discussion to South America, where she examines outcomes in fishing villages of Peru. Reetu Sogani brings us the voices of women from the Himalayan area where ice melt is causing significant consequences for women and men in these areas. Desley Hargraves brings us a significant understanding of the issues for Australian support workers who are part of the disaster response team working in Australia and the Asia-Pacific rim.

This book represents the voices of women from every continent and from vastly different climate events and challenges. There are commonalities in the voices of women and challenges to the global community to listen to and respond to women's experiences, to empower women, to provide gender-based supports and to ensure that women are part of the decision-making team addressing this major issue of our time. We urge readers to view this work as the beginning of a new way of understanding climate change that incorporates gender justice and human rights for all. We look forward to continuing our work in this space.

Margaret Alston OAM, Director, Gender, Leadership and Social Sustainability (GLASS) Research Unit, Monash University, Melbourne, Australia. Convenor, Gender and Climate Change: Women, Research and Action Conference.

#### Preface

This book emerges from the Gender and Climate Change: Women, Research and Action Conference held at Monash University Prato Campus, in Italy in 2011. Monash University's Gender Leadership and Social Sustainability (GLASS) Research Unit convened this conference which brought together researchers, policy makers and community advocates from across the globe to discuss the latest research findings in the area of gender and climate change and to develop strategies to address differential gendered impacts. GLASS academics led by the writer, senior research fellow, Kerri Whittenbury, and several Ph.D. students working through GLASS, participated in the conference. The timing of the conference was critical in that conveners and speakers hoped that information shared at the conference can provide input for significant international fora including Conferences of Parties (COP), Commission on Status of Women (CSW) and Earth Summit.

Delegates from 24 countries and from every continent discussed, debated and analysed how climate change differentially impacts women and men. Delegates also discussed the way research can inform policy makers and encourage action that recognises and addresses these gendered impacts and opportunities of climate change. To make the conference as constructive and progressive as possible there was a strong focus on developing shared priorities and platforms for further research, policy and advocacy work.

To enable widespread global input, GLASS received significant support from AusAid (ISS program) and from the US Department of State (Secretary's Office of Global Women's Issues) to sponsor delegates from the Asia-Pacific region, African nations and South America. A global representation was critical to facilitating a comprehensive discussion and reinforced that despite diversity, there are common experiences and similar ideas and priorities.

The conference included nearly 60 paper presentations across the three themes of:

- · Gendered impacts of climate change
- · Law, policy and frameworks
- Advocacy and innovation

The final afternoon of the conference was devoted to collaborative workshops to determine key priorities for research and action. The following outcomes statement is a summary of the workshops (GLASS 2011).

Delegates affirmed that climate change provides a unique opportunity for change – change that incorporates and facilitates gender equality and women's empowerment in programs, research, action and advocacy.

Critical issues requiring action that emerged from the conference are:

- That our understanding of climate change be reframed to incorporate analyses of gender and particular impacts on women
- That gender be viewed as a critical factor in climate change analysis, policy and planning
- That a technological/scientific focus alone does not address critical issues facing women and their families. The inclusion of a human rights, social justice and gender framework is essential for climate change analysis
- That vulnerable countries and groups within countries be supported to positively adapt to climate change
- That issues of food and water security encompass an analysis of impact on women that the global community mandate for reduced emissions
- That green technologies be resourced and developed and the adoption of these at community levels be facilitated
- That the development of green technologies provides a unique space for women's empowerment and involvement
- That women be viewed not just as victims but as equal partners with men facing the challenges of climate change
- That women be given equal representation on decision-making bodies and that these bodies address social and community impacts
- That women's local knowledge be valued and incorporated in climate change actions and research
- That research gaps be addressed in areas such as forced migration resulting from climate change; climate change and cities; managing technological solutions; renewable energies and that this research have a gendered lens
- That all research and policies include gender-disaggregated data and analysis

#### **About the Authors/Editors**

Margaret Alston OAM Professor Margaret Alston, B. Soc. Stud (Syd), Dip. Comp. Applic. (RMIHE), M. Litt. (UNE), Ph.D. (UNSW), assumed duties as Head of Department of Social Work at Monash University in July 2008. She has established the Gender, Leadership and Social Sustainability (GLASS) research unit at Monash which now has 16 Ph.D. students and two post-doctoral appointees. Prior to commencing at Monash she was Professor of Social Work and Human Services and Director of the Centre for Rural Social Research at Charles Sturt University. She is an Honorary Professor at the University of Sydney and Charles Sturt University. She has served on a number of Boards including the Foundation for Australian Agricultural Women, Family Services Council, Family and Community Services Department in Canberra and the National Women's Advisory Group overseeing the Rural Women's Policy Unit in the Department of Primary Industries and Energy. She is Chair of the Australian Council of Heads of Schools of Social Work and is an advisor to the socio-economic working group for the Murray-Darling Basin Authority and the Health Workforce Australia working group on teaching. In 2008 she was appointed to the Australian delegation attending the commission for the Status of Women meeting in New York. In 2009, 2007 and 2003 she spent time as a visiting expert in the Gender Division of the United Nations Food and Agricultural Organisation in Rome. She has published widely in the field of rural gender and rural social issues. She has also acted as a gender expert for UN-Habitat in Kenya in 2009. She is currently researching the gendered impacts of climate change in Australia, the Pacific, Bangladesh and the Philippines. She has been a keynote speaker at a number of national and international conferences over the last several years and is sought out for media commentary on the rural social condition, and on climate change and gender issues.

She received her Medal of the Order of Australia in 2010 for services to social work and the advancement of women, particularly in rural areas.

**Kerri Whittenbury** Kerri Whittenbury, Ph.D., M. Litt., B.A., is Senior Research Fellow in the Gender, Leadership and Social Sustainability (GLASS) research unit, Monash University, Melbourne Australia. Kerri is a sociologist with research interests in gender, rural communities, rural and farm families, irrigation communities and gender and climate change. Her recent research projects include: social impacts of drought and declining water in the Murray-Darling Basin – funded by Australian Government and Monash University; impacts of declining water on women's health and well-being – funded by Monash University; and influences on irrigators' decisions in an environment of reduced water availability: the importance of subjective knowledge – funded by the Cooperative Research Centre for Irrigation Futures. She is currently researching gendered impacts of climate variability and climate events in Bangladesh, funded by a partnership between Oxfam Australia and Monash University.

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## Part I Introducing Gender and Climate Change

#### **Chapter 1 Introducing Gender and Climate Change: Research, Policy and Action**

Margaret Alston

**Abstract** In the context of a potentially global climate crisis, does gender matter? This book sets out to answer this question, drawing together research from across the globe to demonstrate that in areas as diverse as Australia, Canada, Africa, Asia and Europe, there is emerging evidence that gender does matter. It matters because the experiences of women and men during and after times of climate crisis are different – a difference based on cultural norms and practices, on work roles and access to resources, on safety and security and on different levels of vulnerability resulting from a combination of these factors. We are pleased to present this book, a product of our Gender and Climate Change conference held in Prato, Italy, in 2011. This conference was organized and auspiced by the Gender, Leadership and Social Sustainability (GLASS) research unit at Monash University, Australia. The focus of the book is on research, policy and action – what we know, what we need to know, how we might formally respond in order that support for the most vulnerable is forthcoming and that actions taken are transparent and focused on increasing the resilience of all affected by climate change.

Keywords Gender • Climate change • Action • Policy research • Security

In the context of a potentially global climate crisis, does gender matter? This book sets out to answer this question, drawing together research from across the globe to demonstrate that in areas as diverse as Australia, Canada, Africa, Asia and Europe, there is emerging evidence that gender does matter. It matters because the experiences of women and men during and after times of climate crisis are different – a difference based on cultural norms and practices, on work roles and

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access to resources, on safety and security and on different levels of vulnerability resulting from a combination of these factors. We are pleased to present this book, a product of our Gender and Climate Change conference held in Prato, Italy, in 2011. This conference was organized and auspiced by the Gender, Leadership and Social Sustainability (GLASS) research unit at Monash University, Australia. The focus of the book is on research, policy and action – what we know, what we need to know, how we might formally respond in order that support for the most vulnerable is forthcoming and that actions taken are transparent and focused on increasing the resilience of all affected by climate change.

Three decades ago very few would have recognized, understood or left unchallenged the emerging discussion of potentially permanent climate change. Yet, for much of the latter part of the twentieth century and into the new century scientists have been coming to grips with data suggesting human activities are having potentially devastating consequences on the global climate. Because of the major economic and geopolitical fallout, significant divisions have emerged at a number of levels including at a global level between developed and developing nations and at a community level over who is responsible and what actions should be taken.

Perhaps the most vitriolic division is between, firstly, those who are convinced that critical interventions are required to address our rapidly changing climate and, secondly, those who remain skeptical about the likelihood of ongoing and permanent climate change. This latter group includes those who view potential changes as part of normal cycles of weather changes and, therefore, as requiring no additional actions. The two opposing positions are sometimes pursued with a fervor bordering on zealotry – a variation of climate fundamentalism that divides skeptics and true believers into opposing, and sharply differentiated camps. It is hardly surprising then that there has been an over-emphasis on techno-scientific data to prove or disprove climate change and to develop scientific and technologically based solutions. This has resulted in far less attention being given to the social and community impacts of highly variable weather patterns and limited attention to gendered consequences.

Yet, regardless of the scientific veracity of the evidence, and the fundamentalism inherent in the debate, it is clear that climate variation is having major consequences for people across the world and, in particular, for the poorest of the poor, the majority of whom are women. Over the last three decades no continent has been spared its share of climate events and these have led to high levels of mortality and morbidity and major social dislocation.

The United Nations Secretary-General's High-level Panel on Global Sustainability (2012: 13) reports that global population will increase from seven billion to almost nine billion by 2040, and that by 2030, the world will need at least 50% more food, 45% more energy and 30% more water at a time when climate variability is creating uncertainty around food and water security. Further the number of undernourished people grew by 20 million between 2000 and 2008; 884 million people lack access to clean water; and 2.6 billion people do not have basic sanitation. This Panel (2012: 13) notes: The current global development model is unsustainable. We can no longer assume that our collective actions will not trigger tipping points as environmental thresholds are breached, risking irreversible damage to both ecosystems and human communities. At the same time, such thresholds should not be used to impose arbitrary growth ceilings on developing countries seeking to lift their people out of poverty. Indeed, if we fail to resolve the sustainable development dilemma, we run the risk of condemning up to 3 billion members of our human family to a life of endemic poverty. Neither of these outcomes is acceptable, and we must find a new way forward.

We must find a way forward and this must include an understanding of significant gendered consequences; that climate change has critical consequences for women and men; and that women are particularly vulnerable to poverty, insecurity and violence during and after climate events.

#### **Climate Change**

Climate change is defined as 'a change of climate which is attributed directly or indirectly to human activity that alters the composition of the global atmosphere and which is in addition to natural climate variability observed over comparable time periods' (UNFCC 2011). Climate change refers to the build up of greenhouse gases in the atmosphere as a result of human-induced activities, which causes temperature rises, melting of the ice caps and sea level rises. Climate change events include both slow-onset (or incremental) events such as droughts, desertification, temperature and sea level rises, and catastrophic or disaster events such as floods, bushfires, mudslides, cyclones, and storm surges. Global warming has major consequences for the planet and is impacting on agricultural production cycles through incremental and catastrophic climate events thus threatening food and water security.

The contestation over whether climate change is reversible has led to measures being enacted in various countries to reduce emissions. However global efforts to introduce binding targets on greenhouse emissions have to date been unsuccessful. Yet it appears that the window of opportunity to act is rapidly closing. Hence climate change and climate disasters have been referred to as 'the greatest moral challenge of our time' (Rudd 2007) because the need for action is evident but the process to gain global cooperation has been painfully slow.

Climate variability is not just an environmental problem; nor is it happening in a vacuum. As Terry (2009) notes, it is one of a number of trends including globalisation, rising world population, conflict, economic crisis and unpredictable policies that are leading to food and water insecurity across the globe. In 2008, Britain's Chief Scientific Adviser, Professor John Beddington, described food and water insecurity resulting from climate change as 'the elephant in the room' (Randerson 2008). Climate change must be viewed in a wider global context that includes additional factors that are increasing global uncertainty.

#### **Global Climate Politics**

International efforts to address climate change formally began in 1988 with the establishment of the Intergovernmental Panel on Climate Change (IPCC) – a joint collaboration between the World Meteorological Organisation (WMO) and the United Nations Environment Program (UNEP). Its mission is to assess 'the scientific, technical and socioeconomic information relevant for the risk of human-induced climate change' (IPCC 2012a, b:1). This body works with governments and experts to produce reports on the state of climate change. The United Nations General Assembly launched the first negotiations around climate change in 1990 in what has subsequently been referred to as the United Nations Framework Convention on Climate Change (UNFCCC). The first assessment report of the IPCC served as the basis for the negotiations within the UNFCCC. Optimistically this negotiation opened with a global target of 20% reduction of greenhouse gas emissions.

The UNFCCC was adopted in 1992 in preparation for the United Nations Environment and Development meeting in Rio de Janeiro, Brazil, (the Earth Summit) and officially came into force in 1994. Other outcomes of the Earth Summit, including the Agenda 21 and the Rio Declaration, had transparent attention to gender – it was only the UNFCCC, maintaining its scientific lens, which failed to adopt a strong gender focus (Hemmati and Rohr 2009).

The first annual conference of the parties (COP) to the UNFCCC was held in 1995 in Berlin. Ambitiously it was hoped that the meeting would strengthen global commitment to addressing climate change. At the third COP held in Kyoto in 1997, the Kyoto Protocol was adopted and signatories agreed to work to develop binding targets for the reduction of greenhouse gases (UNFCCC nd). At this point the target for reductions had been lowered from 20 to 5% and still caused significant conflict and no binding agreement.

At the 1997 meeting an international women's forum – Solidarity in the Greenhouse – was held and attracted 200 women from 25 countries. This resulted in a letter to the Chair of the UNFCCC asking that gender be recognized in negotiations. Subsequent COPs included minor events addressing gender but it wasn't until COP 13 that a major breakthrough occurred (Hemmati and Rohr 2009). COP 13, held in Bali, produced the Bali Action Plan (UNFCCC 2012) and it was at this meeting that feminists first expressed their public concerns about the lack of attention to gendered consequences. Disquiet had first surfaced at COP 9 in Milan when an informal meeting of concerned delegates formed a network to pursue gender matters. This group transformed into GenderCC –Women for Climate Justice and was internationally recognized at COP 13 in Bali when they produced several position papers addressing the likely gendered impacts of climate change. The slogan of GenderCC at subsequent COPs and through the production of informed reports (see for example Alber 2011) keeps gender in focus (Gender 2012).

Despite nearly 200 nations signing the Kyoto Protocol, subsequent COPs have struggled with finding ways to introduce binding agreements. This annual failure to achieve global cooperation culminated in a concerted effort at COP 15 held in Copenhagen in 2010. At this COP, 115 world leaders came together to develop a global binding agreement. More than 40,000 people attended this meeting hoping at last to see a fruitful outcome. However tensions emerged between developed nations and powerhouses and developing nations like China and India who argued they should be given some leeway to develop their industrial base before committing to binding reduction targets. Critically affected smaller nations such as the Pacific Island communities urged significant global reductions and their continued frustration at the lack of action. The outcome was a face saving Copenhagen Accord that was not binding, merely committing countries to reducing emissions and revisiting the issue in 2015.

Copenhagen failed to achieve the long-hoped for conclusion to the need for binding international targets to reduce greenhouse gas emissions. However there was agreement that the global community should act to ensure that global temperatures do not rise more than 2°C and that a review of this target would occur in 2015 (UNFCCC 2009). It appears that the global community cannot or will not attend to the need for reductions and therefore the future looks particularly grim. Adopting binding greenhouse emissions targets is essential to protecting people and communities across the planet. Lack of agreement, an increasing global population and threatened food security suggests that the twenty-first century will be an era of global tension and crisis relating to food and water security.

The IPCC continues to produce reports to inform the COP process. The first report in 1990 noted the likelihood of irreversible climate change and the need for action; the second in 1995 to inform the Kyoto Protocol noted that, on the balance of evidence, climate change is human-induced; the third in 2001 noted that climate change was contributing to sea level rises and melting of the ice caps; the fourth report in 2007 noted unequivocally that the earth is warming, that air and ocean temperatures are rising, that melting of the ice caps is widespread and that sea levels are rising; the fifth report is underway and will be released in 2014 (IPCC 2012a, b).

In recognition of its work, the IPCC was awarded the Nobel Peace prize in 2007 (shared with former US politician Al Gore)

for their efforts to build up and disseminate greater knowledge about man-made climate change, and to lay the foundations for the measures that are needed to counteract such change (Nobel Prize 2007).

There is no doubt that the work of the IPCC has been instrumental in achieving global awareness of climate change and the need for action. The push by GenderCC and other organisations and individuals to ensure that the IPCC reports include attention to gender is evident in the fourth report and in preparatory work for the fifth report. It is critical that a gender focus be introduced to the global understanding of climate change, not only because of the innate need to introduce a human rights perspective, but also because the weight of evidence suggests that there are differential gendered impacts. Additionally it is critical because