

Mid-term evaluation of gender and social inclusion in the CARIAA consortia

Noémi GONDA

April 2017

Executive Summary

The aim of this mid-term evaluation on gender and equity is to assess progress towards the integration of gender and social inclusion related aspects in CARIAA's activities and provide recommendations for the remaining program period.

The scope of this assessment was proposed by CARIAA and consisted of reviewing 15 peer-reviewed and non-peer-reviewed papers. In addition, 19 interviews were held with key program members to understand the work of the consortia and how gender and social inclusion concerns are being addressed in the papers as well as in the research design and research process underpinning them. This evaluation is essentially focussed on the research side (outputs and process) rather than how research is put into use through stakeholder engagement.

Two thirds of the papers reviewed were rated 'acceptable' or above 'acceptable' based on a gender assessment scale used to classify research outputs from gender-blind to gender transformative. A refined gender assessment scale was established based on whether or not the paper adheres to the following factors: (i) adopts an intersectional perspective; (ii) builds on the most recent (gender-sensitive) literature on vulnerability, resilience and adaptation; (iii) addresses masculinities; (iv) generates gender-disaggregated data; (v) provides discussions on gender across scales, and; (vi) mobilizes gender and socially sensitive research methods.

The refined gender-assessment scale, developed for this review, can serve as a basis for discussions and can be adapted to local research contexts. It can help move the 'minimum principles' for the integration of gender and equity, currently set as an objective of the gender and equity approach, towards a more complex and innovative gender-transformative research approach.

Concerning the research process, several challenges related to capacities, organizational issues as well as conceptual approaches are highlighted. First, there is a need for a renewed debate in CARIAA focused on ensuring that the gender and equity perspective is not lost among other priorities when implementing research 'on the ground' and/or research not 'specifically' gender and equity focussed. Second, it is stressed that the 'minimum principles' on gender and equity should not be kept to the minimum; rather, gender transformative research should be supported and encouraged. The latter entails that there is a need to build more effectively on existing gender and climate change adaptation research and contribute to filling the gaps in the literature. Only then, will it be possible to generate CARIAA-wide lessons learned on gender and equity that can be shared. CARIAA's gender and equity working group has an important role to play, especially when it comes to fostering innovation and supporting the exchange of methodologies. Finally, there is also a need to refine internal monitoring and evaluation tools on the integration of gender and equity, strengthen cross-consortia coordination, and support learning on gender and equity for 'non-gender' researchers.

List of Acronyms

ASSAR	Adaptation at Scale in Semi-Arid Regions
CARIAA	Collaborative Adaptation Research Initiative in Africa and Asia
DECCMA	Deltas, Vulnerability & Climate Change: Migration & Adaptation
DFID	Department for International Development
GDP	Gross Domestic Product
GEG	Gender and Equity Group
HI-AWARE	Himalayan Adaptation, Water and Resilience (HI-AWARE) Research on Glacier and Snowpack Dependent River Basins for Improving Livelihoods
ICIMOD	International Centre for Integrated Mountain Development
IDRC	International Development Research Center
IPCC	Intergovernmental Panel on Climate Change
OSF	Opportunities and Synergies Fund
PI	Principal Investigator
PRISE	Pathway to Resilience in Semi-Arid Economies
RiU	Research Into Use
SALs	Semi-Arid Lands
SDG	Sustainable Development Goals
VA	Vulnerability Assessment

Content

Executive Summary	2
List of Acronyms	iii
Content	iv
List of Tables.....	v
List of Charts	v
List of Appendices	v
1. Gender and equity in the aims of CARIAA and the consortia	1
CARIAA.....	1
ASSAR: Gender and climate vulnerabilities	2
DECCMA: Gender and climate migrations	3
HI-AWARE: Gender and livelihoods in the context of climate change.....	5
PRISE: Gender and economic development in the context of climate change....	7
2. Purpose and scope of the evaluation	9
3. Evaluation methodology	9
Sampling of the papers and review method.....	9
Sampling	9
Analysis	12
Interviewing	12
Methodological limitations	12
3. Conceptual underpinnings of the evaluation	13
Gender	13
Intersectionality	13
Gender and climate change	14
4. Findings with evidences	14
4.1. Research outputs	14
Rating of the reviewed papers: two thirds above acceptable	14
Refined gender assessment scale	15
Towards gender transformative research	18
Conclusion	20
4.2. Research process	21
4.2.1. A good understanding of gender and equity at the management level that does not always ‘trickle down’ or ‘spread around’	21
4.2.2. Existence of minimum principles on gender and equity that are sometimes kept to the ‘minimum’	22
4.2.3. Need to build better on existing research on gender and climate change adaptation and fill the gaps in the literature	23
4.2.4. Need to generate CARIAA- wide lessons learnt on gender and equity to share with the world.....	24
4.2.5. Need to clarify the role of the gender and equity working group in fostering innovation and supporting the exchange of methodological knowledge	25
4.2. 6. Need to refine internal monitoring and evaluation tools on the integration of gender and equity.....	26
4.2.7. Need to strengthen cross-consortia coordination	27
4.2.8. Need to support learning and mentoring on gender and equity	28
General conclusion	29
Appendices	31

References	53
------------------	----

List of Tables

Table 1. Summary of sampling method and result	10
Table 2. Revised gender assessment framework	16
Table 3. Characteristics of papers presenting gender transformative research associated with climate change adaptation.	Error! Bookmark not defined.
Table 4. List of interviews	48
Table 5. Work schedule	52

List of Charts

Chart 1. Rating of the reviewed papers against the gender assessment scale.....	15
---	----

List of Appendices

Appendix 1. Sampling of the papers.....	32
Appendix 2. Gender assessment scale	37
Appendix 3: Analysis of the reviewed papers against the gender assessment scale (from ‘gender-blind’ to ‘good’)	39
Appendix 4. List of interviews.....	48
Appendix 5. Rating of the papers against the gender assessment scale.....	50
Appendix 6. Consultancy Work Schedule	52

1. Gender and equity in the aims of CARIAA and the consortia

This part is essentially based on information found in CARIAA and consortia documents as well as in online resources. It is completed by information provided by the interviewees.

CARIAA

The Collaborative Adaptation Research Initiative in Africa and Asia (CARIAA) supported by the International Development Research Center (IDRC) and UK's Department for International Development (DFID) aims to build the resilience of vulnerable populations in three climate change hot spots:

- **Semi-arid regions of Africa and South and Central Asia;**
- **Deltas of Africa and South Asia, and;**
- **Glacier and snow-pack dependent river basins in South Asia.**

To this end, CARIAA supports collaborative research to inform policy and practice on climate change adaptation around four consortia:

- **ASSAR: Adaptation at Scale in Semi-Arid Regions;**
- **DECCMA: Deltas, Vulnerability & Climate Change: Migration & Adaptation;**
- **HI-AWARE: Himalayan Adaptation, Water and Resilience Research on Glacier and Snowpack Dependent River Basins for Improving Livelihoods, and;**
- **PRISE: Pathway to Resilience in Semi-Arid Economies.**

The program will run until 2019 and is based on a consortium model that provides opportunities for sharing knowledge and experience across disciplines, sectors, countries, and continents. Working groups were formed to examine different crosscutting themes which includes gender and equity with the following objectives:

CARIAA aims for innovation in gender sensitive and responsive adaptation that is community- based and has strong research uptake. At the program level, the goal is to develop a general framework to mainstream gender concerns across the four consortia. The gender and equity working group collaborates on developing a common approach that meets a minimum acceptable standard for gender research across consortia.

Gender responsiveness is integral to CARIAA and its research and uptake goals. The program is accountable to report on the level of consideration of gender as a key element of social inclusion, from research design to output production. The program requires evidence in procedures for data collection and analysis and in research products that the project in question was aware of and responsive to the needs of and issues affecting women and men.

The program has a gender assessment framework and monitoring scale (see **Appendix 2**) that is based on gender criteria in IDRC's Research Quality (RQ+) framework. The program also integrates standards and procedures for monitoring interim progress on gender into its Research Quality Assurance Protocols. In addition to expert assessments planned at mid-term and at the end of the program, CARIAA's Gender and Equity Working Group (GEG) is mandated to monitor progress against the agreed standards and milestones on an ongoing basis.

ASSAR: Gender and climate vulnerabilities

"More than a technical exercise, [vulnerability assessments] should be viewed as an opportunity to challenge cultural stereotypes that reinforce women's marginalisation and vulnerability to shocks and stresses." (Ravon 2014; in Morchain et al. 2015, 493)

ASSAR aims to deepen the understanding of the barriers and enablers for effective, medium-term adaptation within the dynamic and socially differentiated semi-arid regions of Africa and Asia. ASSAR seeks to generate new knowledge about how adaptation processes can be modified or improved upon to achieve more widespread, equitable and sustained adaptation. ASSAR is particularly interested in understanding people's vulnerability and, in doing so, exploring the dynamic structural and relational aspects linking vulnerability to social difference, governance and ecosystem services.

The dynamics of gender roles and relations are a central theme throughout ASSAR's approach, which is mainly research oriented. Focal research themes in each region are: agro-intensification in West Africa, land and water access in East and Southern Africa, and land use land cover and livelihood changes in India (ASSAR 2017).

Concerning gender and climate vulnerabilities, ASSAR highlights five key aspects for the semi-arid regions of Africa and Asia where the program is intervening:

- **Gender is rarely taken into account but when it is, it is often understood as women** (seen as a homogeneous group). The intersectional perspective, key to highlighting differential vulnerabilities, is hardly ever taken into account in the debate (ASSAR 2016);
- **Masculinities and male activities are rarely given attention. This is seen as problematic because equitable policy-making needs to identify the most vulnerable based on an intersectional perspective that should include concerns for masculinities** (ASSAR 2016);
- **Adaptation needs to be seen in a multidimensional and relational way.** Non-climatic drivers largely influence climate vulnerabilities. Thus gender inequality can become an important driver of vulnerability (ASSAR 2016);
- **The evolution of gender roles and responsibilities can enhance cooperation and opportunities for adaptation** (ASSAR 2016);
- **Both women and men need access to information on climate change and adaptation** (ASSAR 2016).

The 2015 publication on vulnerability assessments written under the lead authorship of an ASSAR co-principal investigator (Morchain et al. 2015) describes how ASSAR envisions gender-transformative vulnerability assessments (VAs). The following aspects are highlighted:

- **Listening to women's voices;**
- **Promoting women's empowerment** through active participation and by raising their self-esteem, reducing their forced economic migration, increasing their technical skills and thus their position in society, giving them the possibility to organize (organization may provide emotional support);
- **Involving women's organizations in VAs** and valuing them as legitimate actors in disaster reduction and climate change adaptation;
- **Engaging men in gender-sensitive VAs, rethink masculinities with adequate facilitation;**
- **Building capacities through partnership with women's organizations** (the ones who are expert in gender and who are knowers of gender dynamics at a local level);
- **Combining gender mainstreaming and transformational gender agendas;**
- **Combining approaches to gender justice and development** because the synergies between gender equality narratives and resilience are not automatic, and they are often ignored in the climate change debate (or remain superficial) (Morchain et al. 2015).

Thus, VAs are tools that can and must be used with the aims of transformation and empowerment. Yet, much work is needed in that direction.

The work of hired gender specialists providing consulting services and gender focal points, with gender training, guarantee the ongoing support for the effective integration of gender and equity within research themes. According to an interviewee, the gender lead person at ASSAR is perseverant "if it wasn't for her, sometimes the other people [the gender focal points] would have to be chased."

A regional diagnostic study on gender set the base for the work on gender and equity. The study (Rao et al. in review), which is in the publication pipeline, has allowed for focussing the discussions on gender and equity within ASSAR on intra-household dynamics and vulnerabilities.

DECCMA: Gender and climate migrations

"The question, therefore, has been more how to do this [including the gender perspective in DECCMA's research], rather than what the question should be."
(Vincent and Cull 2015, 10)

DECCMA seeks to analyze the impacts of climate change and other environmental drivers across contrasting deltas in Africa and Asia by undertaking the following tasks:

- **Evaluate the effectiveness of adaptation options in deltas;**
- **Assess migration as an adaptation strategy in deltaic environments under a changing climate, and;**
- **Deliver policy support to create the conditions for sustainable gender-sensitive adaptation.**

DECCMA defines its programmatic objectives in the following way:

- **Understand the governance mechanisms that promote or hinder migration of men and women in deltas;**
- **Identify climate change impact hotspots in deltas where vulnerability will grow and adaptation will be needed;**
- **Understand the conditions that promote migration and its outcomes, as well as gender-specific adaptation options for trapped populations, via surveys;**
- **Understand how climate-change-driven global and national macro-economic processes impact on migration of men and women in deltas;**
- **Produce an integrated systems-based bio-physical and socio-economic model to investigate potential future gendered migration under climate change;**
- **Conceptualize and evaluate migration within a wide suite of potential adaptation options at both the household and delta level;**
- **Identify feasible and desirable adaptation options and support implementation of stakeholder led gender-sensitive adaptation policy choices.**

The working paper entitled *DECCMA's approach to the incorporation of gender* by the consortium's two gender consultants (Vincent and Cull 2015) provides an overview of DECCMA's gender perspective from research design to result restitution. DECCMA's understanding of gender-sensitiveness includes adopting an intersectional perspective, avoiding a homogeneous view of men and women, seeking equity rather than equality and recurring to positive discrimination if necessary. The following two main lenses inform DECCMA's gender approach:

- **Gender and migration, where migration is an adaptation strategy in poor communities.**

Vincent and Cull (2015) stress that while it seems that more men are migrating, it does not systematically lead to empowering the women that are left behind. Indeed, women who are left behind may lose power and leadership. Additionally, women who migrate may do it in worse conditions than men. Overall, they highlight that more research is needed linking gender and migrations in the context of climate change.

- **Gender and adaptation, where adaptation is a way to reduce vulnerability and contribute to adaptive development processes.**

In DECCMA's view, adaptation should be mainstreamed rather than appearing as an endpoint. Vincent and Cull (2015) stress the need for an intersectional lens and to identify research gaps such as the link between vulnerability and ethnicity. Moreover, they cite the work of political ecologists on the role of (gendered) institutions in potentially (re)producing gender inequalities. Two enabling factors for adaptation are highlighted: (i) access to social protection for the most vulnerable, and (ii) access to climate services in a gender specific way.

To guarantee a gender-sensitive research process, DECCMA promotes a series of measures:

- **Commitment by researchers to disaggregate data by sex,**
- **Ensuring an equitable research process in which different voices can be heard, different opinions can be recorded, in which there is flexibility in the timing of the activities, special facilitating methods and facilitating persons are mobilized, activities are organized by sex if necessary, researchers are able to highlight in their analysis which comments are made by men and which comments are made by women, among other things.**

The work of hired gender specialist consultant and gender focal people in each country, who are regularly in contact with the gender consultant, guarantees the ongoing support for the effective integration of gender and equity within research components. These staff members who oversee gender and equity review areas that could be central for gender and equity sensitiveness as opposed to doing the work. According to an interviewee: “it is a regular but light touch monitoring” on gender and equity.

Indeed, DECCMA chose not to have gender as a separate theme but to mainstream gender and equity in all its research activities. One of the interviewees formulated this approach in the following way: “in DECCMA, gender is part of the air we breathe”. Another person explained the same idea as follows: “we don’t even have to say it is gender sensitive, we just know it is”. Indeed, gender is mainstreamed, incorporated at all levels: in literature reviews, policies, in interview protocols, in training methodologies.

HI-AWARE: Gender and livelihoods in the context of climate change

We conceptualize manifestations of gendered vulnerabilities in the climate change context as an interplay of external factors such as market forces, consumerism, urbanization, globalization, infrastructure development and technological intervention in a place and time combined with internal geo-political-socioeconomic factors of social structure, gender structure, geography, economy and political and decision making processes and institution, which alter or influence the livelihood options of women and men, determining the capability to respond to risk posed by climatic and socioeconomic stressors (HI-AWARE 2017).

HI-AWARE aims to enhance the adaptive capacities and climate resilience of the poor and vulnerable women, men, and children living in the mountains and flood plains of the Indus, Ganges, and Brahmaputra river basins. It seeks to do this through the development of robust evidence to inform people-centered and gender-inclusive climate change adaptation policies and practices for improving livelihoods.

HI-AWARE seeks to:

- **Generate scientific knowledge on the biophysical, socio-economic, gender, and governance conditions and drivers that lead to people’s and region’s being vulnerable to the effects of climate change;**
- **Develop robust evidence to improve understanding of the potential of adaptation approaches and practices, with an explicit focus on gender and livelihoods;**
- **Develop stakeholder-driven adaptation pathways based on the up- and out-scaling of institutional and on-the-ground adaptation innovations;**

- **Promote the uptake of knowledge and adaptation practices at various scales by decision-makers and citizens, and;**
- **Strengthen the interdisciplinary expertise of researchers, students and related science and policy stakeholder networks.**

The different research components focus on:

- **Biophysical drivers and conditions that lead to people's being vulnerable to climate change;**
- **Socio-economic, governance and gender drivers and conditions leading to vulnerability to climate change;**
- **Monitoring and assessing climate change adaptation practices by reviewing existing climate change adaptation practices and policies, both planned and autonomous; and developing new approaches to conduct inclusive socio-economic cost-benefit analysis of adaptation practices and policies.**
- **Identifying and analyzing critical adaptation moments and adaptation turning points;**
- **Exploring adaptation pathways.**

The research component that is most directly focussed on gender and equity is *Socio-economic, governance and gender drivers and conditions leading to vulnerability to climate change* in the list above.

Based on the reviewed HI-AWARE publications (see **Table 1** for the list of reviewed papers) as well as the gendered vulnerability framework and the gendered vulnerability assessment tools developed by the project, HI-AWARE's approach to gender and equity has the following important characteristics:

- **Use of an intersectional perspective:** Interviewing both men and women, young and old, people from different caste, etc. and discussing potentially oppressive and privileging factors such as gender, ethnicity but also geographical location (and how these factors may intersect among them);
- **Combination of an approach to gendered vulnerability with an adapted version of the sustainable livelihoods framework¹:** To analyze gendered impacts of climate change on livelihoods;
- **Combine quantitative research methods with qualitative and especially ethnographic research methods to give voice to those who are seldom listened to:** The use of individual narratives and case studies to highlight personal experiences of vulnerability and adaptation;
- **Use of a self-reflexive socially sensitive approach to research** with the involvement of anthropologists;
- **Providing gender-disaggregated data when available.**

¹ The sustainable livelihoods framework outlines five "capitals" - human capital, financial capital, social capital, natural capital and physical capital – for livelihoods. In HI-AWARE's framework, there is an additional one: political capital.

The work of hired gender lead specialist integrated in ICIMOD and gender focal people in partner institutions, who are in regular contact with the gender lead guarantees the ongoing support for the effective integration of gender and equity within research components. Gender training is also provided for “non-gender” people.

PRISE: Gender and economic development in the context of climate change

PRISE seeks to generate knowledge about how economic development in semi-arid regions can be made more equitable and resilient to climate change to deepen decision-makers’ understanding of the threats and opportunities that semi-arid economies face in relation to climate change.

In PRISE’s view, women and other marginalized groups face both formal and informal barriers in accessing and controlling resources, particularly land, and experience challenges in accessing state services and negotiating with markets. However, women are also seen as powerful drivers of economic growth and entrepreneurship, and unlocking the potential of women is key to economic development. Gender considerations are viewed as core to successful adaptation: women and men are affected by climate change differently for a variety of reasons, and their access to adaptation options and economic development opportunities differs. Decision makers, whether they be private sector, government or academia, must consider these barriers and the potential that women and other marginalized groups hold in their policy and practice (PRISE 2017).

The different research areas are:

- **Migration futures in Asia and Africa:**

Climate change and climate-resilient economic development. This research project examines the potential links between climate change and variability, and internal migration patterns and the economy; and the role of climate change on internal migration patterns, and their impact on economic development, poverty, conflicts, urbanisation and adaptation capacities;

- **Migration, remittances, adaptation and resilience in arid and semi-arid regions of Senegal and Tajikistan:**

The project analyzes how remittances from migrants can be more effectively channelled and re-invested in ways that will make a real impact to people’s resilience in semi-arid lands of Senegal and Tajikistan;

- **Harnessing opportunities for climate-resilient economic development in semi-arid lands: adaptation options in key sectors.**

This project seeks to identify the potential for economic transformation and diversification for business and private sectors in semi-arid lands²; Enabling

² There may be a link here with SDG5 (economic empowerment of women) but it should be taken with caution as economic empowerment has not always been emancipatory for women.

environment for private sector/multi-stakeholder action to strengthen resilience to climate change.

The project aims at deepening the understanding of how private sector actors can contribute to, and become key agents of, change for inclusive climate-resilient development; how businesses can adapt and take advantage of new opportunities created by the dynamics resulting from climate change and how the public sector and multi-stakeholder partnerships can incentivise this process;

- **Property rights, investments and economic development in the context of climate change in semi-arid lands.**

This project assesses the influence of property rights on people's ability to adapt to climate change impacts and on climate-resilient economic development, and the joint effects of climate risks and land tenure insecurity on people's economic welfare;

- **Cross-boundary multi-scale governance of semi-arid lands: implications for climate resilience and economic development.**

This project analyzes the role of various institutional, economic and socio-political drivers in influencing the design and delivery of climate policy and influencing adaptive capacities at multiple scales. It also explores the mechanisms through which specific communities respond to climate-related shocks and stressors.

- **Water governance in semi-arid lands: political and economic insights for the management of variability and extremes in a changing climate.**

This project analyzes how institutions and decision-making respond to crises of too much and too little water, as well as oscillations between extremes, by using a 'political economy' lens.

The internal document *Opportunities for integrating gender and social equity issues into the Pathways to Resilience in Semi-Arid Economies* commissioned by PRISE in its inception phase and written by Katherine Vincent in 2015 (Vincent 2015) as well as three short articles focusing on gender published in Agripade's special issue on PRISE projects in October 2016 give an idea of its political economy approach that sees women as economic agents, prone to develop entrepreneurship. In general, they are considered as having activities that are more vulnerable to climate change than men due to their lack of access to land and other production means such as capital and information (Diop 2016). PRISE sees women's economic and productive associations as having the potential to mitigate the effects of climate change on women's climate related economic activities (i.e. in the milk production value chain for example) (Ndiaye, Diop, and Bèye 2016).

Gender and equity has been identified a cross cutting theme across all priority research areas in PRISE. The consortium recognizes that gender and social equality issues must be integrated into all research dimensions including stakeholder engagement processes (the later being central for PRISE) to ensure climate-resilient development in semi-arid economies.

There are two gender focal points (one for English and one for French speaking countries) who have been providing peer-support for the integration of gender and equity in research since July 2016. An internal mid-term review on gender and equity is in process and aims to understand the specific needs of PRISE members for the integration of gender and equity.

2. Purpose and scope of the evaluation

The mid-term evaluation of CARIAA is an independent and formative evaluation to determine how CARIAA's body of research is addressing gender and social inclusion from research design to output production. This evaluation assesses progress thus far and identifies opportunities for improvement in the remaining lifespan of the program.

The scope of this assessment, proposed by CARIAA, consisted of reviewing 15 peer-reviewed and non-peer reviewed papers. In addition, Skype interviews were held with key program members to understand the work of the consortia and how gender and social inclusion concerns are addressed in the papers as well as in the research design, and research process that underpinned them. The primary users of this evaluation will be the Program Management team, the consortia Principal Investigators (PI) and the Gender and Equity working group.

3. Evaluation methodology

The evaluation was based on the analysis of 15 peer-reviewed and non-peer – reviewed papers generated by the program selected from a total of 126 papers published until December 2016, as well as 19 qualitative interviews with program officers, consortium coordinators, gender focal points, principal and co-principal investigators and other people of interest.

Sampling of the papers and review method

Sampling

A purposeful sampling combined with random selection was used to choose the 15 papers that were analyzed against the evaluation objectives. This sampling was implemented based on the titles of the papers.

- **Stage 1: excluding non-relevant papers**

Papers with a pure biophysical scope were excluded from the review process. In this stage, 21 papers out of 126 (16,7%) documents were excluded. Indeed, research that adopts a biophysical perspective on climate change does not necessarily need gender sensitive research methodologies³.

- **Stage 2: selecting the core research papers for the review (Category 1)**

The three papers that have gender and/or equity in their titles (2,4% of all the papers) were selected for the review.

³ This assertion can of course be discussed. For example, HI-AWARE looks at the gender effects of specific climate change scenarios. However, given the limited scope of the evaluation and the limited time attributed for its execution, it was not possible to adopt a more refined sampling methodology. Such refined sampling would have required basing the selection not only on the title of the papers but also the abstracts. The latter would have taken an enormous quantity of time, as it would have required downloading all the papers, opening them, finding the abstract and coding them, in addition to elaborating an alternative strategy for the papers that do not have an abstract.

- **Stage 3: selecting additional research papers through random sampling (Category 2) and purposeful sampling (Category 3)**

The remaining 102 documents (80,9%) were classified into two categories based on their titles. In Category 2, the papers that deal with topics that call for a gender perspective were selected. Among these topics are: vulnerability and resilience in specific places, migrations, social learning and communication on climate change, climate change perceptions, maladaptation, climate change institutions, child health, Sustainable Development Goals, adaptation policies, adaptation research processes. Among the 25 papers that compose Category 2 (20% of all the papers), a random sampling (executed with an online tool) helped to choose 11 papers for the review.

The rest of the papers (those not excluded initially and that do not belong neither to Category 1 nor to Category 2) composes category 3. One paper out of the 98 that compose Category 3 – *The Review of Current Adaptation Action in Bangladesh*, was selected for the review. It was chosen because Bangladesh's Adaptation Action Plan is known to be gendered.

Finally, the classification into categories (presented in **Appendix 1**) was checked for geographical/consortium balance and inclusion of both peer-reviewed and non-peer-reviewed papers. The selected papers and a summary of the sampling method appear in **Table 1** below.

Table 1. Summary of sampling method and result

Peer reviewed papers appear in grey.

Selected papers (peer-reviewed in grey, non-peer-reviewed in white)		Participating consortium/ program				
		CARIAA	DECCMA	HI-AWARE	PRISE	ASSAR
Category 1 (review of 3 papers out of 3- 100% of the papers classified in Category 1)						
1	What if gender became an essential, standard element of Vulnerability Assessments?		X			X
2	DECCMA's approach to the incorporation of gender		X			
3	Resilience, equity and growth in semi-arid economies: a research agenda				X	
Category 2 (review of 11 papers out of 25 – 44 % of the papers randomly selected within those classified in Category 2)						
4	One step forward, two steps back? The fading contours of (in)justice in competing discourses on climate migration			X		
5	How do we assess vulnerability to climate change in India? A systematic review of literature					X

	Selected papers (peer-reviewed in grey, non-peer-reviewed in white)	Participating consortium/ program				
		CARIAA	DECCMA	HI-AWARE	PRISE	ASSAR
6	Social vulnerability in three high poverty climate change hotspots: what does the climate change literature tell us?	X				
7	Social learning and climate change adaptation: evidence for international development practice	X				
8	Assessing climate change risks and contextual vulnerability in urban areas of semi-arid India: the case of Bangalore					X
9	Climate induced rural-to-urban migration in Pakistan				X	
10	Migration and The 2015 Gorkha Earthquake In Nepal – Effect On Rescue And Relief Processes And Lessons For The Future			X		
11	État des lieux des liens entre migration, transferts et résilience au changement climatique au Sénégal	X			X	
12	Misfortunes never come singly: structural change, multiple shocks and child malnutrition in rural Senegal				X	
13	Policies, Projects and People: Exploring the Adaptation-development Spectrum in India					X
14	The Bihar Paradox: Floating Villages, Floating Lives			X		
Category 3 (One paper chosen on purpose out of 98 papers that were classified in Category 3- 1%)						
15	Review of Current and Planned Adaptation Action in Bangladesh	X				
	15 papers	4	2	3	4	4

The review included four peer-reviewed papers and 11 non-peer-reviewed papers: four papers written with CARIAA, two with DECCMA, three with HI-AWARE, four with PRISE and four with ASSAR.

Analysis

The rating of the papers was done against the Gender Scale of Assessment (1 - Unacceptable (Gender Blind), 2 - Needs Improvement, 3 – Acceptable, 4 – Good, 5 - Very Good (Gender transformative) to be found in **Appendix 2** and developed by CARIAA in its Monitoring, Evaluation and Learning report issued in 2015 (CARIAA 2015). To inform this assessment, evidence was provided. **Appendix 3** presents the detailed analysis that underpins the rating of each reviewed paper from ‘gender-blind’ to ‘good’ (Papers that were rated ‘gender transformative’ are discussed in Part 3)⁴.

Interviewing

19 qualitative open-ended interviews (of 30-40 minutes maximum each) were carried out with program officers, consortium coordinators, gender focal points, principal and co-principal investigators and other people of interest. A senior program officer at IDRC suggested the list of interviewees which can be found in **Appendix 4**. The work schedule of the evaluation appears in **Table 5** of **Appendix 6**.

Methodological limitations

Methodological limitations exist due to the limited sample analyzed and recent emergence of gender and equity focussed research from the program (for example the peer-reviewed article *Gendered Vulnerabilities to Climate Change: Insights from the Semi-Arid Regions of Africa and Asia* by Nitya Rao, Elaine T. Lawson, Wapula N. Raditloaneng and Margaret Angula is still in the review process and is likely to be published later in 2017. Other similarly gender transformative research outputs are on their way but could not be assessed in the frame of this evaluation). This evaluation is also essentially focussed on the research side (outputs and process) rather than how research is put into use through stakeholder engagement.

Finally, as requested in the terms of reference, the interviews were held with the ‘top-level’ management of the program (principal investigators, program officers, gender leads, gender focal points, monitoring and evaluation consultants, etc.) who are leading and/or supporting the gender and equity related work since the inception of the program. Including more ‘on the ground’ researchers in the evaluation would have likely resulted in different outcomes. Indeed, due to the scope and methodology of this evaluation (proposed in the terms of references), it essentially provides generic, rather than pragmatic recommendations. This evaluation however remains an important and useful tool for CARIAA and consortium members to initiate

⁴ The appropriateness of this one to one correspondence between level of acceptability of the paper and level of gender sensitivity can be discussed. As one interviewee commented, “there could be cases where a gender transformative approach tout-court is not possible, or it is not desirable in the first stage, because could put stakeholders off. A more staged approach may be more suitable. So authors may have deliberately chosen to be less bold. There could also be cases where researchers that used to be gender blind now contribute to a paper that may not be gender transformative, but has clear elements of gender awareness in it. In this case should not we assess the change in awareness, instead of the absolute level? We are not saying that something is not gender transformative is wrong”. This comment reflects one of the limitations of the Gender Scale of Assessment. This is one of the reasons why this report suggests that projects elaborate their own refined gender assessment scale (see further) that reflects their understanding of what it means to be gender transformative in a given time and context of the project. Such refined gender assessment scale should be open to evolve.

discussions on concrete measures to take for a better integration of gender and equity related concerns in the remaining time of the program.

3. Conceptual underpinnings of the evaluation

The conceptual underpinnings of the evaluation are based on the most recent literature on gender and climate change adaptation as well as the document review and the interviews that were done in the frame of this evaluation. Three topics are discussed below: the concepts of gender and intersectionality, as well as the link between gender and climate change.

Gender

Gender is defined by the Food and Agriculture Organization (FAO) as follows: “[gender concerns] the relations between men and women, both perceptual and material. Gender is not determined biologically, (...) but is constructed socially. It is a central organizing principle of societies, and often governs the processes of production and reproduction, consumption and distribution” (FAO 2012). Hence, gender refers to how a person’s biology is interpreted in specific cultural settings. The ultimate societal goal related to gender is to reach equality, which, in the context of climate change entails equality of opportunities to adapt to the changes, equality of possibilities to access the means to achieve coping measures without being constrained by gendered stereotypes. Gender equity (treating women and men fairly which can include implementing positive discrimination measures) is a means to achieve gender equality.

Today, there is a certain consensus on the fact that climate change adaptation research and practice need to be attentive not only to gender but also to other intersecting factors that may become potentially oppressive or privileging when it comes to adapting to climate change. The intersectional perspective was widely mentioned by the people that were interviewed in the process of this evaluation. In all the reviewed papers that are not gender-blind, it also appears as part of CARIIA and the consortia’s conceptual approach to gender.

Intersectionality

Intersectionality refers to the fact that “[p]eople are not just men and women with culturally defined roles, but inhabit multiple and fragmented identities that intersect with class, race, ethnicity, sexuality, etc.” (Elmhirst 2011; in Tschakert 2012, 149). Multiple identities and subjectivities shape the way women and men experience climate change. The differences emerge and are produced out of everyday practices (Nightingale 2011) in farming, managing natural resources, migrating, in community or project activities, under the effects of policies, as historical legacies, as the result of land tenure systems, among many other things. Gender can never be a factor that will by itself explain disadvantaging or privileging processes in the context of climate change. As people are never just women or men, no matter if gender intervenes as an oppressive or an advantaging factor when it comes to implementing strategies to adapt to climate change, it always works together with others, among them ethnicity, caste, age, poverty levels, geographical location, among other ones.

Gender and climate change

Despite a relative persistence of gender-blindness in environmental research and a reciprocal environmental issues blindness in feminist research (MacGregor 2010), the recent reports of the Intergovernmental Panel on Climate Change (IPCC) give greater importance to, and show a more nuanced understanding of the complex interactions between gender inequality and climate vulnerability than these did some years ago (IPCC 2007; IPCC 2014). In particular, the conceptualization of climate vulnerability changed. Today, it reflects much more the gender, caste, age, ethnicity and geographical location-related power processes through which vulnerabilities are (re)produced, and possibly challenged in climate change adaptation.

Indeed, in its fifth assessment report, the IPCC describes vulnerability as the “propensity or predisposition to be adversely affected. Vulnerability encompasses a variety of concepts and elements including sensitivity or susceptibility to harm and lack of capacity to cope and adapt” (IPCC 2014, 4). This definition includes predisposition as a possible cause for climate vulnerability, which opens the floor to talk about all kinds of previously acquired factors that may contribute to making women and men vulnerable. Additionally, the 2014 report highlights that climate vulnerability can not only result from climate change related risks, but that vulnerability is most of the time multidimensional, which challenges earlier linear explanations of vulnerability. Moreover, the multidimensional character of climate vulnerability is understood through its relation to existing, context-dependent inequality, that requires an intersectional lens.

Thus, the most recent conceptualization of climate vulnerability shows that the framing of climate change adaptation has “moved further from a focus on biophysical vulnerability to the wider social and economic drivers of vulnerability and people’s ability to respond” (Noble et al. 2014, 836). In particular, it opens the floor to talk in parallel about “values, agency, assets and power” (Tschakert and Tuana 2013, 76) that may influence climate vulnerability. Another important aspect in the 2014 IPCC report is that it recognizes that adaptation actions can potentially contribute to creating and reproducing vulnerabilities, and that they can interact with exposure to risks and existing vulnerabilities (IPCC 2014). The latter is important for a project like CARIAA: it calls for self-reflexive research approaches.

4. Findings with evidences

4.1. Research outputs

Rating of the reviewed papers: two thirds above acceptable

The reviewed papers were rated against the gender assessment scale established in CARIAA’s M&E and Learning Strategy (CARIAA 2015). The assessment scale appears in **Appendix 2**.

As shown on **Chart 1**, out of the 15 papers, only one was rated unacceptable (gender-blind), four were rated as needing improvement, three were rated as acceptable, three as good and four as very good (gender transformative). Two thirds (ten papers) were rated acceptable or above acceptable conveying, based on the majority of the papers that compose the reviewed sample, that the goal set in in CARIAA’s M&E and Learning Strategy (by 2016 “expert assessment rates attention

to gender in CARIAA research design, process, and outputs as “acceptable” or better” – p. 32) has been reached.

Chart 1. Rating of the reviewed papers against the gender assessment scale



Refined gender assessment scale

Six main gendered criteria emerge from the papers reviewed which can be useful for refining the gender assessment scale and providing a framework for assessing research outputs. Thus, each research output (from gender-blind to gender transformative) can be described in terms of whether and how they:

- (i) **adopt an intersectional perspective;**
- (ii) **build on the most recent (gender-sensitive) literature on vulnerability, resilience and adaptation;**
- (iii) **address masculinities;**
- (iv) **generate gender disaggregated data;**
- (v) **provide discussions across scale, and;**
- (vi) **mobilize gender and socially sensitive research methods.**

The revised gender assessment scale is summarized in the Table below.

Table 2. Revised gender assessment framework

The detailed assessment of the papers with the arguments that led to the classification of each one to a specific place in the grid is explained further in the document for the papers that are classified as “Gender Transformative”, and in **Appendix 3** for the papers that are classified from “Gender Blind” to “Good”. This classification is of course subjective and provides just an example of how research projects could use the scale to adapt it to their own contexts while encouraging progress in the integration of gender and equity.

	Unacceptable (Gender Blind)	Needs Improvement	Average	Good	Very Good (Gender Transformative)
Intersectional perspective	There is no evidence that gender was considered when designing and/or implementing the research.	Insufficient integration of the intersectional perspective: discussions on the factors that are potentially producing vulnerabilities or creating resilience or growth are limited to binary mentions of male/female, rich/poor, urban/ rural.	The intersectional perspective is present but not fully explored, therefore the paper risks reproducing gendered stereotypes such as women being the most vulnerable and the poorest of the poor, etc.	The intersectional perspective is present but the complex interactions between potentially oppressive and privileging factors in the context of climate change could have been highlighted in a more nuanced way.	The paper adopts an intersectional perspective that allows for highlighting in a nuanced way the complex interactions between potentially oppressive and privileging factors in the context of climate change.
Conceptual approach to vulnerability resilience, migration and/or adaptation		Insufficient reliance on the most recent understanding of vulnerability, resilience and/or climate change related migrations, which makes it difficult to integrate concerns for gender and equity.	Insufficient reliance on the most recent understanding of vulnerability, resilience and/or climate change related migrations, which makes it difficult to integrate concerns for gender and equity.	The paper builds on the latest scholarly developments on (climate) vulnerability, resilience and/or adaptation.	The paper builds on the latest scholarly developments on (climate) vulnerability, resilience and/or adaptation.

	Unacceptable (Gender Blind)	Needs Improvement	Average	Good	Very Good (Gender Transformative)
Masculinities		Men's issues and /or masculinities are not integrated in discussions on gender.	Men's issues and /or masculinities are not integrated in discussions on gender.	Men's issues and /or masculinities are insufficiently integrated in discussions on gender.	Men's issues and /or masculinities are integrated in discussions on gender.
Data		Insufficient reliance on gender-disaggregated data.	Insufficient reliance on gender-disaggregated data.	The findings rely on gender-disaggregated data and gender differentiated contextual analysis of vulnerability, adaptation or resilience.	The findings rely on gender -disaggregated data and gender differentiated contextual analysis of vulnerability, adaptation or resilience.
Scale		Gendered discussions are weak – they do not cover gender issues at all scale.	Gendered discussions are present but the analysis does not cover gender issues at all scale.	Gendered discussions are present but the analysis does not cover gender issues at all scale.	The analysis bridges scales (from the household level to the international spheres).
Research methods		Research methods are insufficiently gender and socially sensitive.	Research methods are insufficiently gender and socially sensitive.	Evidence for gender and socially sensitive research methods are insufficiently highlighted.	The research adopts gender and socially sensitive research methodologies that are sufficiently highlighted.

Towards gender transformative research

Table 2 not only provides a classification of the reviewed paper thus giving an idea of the level and quality of the inclusion of gender and equity related issues, it can also be used as a refined gender assessment scale for self and external evaluative purposes.

The classification process is illustrated below with the example of the four papers that were rated gender transformative in the review. (The other papers are classified into the other categories with evidences provided in **Appendix 3**).

The four papers rated very good (gender transformative) in the review are:

- *Morchain et al., “What If Gender Became an Essential, Standard Element of Vulnerability Assessments?”*
- *Vincent and Cull, “DECCMA’s Approach to the Incorporation of Gender.*
- *Singh, Deshpande, and Basu, “How Do We Assess Vulnerability to Climate Change in India?”*
- *Maharjan, Prakash, and Gurung Goodrich, “Migration and the 2015 Gorkha Earthquake in Nepal: Effect on Rescue and Relief Processes and Lessons for the Future, HI-AWARE Working Paper 4.*

The following paragraphs provide evidence for the rating of these four papers as gender transformative.

(i) The paper adopts an intersectional perspective that allows for highlighting in a nuanced way the complex interactions between potentially oppressive and privileging factors in the context of climate change.

The authors of *What if gender became an essential standard element of Vulnerability Assessments?* adopt an intersectional perspective (p.484) argued for by third wave feminists and increasingly adopted in the field of climate change (see IPCC’s 5th assessment report). For example, the authors stress that vulnerability is not an inherent attribute to women (p.483). “Inequality is not only about gender. Likewise, women are not inherently vulnerable because of their sex” (p. 494). On page 484, they underscore that VAs should allow for unveiling the factors that make women more (or less) vulnerable than men. The later is important in order not to (re)produce widely spread stereotypes of women being the victims of climate change... just because they are women.

Similarly, the authors of *DECCMA’s approach to the incorporation of gender* adopt an intersectional perspective. *Migration and the 2015 Gorkha Earthquake in Nepal- Effect on Rescue and Relief Processes and Lessons for the Future* mobilizes an intersectional perspective and discusses potentially oppressive and privileging factors such as gender, ethnicity but also geographical location (and how these factors intersect among them).

(ii) The paper builds on the latest scholarly developments on (climate) vulnerability, resilience and/or adaptation.

What if gender became an essential standard element of Vulnerability Assessments? deals with multi-hazard VAs and stresses the interrelated character of vulnerabilities, to climate change, to reducing market opportunities, to gender inequalities, etc., which is proper to a human-security framing of climate change, recognized as potentially better integrating gender concerns than earlier and linear

understandings of climate change (Tschakert 2012). Thus, the article builds on the latest scholarly developments in the field of gender and climate change. In addition, the authors of *What if gender became an essential standard element of Vulnerability Assessments?* stress that the synergies between gender equality narratives and resilience are not automatic. This is key because the win-win narrative is still too present in debates on gender and climate change.

The authors of *DECCMA's approach to the incorporation of gender* underscore that gender relations can and do change over time. This is an important point that is often overlooked by climate change projects and research, especially when vulnerability assessments are involved. Indeed, assessments tend to put people into categories according to their levels of vulnerability. If a group of people is qualified as more vulnerable than another due to unequal gender relations, it is rarely discussed how challenging these unequal gender relations may shift vulnerabilities. In practice, gender roles such as cooking, fetching water and wood may be wrongly considered as immutable. These roles can change and the related gendered vulnerabilities linked with health issues due to smoke emissions, increasing water and wood scarcity can change as well.

How do we assess vulnerability to climate change in India? A systematic review of literature builds on the most recent (gendered) literature on vulnerability related to climate change. It integrates the progress in the definition of vulnerability made by the IPCC by building on its latest, fifth assessment report (IPCC 2014). Moreover, in their critiques to linear and predominantly biophysical understandings of vulnerability, the authors highlight their perspective on multidimensional (p. 2-paragraph 2) and relational vulnerability (page 2-paragraph 3) argued for by feminist scholars working on environmental changes (e.g. Tschakert and Tuana 2013). In addition, the authors of *How do we assess vulnerability to climate change in India? A systematic review of literature* explains the importance of topics that are crucial for feminist scholarship and for the integration of a gender perspective in the practice of VAs. Among these topics is the integration of temporality in VAs (in order to avoid classifying people into groups according to vulnerability levels without acknowledging that vulnerabilities can shift over time).

(iii) Men's issues and /or masculinities are integrated in discussions on gender

The authors of *What if gender became an essential standard element of Vulnerability Assessments* highlight the masculinist character of mainstream climate science and propose solutions to the misbalance that it may generate in terms of gendered research and practice on climate change adaptation. In addition, they recommend bridging the gap between gender experts (women's organizations) and climate change experts, social issues important for women with mainstream (sometimes technical) approaches to climate change (p. 488), something that in practice is seldom done. Also, they recommend drawing attention on men's engagement, and highlight the need to develop new notions of masculinity(ies) (p.489). The later is an under-researched topic in climate change and is often not mentioned. Although not explored in depth, in *DECCMA's approach to the incorporation of gender*, there is mention to other categories than male or female (p.5). This is a much-needed topic in discussions on gender and environment and the fact that it is mentioned is innovative.

(iv) The findings rely on gender-disaggregated data and gender differentiated contextual analysis of vulnerability, adaptation or resilience

Migration and the 2015 Gorkha Earthquake in Nepal- Effect on Rescue and Relief Processes and Lessons for the Future provides gender-disaggregated data when available.

(v) The analysis bridges scales (from the household level to the international spheres)

The authors of *How do we assess vulnerability to climate change in India? A systematic review of literature* highlight household power dynamics in addition to using a landscape approach, which shows an effort to bridge scales. The later is important to detect the cross-scalar facets of gender and equity related oppressions.

(vi) The research adopts gender and socially sensitive research methodologies

Despite the methodological and logistical difficulties, the research for *Migration and the 2015 Gorkha Earthquake in Nepal- Effect on Rescue and Relief Processes and Lessons for the Future* was done immediately in the aftermath of the earthquake, which makes of it a very valuable and unique document. The methodology (interviewing both men and women, young and old, the use of individual narratives and case studies to highlight personal experience, participation in relief activities (p.14)) is pertinent for a feminist and gender sensitive understanding of the situation. The research methodology is socially and gender sensitive (“not to offend people”, “it was inappropriate to burden households with interviews”, “interviews were conducted in such a way that they would help with alleviating the trauma”, “reporting an incident that highlights the stigma associated with women’s migration, discussing how a more sensitive kind of research (on women migrating as domestic or sex workers in India) would need to show a strong and tangible benefit to migrant women”). This study gives great importance to, and is reflexive about the research process, essential for feminist and gender sensitive research.

Conclusion

Based on the document review, a refined gender-assessment scale has emerged. It has shown that a piece of research that can be qualified as tending towards gender transformative⁵ has the following characteristics summarized in the last, right-side column of **Table 2** above.

⁵ In the gender assessment scale, a piece of research that is very good (gender transformative) is defined as follows: “Gender was considered with great sensitivity across all aspects of the research design, selection and implementation of data collection methods, analysis and interpretation of findings. It has brought significant new, highly credible insights as well as potential to use these insights to address gender differences. The research shows potential to challenge existing gender and social power relations, hierarchy or norms and to have significant policy implications”.

The refined gender-assessment scale can serve as a basis for discussions and can be adapted to local research contexts. It can help move the ‘minimum principles’, set as the objective for the current gender and equity approach, towards a more innovative research approach that can capture more complexities.

4.2. Research process

This section summarizes the interviews held with CARIAA and consortia staff (see **Appendix 4** for the list of interviews) by presenting the most important topics that emerged from the discussions in relation to how the integration of gender and equity could be made more efficient. Existing challenges related to capacities, organizational issues as well as conceptual approaches are highlighted, and recommendations for the future are provided.

4.2.1. A good understanding of gender and equity at the management level that does not always ‘trickle down’ or ‘spread around’

The interviewees reflected on the fact that while the “top-management” of CARIAA and the consortia have an excellent conceptual knowledge of gender and equity and share a concern for these issues, this common knowledge and concern does not always ‘trickle down’ to the researchers on the ground. This was particularly highlighted in the case of DECCMA, ASSAR and PRISE. For DECCMA and ASSAR, it was explained that gender experts involved with the consortia, and gender focal points are not always working closely with the researchers and research projects on the ground. DECCMA’s gender expert wrote PRISE’s internal working paper on gender and equity (Vincent 2015). PRISE’s gender focal points have only been appointed in the second half of 2016 as a response to the observation that gender and equity related issues were not given as much importance as initially planned. In HI-AWARE, the problem was not related to ‘trickling down’ but ‘spreading around’. While there is a research component explicitly on gender and equity (“Socio-economic, governance and gender drivers and conditions leading to vulnerability to climate change”), it was remarked that some researchers working on *other* research components did not focus enough on gender and equity related issues, as they assumed that ‘gender and equity related issues were already integrated’ in that research component.

Additionally, some interviewees explained that the importance given to gender and equity issues had decreased over time. The initial CARIAA call had a strong emphasis on gender and equity. Thus, gender and equity related concerns were included in the proposal design which included establishing alliances with gender experts from an early stage, planning for gender and equity sensitive research activities and methodologies, and budgeting appropriately. All the interviewees welcomed the early emphasis gender and equity. They shared that it would have been more difficult to integrate gender and equity in gender-blind proposals. While significant efforts had been made in the first year of the program, mainly through training and mentoring activities on gender and equity with the support of the University of East Anglia and with the compilation of conceptual papers, the second year of the program was weaker. Some attributed this weakness to insufficient guidance on the gender and equity perspective by a dedicated (possibly IDRC) lead on gender and equity who would have responsibilities in all four consortia, and to a lack of incentives for integrating gender and equity. This is problematic as there is a dedicated program officer who looks after the gender and equity group even if it is

just in the role of facilitator and not as a person who enforces decisions on content. Thus, this program officer's role is to monitor progress based on the decisions made within the group. It is in part due to the lack of involvement in the gender and equity working group that this program officer's efforts may be insufficiently noticed. Other interviewees highlighted that the integration of gender and equity needed to be done in a more organic manner, coming from the bottom-up, which was made difficult in a research project in which most research leads were men with natural science perspectives⁶.

Some of the consortia are trying to address this challenge. PRISE recently initiated a mid-term review on gender to understand the capacity of its stakeholders to recognize and act upon gender equality in their decision-making, policies and procedures, and the capacity of its research teams to support these efforts. Similarly, HI-AWARE has recently done its midterm learning review, which recommended developing a gender strategy for the program, a plan for capacity building and peer-mentoring, and strengthening the research lead on gender (Douthwaite, Ahmed, and Mundy 2016).

These observations and ongoing efforts point to a need for a renewed debate on ensuring that gender and equity are not lost among other priorities within CARIAA, especially when executing field level activities and activities that are not 'specifically' gender and equity focussed. This would require updating initial strategies like DECCMA's *DECCMA's approach to the Incorporation of Gender* (Vincent and Cull 2015) and PRISE's *Opportunities for Integrating Gender and Social Equity Issues into the Pathways to Resilience in Semi-Arid Economies (PRISE) Project* (Vincent 2015). The updated strategies can be done in the form of publications on lessons learnt based on experience integrating gender and equity in the consortia's work. In addition, these strategies could feed into an updated cross-consortia gender and equity inclusion strategy.

Recommendation 1:

Take stock of the situation and where possible revisit the gender and equity strategy of each consortium based on experiences and lessons learnt so far. Discussions based on the findings of this evaluation should feed into decisions made concerning gender and equity strategies (e.g.: focussing on the elements that are working, elaborating a refined gender assessment scale, revisiting the objectives, etc.)

4.2.2. Existence of minimum principles on gender and equity that are sometimes kept to the 'minimum'

CARIAA monitors the number of female and male authors of its publications, encourages the recruitment of young female researchers, and the consortia developed and adopted methods to elicit women and men's opinions while interviewing, carrying out focus group discussions or surveying. However, these tools are mainly oriented to measure gender balance in the research process as well as to generate gender-disaggregated data. These tools may not account sufficiently for how the

⁶ This statement needs to be nuanced for some regions. Indeed, it is not the case in East and West –African sites of ASSAR.

program manages to tackle unequal power (including gender) relations. For example, one of the interviewees highlighted how unequal gender relations are reflected by the fact that are mostly men even though there are cases where the main authorship should go to women. Indeed, out of the 126 papers issued until December 2016, 67 were under the lead authorship of men (53%), 54 lead authors were women (43%), and 5 papers (4%) did not have authors. Other interviewees underscored that most lead investigators were men. While the interviewees highlighted the need to integrate more female Master's and PhD students as researchers in the program, some highlighted that in some case, especially West-African, this was not possible. Others (for example in Nepal) were stressing that female participation should be enforced and if there was no female applicant for a position, then the position should be rethought or the call re-issued. In their opinion, the position should not be filled by hiring a man even 'in the absence' of women.

Ensuring the participation of women in focus group discussions, surveys and stakeholder meetings is important and can bring to the fore women's perspectives. However, none of these measures guarantee that women's perspectives are effectively included or that the research process does not (re)produce gendered vulnerabilities. Therefore, there is a need to discuss the outcomes of these measures and *in addition to them* ask more nuanced and complex questions about the processes that make women and men and other groups vulnerable in the context of climate change and climate change research.

Similarly, while the program is explicit about its intersectional perspective, addressing other disadvantaging factors in addition to gender is less present in methodological discussions. While challenging unequal caste relations that often intersect with unequal gender relations is difficult, some of the consortia have experiences that need to be highlighted and discussed. For example, some HI-AWARE researchers make a point to offer a glass of water and a seat to *dalit* women in research communities, a small gesture that challenges the practice of caste hierarchies.

Recommendation 2:

Discuss among staff responsible within the consortia for monitoring and evaluation tools that measure the *results* of the integration of gender and equity including other factors than gender. These tools, that may include qualitative methods and short case studies, need to document how unequal power/gender relations are being challenged. They can be used *in addition* to assessing gender balance and using gender-disaggregated data.

4.2.3. Need to build better on existing research on gender and climate change adaptation and fill the gaps in the literature

To be more innovative on gender and equity research and stakeholder engagement, there is a need to better build on the existing as well as identify gaps within the gender and climate change adaptation literature. More attention needs to be given to topics that are currently under-researched and under-discussed particularly with policy makers on climate change adaptation. For example, researchers and practitioners who are increasingly able to identify the social factors that create differentiated adaptive capacities, still have difficulties to address and challenge them

(Tschakert and Machado 2012). Tschakert and Machado explain these difficulties with the insufficient attention given to aspects such as “interconnectedness” and “mutual fragility”.

There is a dearth of intersectional and cross-scalar research methodologies on gender and climate change adaptation. There is a particular need to discuss *how to do* intersectional research on climate change adaptation in practice and in different research contexts. Other research gaps on climate change adaptation include masculinities related to environmental changes and gender transformations within the context of climate change. Several interviewees stressed that some of these topics are ‘too complex’. For example, masculinities were seen as ‘too complex’ based on the argument that some researchers and policy-makers lack capacities on gender. However, it remains important to contribute towards putting masculinities back on the gender and climate change agenda. In addition, there are research projects within CARIAA that directly call for integrating masculinities in the discussions. One such project focusses on livestock value chains in Senegal (P3A), which is mostly controlled by men. It is key to integrate gender discussions in this project in a way that goes beyond observing that women are absent. Indeed, livestock is often associated with hegemonic masculinities that may be threatened by climate change.

Another gap is socio-environmental transformations including gender transformations in the context of climate change. Except for ICIMOD, which has a gender transformation framework, the reviewed papers and the interviewees did not clearly present what a gender transformative stance on climate change adaptation means for CARIAA, the consortium and in specific research contexts.

Recommendation 3:

Dedicate time and resources to identify and explore under-researched and innovative topics such as intersectional and cross-scalar climate change research methodologies, masculinities and climate change, or gender transformative frameworks.

4.2.4. Need to generate CARIAA- wide lessons learnt on gender and equity to share with the world

CARIAA is currently one of the biggest research projects on climate change adaptation in the world. Given the gaps in the literature on gender and climate change, as well as an overall masculinist, top-down and scientific approach to climate change (MacGregor 2010), it is important that CARIAA-wide message(s) are shared on the inclusion of gender and equity in climate change adaptation research. The interviewees agreed on the importance of having CARIAA wide lessons but underscored the differences between the various consortia’s research orientations. For instance, not all of them can contribute gender case studies, and researchers are lacking time and resources to participate in the collective building of CARIAA wide lessons.

Despite these challenges, it is imperative for CARIAA to compile and share lessons learned. One topic that is important and would not require much effort, would be to share experiences associated with undertaking gender and equity sensitive climate change research. This topic constitutes a research gap that every consortium in CARIIA can contribute to. Exploring it collaboratively across CARIAA would

require minimal resources. IDRC could provide support in the form of expertise to generate lessons learned. This expertise may be needed to construct unbiased and common lessons learned by leveraging their intellectual leadership. As one of the interviewees suggested, a consultant could be hired to construct these complex and nuanced messages and lessons learned by pulling together similarities and differences from the different consortium experiences. Another solution (suggested by another interviewee) would be to mobilize in house expertise within University of East Anglia, Kulima, and some local partners. Indeed, it was stressed that if the research done and the research team are not gender transformative, an additional consultant will not be able to go deep as they will have no material to work on. In any case, the decision on how to proceed should be taken by CARIAA and the consortium members based on their objectives (to be re-discussed after this evaluation) and available resources.

Recommendation 4:

Initiate a process of construction of a CARIAA-wide lessons learned on gender and equity by dedicating it resources.

4.2.5. Need to clarify the role of the gender and equity working group in fostering innovation and supporting the exchange of methodological knowledge

According to the program, the role of the gender and equity group is “to look at the research conducted by all the consortia and mainstream gender concerns into the CARIAA program across the four research consortia”. Specific objectives include:

- (i) **Developing a strategy to create awareness among the researchers to undertake innovations that specifically addresses gender concerns that help develop adaptive capacity of communities of differentially vulnerable groups;**
- (ii) **Developing a methodology framework that can be adopted across all the research consortia to address gender concerns;**
- (iii) **Enhancing capacity of the researchers in developing research protocols that help reduce gender inequality;**
- (iv) **Network with likeminded groups and other networks at different levels (local, regional and global) for larger level policy advocacy and research uptake.**

The interviewees shared that the gender and equity working group has not managed to become a space where innovation on gender and equity research emerges and consolidates (related to objective (i)). There remains a need to move from a minimalist integration of gender and equity towards gender transformative climate change adaptation research. The gender and equity working group has a core role to enable this transition.

Concerning the development of a methodology framework across all research consortia (objective (ii) of the gender and equity working group), several consortia have worked on developing such tools. For example, HI-AWARE has an internal tool to assess gendered vulnerabilities, a methodology to train researchers on how to assess gendered vulnerability, as well as a methodology to evaluate households’ and individuals’ access to resources and control of benefits. Similarly, DECCMA has its

own tools, including a methodology to train enumerators in implementing gender sensitive surveys. The other two consortia also have their own methodologies and tools to integrate gender and equity. Bringing together these tools and methodologies in one common pool could prove to be very useful. This could save time by adapting these tools to specific contexts as opposed to building them from nothing. As a legacy of CARIAA, and in accordance with the gender and equity working group's objective (iv), it would also be important to leave these tools and methodologies for further research projects.

The gender and equity working group has so far provided space for training and mentoring and, through the opportunities and synergies fund, it is organizing a write-shop to generate a meta-synthesis on gender and equity case studies. These activities relate to the group's objective (iii). Overall, the gender and equity working group has only partially fulfilled its objectives. Without the necessity of formalizing it more, it still needs to become a platform where human, theoretical, methodological resources on gender and equity are made available and can easily be mobilized by the different consortia, its partner institutions, and further projects.

Recommendation 5:

Revise the gender and equity working group's objectives for the remainder of the program. Discuss how the working group can foster innovative research on gender and equity, as well as how it can support mechanisms that promote the exchange of methodological expertise and knowledge across and outside the consortia. The gender and equity working group has the potential to become a platform that supports capitalization on gender and equity in the second half of the CARIAA program and after the program is finalized. If the later constitutes a priority for CARIAA, it would be recommendable that IDRC supports this process by allocating a person for this task.

4.2. 6. Need to refine internal monitoring and evaluation tools on the integration of gender and equity

Most gender focal points and gender leads have expertise in gender, and are motivated to do work on gender and equity. However, some complained that as they were acting as other researchers' peers, when a project lead was not sensitive enough to gender and equity related issues, it was impossible to enforce even the 'minimum principles'. An interviewee gave the example that if a project lead did not insist in ensuring that there was a gender balance in meetings with stakeholders, then there was no way to ensure this measure. This interviewee suggested that in such cases, the project coordination should intervene. Another interviewee highlighted the difficulty that gender leads and gender focal points were facing when making recommendations to their peers, as they could not oblige researchers (who have many other responsibilities) to prioritize gender and equity.

While most of the interviewees had heard about the gender assessment scale (used in this evaluation), none of them had used or envisaged using it. Some gender focal points supporting the integration of gender and equity in research proposals could have made good use of it. For example, the newly appointed gender focal points in PRISE limited their review to assessing if the project generated gender-disaggregated data, and whether it examined gender differences. As one of the

interviewees shared, this review was essentially based on the language used in the different research projects.

The gender assessment scale can be used as a basis for discussions and refined for research projects and research sites. Of course, there are many possible tools that can be used and developed to go further in integrating gender and equity going beyond counting the participation of women and men. A refined gender assessment scale used as a tool to frame what gender transformative research and research processes could look like is one example. As one of the interviewees stressed, implementing a monitoring system on gender and equity needs first and foremost users that agree to the criteria (e.g. gender transformation, progress towards gender equality, etc.) that are monitored.

Recommendation 6:

Ensure that the people in charge of internal validation processes are trained on gender and equity and have access to evaluation tools that are appropriate to their needs and easy to use. If needed, organize discussions or training sessions with them on how to provide peer support. These discussions can be held by gender focal points or gender leads at the consortium level.

4.2.7. Need to strengthen cross-consortia coordination

Coordination is one of the main challenges for a better integration of gender and equity. Stronger leadership at CARIAA from people with gender backgrounds would assist with doing more with gender and equity related findings. As highlighted earlier in this report, there are many research findings to capitalize on, however, there is a considerable risk that many gender and equity findings will fall through the cracks. An obstacle to consortia coordination on gender and equity is that one of the consortium, DECCMA, is not participating in most of the activities of the gender and equity working group. This lack of participation weakens the mission of the group since DECCMA's work is not reflected its activities. It also weakens DECCMA's mission, as DECCMA loses opportunities to benefitting from reflections advanced by others. A DECCMA member stressed that is not due to their own unwillingness, and that their Gender and Equity working group representative has made suggestions to the cross-consortia working group which went unanswered. Also, the cross-consortia working group, has, on more than one occasion, held meetings on dates where DECCMA representatives have been unable to attend. What is certain is that there should be renewed discussions on how to collaborate better between consortia. Gender experts could also be mobilized where needed (across consortia). There is the need to discuss with DECCMA (and the other consortia) what type of collaboration they envision with the gender and equity group in the second half of the program. This discussion should acknowledge that each consortium's expectations and needs may be different and valid.

Recommendation 7:

Implement a rapid survey on the needs of each consortium to better enable cross-consortia support on gender and equity.

4.2.8. Need to support learning and mentoring on gender and equity

Despite the different approaches to gender and equity within the consortia, the interviewees share the opinion that most researchers have evolved in their understanding of how to do gender-sensitive research. The course provided by the University of East Anglia was cited as positive by all the interviewees. Other capacity building activities by the consortia, such as the annual ASSAR meeting, were also highlighted as positive. One of the interviewees highlighted that the participants who profited the most from the gender training were those who received support to continue with their own reflections and research projects on gender and equity. For example, a student who participated in a course, coordinated by ASSAR, obtained a small fund to develop a research project and apply her knowledge, while receiving mentoring from the gender lead.

After the initial training on gender and equity, it was proposed to IDRC to have a data analysis and mentoring workshop to help researchers analyze their emerging data in a gender sensitive way. Although this workshop did not take place, rethinking the idea for those interested would be important. In ASSAR, the mentoring is taking place internally. For example, the mentoring process in ASSAR by the gender lead materialized in collaborative writing that took place during several months and that resulted in a paper based on preliminary research findings written by the gender lead together with gender focal points in different regions (Rao et al. in review). Mentoring should be focussed on “letting (...) [researchers] do [research] and supporting them, rather than teaching”, as expressed by one of the interviewees.

Several interviewees highlighted the fact that the annual CARIAA learning meetings are very rich providing space for learning to happen. The problem that was mentioned in relation to them is that many good ideas that are generated fall into the cracks due to a lack of follow-up.

Cross consortia learning processes on gender and equity could be enabled through an internal webpage or interactive web discussions. For example, within ASSAR, researchers who share an interest in learning and contributing to an informal working group on intra-household dynamics and vulnerability share methodologies, work in progress, timelines, and aim to discuss their advancement monthly. This is something that could be replicated at the inter-consortia level. Indeed, each consortium has its own strength on gender and equity. ASSAR could share its thinking on gender and intra-household dynamics in the context of climate change, HI-AWARE could do something similar on the role of qualitative methods in gender sensitive research, and so on. Any researcher who is interested in discussing this theme in her/his research project could find resources on this topic in one place and ask questions if necessary. Learning processes on gender are also important for non-gender researchers (for example, HI-AWARE is implemented a workshop on gender and equity for non-gender researchers in March 2017).

Recommendation 8:

CARIAA-wide learning processes on gender should be encouraged via an efficient use of existing internal virtual platforms, virtual interest groups, where methodologies could be shared, online discussion forums could be in place, and which could be accessed by ‘non-gender’ researchers too.

General conclusion

The aim of this mid-term evaluation on gender and equity was to assess progress towards the integration of gender and social inclusion related aspects in CARIAA's activities and provide recommendations for the remaining program period.

While two thirds of the papers reviewed were rated 'acceptable' or above 'acceptable' based on a gender assessment scale used to classify research outputs from gender-blind to gender transformative, a need to move the 'minimum principles' for the integration of gender and equity towards a more complex and innovative gender-transformative research approach has been identified.

The following recommendations have emerged:

Recommendation 1:

Take stock of the situation and if necessary revisit the gender and equity strategy of each consortium based on experiences and lessons learnt so far. This does not mean that the strategies should be obligatory rewritten. However, discussions based on the findings of this evaluation should feed into decisions made concerning gender and equity strategies (e.g.: focussing on the elements that are working, elaborating a refined gender assessment scale, revisiting the objectives, etc.)

Recommendation 2:

Discuss among staff responsible for monitoring and evaluation tools that measure the *results* of the integration of gender and equity including other factors than gender. These tools, that may include qualitative methods and short case studies, need to document how unequal power/gender relations are being challenged. They can be used *in addition* to assessing gender balance and using gender-disaggregated data.

Recommendation 3:

Dedicate time and resources to identify and explore under-researched and innovative topics such as intersectional and cross-scalar climate change research methodologies, masculinities and climate change, or gender transformative frameworks.

Recommendation 4:

Initiate a process of construction of a CARIAA-wide lessons learned on gender and equity by dedicating it resources.

Recommendation 5:

Revise the gender and equity working group's objectives⁷ for the remainder of the program. Discuss how the working group can foster innovative research on gender and equity, as well as how it can support mechanisms that promote the exchange of methodological expertise and knowledge across and outside the consortia. The gender and equity working group has the potential to become a platform that supports capitalization on gender and equity in the second half of the CARIAA program and

⁷ It is important to take into account that participation in the working group is purely voluntary.

after the program is finalized. If the later constitutes a priority for CARIAA, it would be recommendable that IDRC supports this process by allocating a person for this task.

Recommendation 6:

Ensure that the people in charge of internal validation processes are trained on gender and equity and have access to evaluation tools that are appropriate to their needs and easy to use. If needed, organize discussions or training sessions with them on how to provide peer support. These discussions can be held by gender focal points or gender leads at the consortium level.

Recommendation 7:

Implement a rapid survey on the needs of each consortium to better enable cross-consortia support on gender and equity.

Recommendation 8:

CARIAA-wide learning processes on gender should be encouraged via an efficient use of existing internal virtual platforms, virtual interest groups, where methodologies could be shared, online discussion forums could be in place, and which could be accessed by ‘non-gender’ researchers too.

Appendices

Appendix 1. Sampling of the papers

Color codes:

Article title	Non-relevant papers (excluded)
Article title	Category 1 (selected for review)
Article title	Category 2 (non-selected for review)
Article title	Category 2 (selected for review)
Article title	Category 3 (non-selected for review)
Article title	Category 3 (selected for review)

Investissements et Répartition des Ressources en Eau au Burkina Faso – étude préliminaire sur l'arbitrage urbain-rural
Lessons learned on consortium-based research in climate change and development. CARIAA Working Paper no. 1
Science–policy interface for disaster risk management in India : toward an enabling environment
Status of climate change adaptation in Africa and Asia
Vulnerability to climate change in three hot spots in Africa and Asia: key issues for policy-relevant adaptation and resilience-building research
Review of key initiatives and approaches to adaptation planning at the national level in semi-arid areas
A review of the biophysical impacts of climate change in three hotspot regions in Africa and Asia
A systematic review of research on climate change adaptation policy and practice in Africa and South Asia deltas
Adaptation policy and practice in densely populated glacier-fed river basins of South Asia: a systematic review
Social vulnerability in three high poverty climate change hotspots: what does the climate change literature tell us?
Systematic review approaches for climate change adaptation research
Regional Climate Messages for East Africa
Regional Climate Messages for South Asia
Regional Climate Messages for Southern Africa
Regional Climate Messages for West Africa
Vulnerability and Adaptation to Climate Change in Semi-Arid Areas in India
Water for growth and development in the Ganges, Brahmaputra, and Meghna basins: an economic perspective

Climate Change Adaptation Practice in Semi-Arid Regions: Views and Insights by Practitioners
Understanding and communicating climate information to support uptake of adaptation actions in semi-arid regions in Africa and Asia: A literature review
Vulnerability and Adaptation to Climate Change in Semi-Arid Areas in East Africa
Vulnerability and Adaptation to Climate Change in Semi-Arid Areas in Southern Africa (Regional Diagnostic Studies Report)
Vulnerability and Adaptation to Climate Change in SemiArid Areas in West Africa
The nexus approach to water–energy–food security: an option for adaptation to climate change
AGRIDAPE Numéro Spécial : Faire face aux risques climatiques
DECCMA's approach to the incorporation of gender
Social learning and climate change adaptation: evidence for international development practice
(Re)conceptualising maladaptation in policy and practice: towards an evaluative framework
Climate change, private sector and value chains: Constraints and adaptation strategies
Climate change and the geographical and institutional drivers of economic development
Coping with climate risk: the role of institutions, governance and finance in private adaptation decisions of the poor
Bangladesh GBM Migration Literature Review
Synergies of Remote Sensing with Social Science Tools for Participatory Management of Natural Resources
Pakistan:Country Situation assessment
Senegal Country situation assessment : Review of the Socioeconomical, political and environmental context of Senegal
Connecting the dots: linking climate change resilience to human capital
Tajikistan: Country Situation Assessment
Impact of debris cover on glacier ablation and atmosphere–glacier feedbacks in the Karakoram
Climate risk management report
Burkina Faso Country situation assessment : Review of the socioeconomical, political and environmental situation
Institutions and Adaptation: Lessons Learned from the Climate Change Adaptation in Africa Program. CARIAA Working Paper no. 2
Stakeholder Mapping for Adaptation in Deltas
Water resource decoupling in the MENA through food trade as a mechanism for circumventing national water scarcity
Perceptions of climate variability, current exposure of households to shocks and coping in semi-arid lands: a case study from the Central Plateau region in Burkina Faso
The urban-rural interface: A preliminary study in Burkina Faso

Stakeholder and influence network mapping exercise with the government, development and research actors in Namibia
What if gender became an essential, standard element of Vulnerability Assessments?
Flexibility in land and water use for coping with rainfall variability
A method to assess migration and adaptation in deltas: A preliminary fast track assessment
Climate change impacts on crop productivity in global semi-arid areas and selected semi-arid economies
Report on 1st Round of Stakeholder Engagement (D1.1.3)
Natural capital endowment and dynamics of climate change: experiences from Africa and Asia
Tanzania: Country Situation Assessment
Assessing Migration and Adaptation in Deltas - Integration in DECCMA
Analysis on the Adaptation Inventory of Bangladesh Delta
Selecting representative climate models for climate change impact studies: an advanced envelope-based selection approach
Climate induced rural-to-urban migration in Pakistan
Kenya: Country Situation Analysis
An appraisal of precipitation distribution in the high-altitude catchments of the Indus Basin
Resettlement and Rehabilitation: Indian Scenario.
Flexible Strategies for Coping with Rainfall Variability: Seasonal Adjustments in Cropped Area in the Ganges Basin
Review of National Adaptation Policies, India - WT6.1.2
Review of Odisha State Adaptation Policies, Mahanadi Delta, WT6.1.2
Review of West Bengal State Adaptation Policies, Indian Bengal Delta, WT6.1.2
Review of Adaptation Related Policies in Ghana
Scoping report on adaptation finance initiatives in Bangladesh, Ghana and India
The Bihar Paradox: Floating Villages, Floating Lives
From pilots to systems: barriers and enablers to scaling up the use of climate information services in smallholder farming communities. CARIAA Working Paper no. 3
Selection of Climate Models for Developing Representative Climate Projections for the Hindu Kush Himalayan Region
Transformation in Adaptation: Learning from ASSAR's Regional Diagnostic Studies
Policies, Projects and People: Exploring the Adaptation-development Spectrum in India
Assessing climate change risks and contextual vulnerability in urban areas of semi-arid India: the case of Bangalore

Analysing the economic development impact of semi-arid lands, and mitigation through food-trade water resource decoupling
Understanding patterns of climate-resilient development – the case of Senegal
Cartographie de la chaîne de valeur bovine au Sénégal
Cartographie de la chaîne de valeur du lait de vache au Sénégal
Crop-specific seasonal estimates of irrigation-water demand in South Asia
Geography, institutions and development: a review of the long-run impacts of climate change
Impact of climate change on the hydrology of High Mountain Asia
Investigating the enabling environment for private sector adaptation in Senegal's semi-arid areas
Changement climatique et agriculture durable au Burkina Faso: Stratégies de résilience basées sur les savoirs locaux
Migration in the Indian Bengal Delta and the Mahanadi Delta: A review of the literature
Migration in the Volta Delta: a review of the literature
Setting the scene: National and deltaic migration trends in India, Bangladesh and Ghana
Trade offs for climate-resilient pastoral livelihoods in wildlife conservancies in the Mara Ecosystem, Kenya
La Gestion Intégrée des Ressources en Eau (GIRE) au Burkina Faso
Migration, transferts, adaptation et résilience au changement climatique au Sénégal : un état des lieux
Assessing the robustness and uncertainties of projected changes in temperature and precipitation in AR4 Global Climate Models over the Arabian Peninsula
Dynamics Analysis and Factors in Landscape Units' Evolution in Senegal River Delta Ecosystems
Using of Landsat Images for Land Use Changes Detection in the Ecosystem: A Case Study of the Senegal River Delta
How do we assess vulnerability to climate change in India? A systematic review of literature
Assessing Costs And Benefits Of Climate Change Adaptation
Migration, remittances and climate resilience in Tajikistan
Resilience, equity and growth in semi-arid economies: a research agenda
One step forward, two steps back? The fading contours of (in)justice in competing discourses on climate migration
A framework for the design and evaluation of adaptation pathways in large river deltas
Cotton Value Chain in Pakistan: A Preliminary Assessment of its Climate Vulnerabilities
Towards characterizing the adaptive capacity of farmer-managed irrigation systems: learnings from Nepal
Misfortunes never come singly: Structural change, multiple shocks and child malnutrition in rural Senegal
Climate Change Impacts on the Upper Indus Hydrology: Sources, Shifts and Extremes

Making SDGs Work for Climate Change Hotspots
Migration And The 2015 Gorkha Earthquake In Nepal – Effect On Rescue And Relief Processes And Lessons For The Future
Reference Climate Dataset For The Indus, Ganges, And Brahmaputra River Basins
Adaptation to climate change or non-climatic stressors in semi-arid regions? Evidence of gender differentiation in three agrarian districts of Ghana
ASSAR Short Report: Preparing for the Transformative Scenario Planning in Botswana
Vulnerability and Risk Assessment in Botswana's Bobirwa Sub-District: Fostering People-Centred Adaptation to Climate Change
Climate change perception and system of rice intensification (SRI) impact on dispersion and downside risk: a moment approximation approach
Approche territoriale des changements climatiques au Sénégal : cas de la zone agro-sylvopastorale du Ferlo
Deconstructing a pastoralists' network to evaluate climate adaptation in the sector: A case study of Narok, Kenya
Vulnerability and Risk Assessment in Omusati Region in Namibia: Fostering People-Centred Adaptation to Climate Change
Review of Current and Planned Adaptation Action in Bangladesh
Review of Current and Planned Adaptation Action in Botswana
Review of Current and Planned Adaptation Action in Burkina Faso
Review of Current and Planned Adaptation Action in Ethiopia
Review of Current and Planned Adaptation Action in Ghana
Review of Current and Planned Adaptation Action in India
Review of Current and Planned Adaptation Action in Kenya
Review of Current and Planned Adaptation Action in Mali
Review of Current and Planned Adaptation Action in Namibia
Review of Current and Planned Adaptation Action in Pakistan
Review of Current and Planned Adaptation Action in Senegal
Review of Current and Planned Adaptation Action in Tajikistan
Review of Current and Planned Adaptation Action in Tanzania
Approche territoriale des changements climatiques au Sénégal : cas du Plan Climat Territorial Intégré (PCTI) de la région de Dakar
Hydrogeological delineation of groundwater vulnerability to droughts in semi-arid areas of western Ahmednagar district
Misfortunes never come singly: structural change, multiple shocks and child malnutrition in rural Senegal
Enabling private sector adaptation in developing countries and their semi-arid regions – case studies of Senegal and Kenya

Appendix 2. Gender assessment scale

(CARIAA 2015)

1 - Unacceptable (Gender Blind)

There is no indication that gender was a consideration in the project. There has been insufficient attention to gender in the research design, selection and implementation of data collection methods, analysis and interpretation of findings. The research outputs and their application run the risk of reinforcing gender inequality.

2 - Needs Improvement

Gender was a consideration in the research design and/or, selection and implementation of data collection methods and/or analysis and/or interpretation of findings. However the extent of integration is insufficient to highlight gender differences.

3 - Acceptable

Gender was considered across all aspects of the research design, selection and implementation of data collection methods, analysis and interpretation of findings. The level of integration was sufficient to highlight gender differences.

4 - Good

Gender was considered across all aspects of the research design, selection and implementation of data collection methods, analysis and interpretation of findings. The findings offer useful insights for addressing previous or existing gender inequalities.

5 - Very Good (Gender transformative)

Gender was considered with great sensitivity across all aspects of the research design, selection and implementation of data collection methods, analysis and interpretation of findings. It has brought significant new, highly credible insights as well as potential to use these insights to address gender differences. The research shows potential to challenge existing gender and social power relations, hierarchy or norms and to have significant policy implications.

To inform this assessment, there should be evidence in research procedures for data collection and analysis and in research products that the project in question was aware of and responsive to the needs of and issues affecting women and men. Aspects covered include:

(a) Research design

- Sensitivity to the needs and special situations of women and men, as relevant, in the selection of methods for primary data collection

(b) Research process

- Engagement with research participants using a gender lens, including in using safety protocols
- Flexibility of research to facilitate gender-sensitive inclusion
- Sensitivity to the impact of gender power relations

- Collection of sex-disaggregated primary data

(c) Analysis of results

- Systematic gender differentiated analysis of research activities and findings on women and men
- Solutions that are cognizant of the different situations, responses and needs of men and women in society.

Appendix 3: Analysis of the reviewed papers against the gender assessment scale (from ‘gender-blind’ to ‘good’)

Gender-blind

Out of the 15 papers, only one has been rated gender blind. In the gender assessment scale, a gender-blind piece of research is defined as follows:

There is no indication that gender was a consideration in the project. There has been insufficient attention to gender in the research design, selection and implementation of data collection methods, analysis and interpretation of findings. The research outputs and their application run the risk of reinforcing gender inequality.

The paper (Singh, Gajjar, and Deshpande 2017) *Policies, Projects and People. Exploring the Adaptation- development Spectrum in India* issued by ASSAR in 2016 responds to this description. Indeed, in this paper that explores the adaptation-development spectrum in India, there is no evidence that gender was considered when designing and/or implementing the research that resulted in this paper. For example, the authors did not analyze how the different framings of climate change adaptation they discuss in the paper are likely to integrate (or not) concerns for gender and equity. Similarly, their analysis of the existing adaptation projects in India does not discuss how these projects integrate concerns for gender and equity. Both the analysis of the existing framings and projects could have been possible through a gender and equity lens: the first one (the framings) with the support of existing literature and the second because the authors state that the reviewed projects give great detail about beneficiaries (vulnerable households).

Thus, while the document is entitled *Policies, Projects and People*, it is mostly about projects (instead of policies or people). These projects were analyzed without a gender-lens and concern for equity.

Additionally, the analysis is done against the SDGs (Sustainable Development Goals), which is a valid conceptual approach (among many other possible approaches) to discuss the adaptation- development linkage. However, it would have been interesting to highlight the limitations of such approach, especially when it comes to integrating gender and equity issues.

The authors mention transformation without explaining what it would entail in the Indian context. As Tschakert et al. highlight, “transformation conveys something more radical than mere change or even transition to a new world where climate change effects are a reality”(Tschakert et al. 2013, 346 italics in original). Transformation is a key concept when discussing gender and equity issues because it is crucial to address the root causes of vulnerability and to define pathways towards sustainable futures (Pelling and Manuel-Navarrete 2011; O’Brien 2012; Tschakert et al. 2013), something that lacks in this paper.

Needs improvement

Four papers were rated as needing improvement. In the gender assessment scale, a piece of research that needs improvement is defined as follows:

Gender was a consideration in the research design and/or, selection and implementation of data collection methods and/or analysis and/or interpretation of findings. However the extent of integration is insufficient to highlight gender differences.

These papers are:

Assessing climate change risks and contextual vulnerability in urban areas of semi-arid India: the case of Bangalore

Climate induced rural-to-urban migration in Pakistan

Resilience, equity and growth in semi-arid economies: a research agenda

Social learning and climate change adaptation: evidence for international development practice

These papers share some common and specific weaknesses that are explained and exemplified below.

(i) Insufficient integration of the intersectional perspective: discussions on the factors that are potentially producing vulnerabilities or creating resilience or growth are limited to binary mentions of male/female, rich/poor, urban/ rural

In *Assessing climate change risks and contextual vulnerability in urban areas of semi-arid India: the case of Bangalore* discussions on inequality are limited to discussing the poor/ rich and the urban / rural divide. The discussion on caste related divisions could have included a gender perspective. In addition, *Assessing climate change risks and contextual vulnerability in urban areas of semi-arid India: the case of Bangalore* relies to a certain extent on a sectoral approach (food, water, health, buildings, transport and natural ecosystems – p. 24 and p.25), which makes it difficult to include an intersectional perspective. In the conclusion of the paper *Assessing climate change risks and contextual vulnerability in urban areas of semi-arid India: the case of Bangalore*, the authors voice their concerns on the gender blindness of city scale policies. However, their own diagnostic is hardly gender sensitive (apart from the last comment in the document- which seems to have been added once the research was written up). Several topics (at different scales) in the same paper could have been discussed in a gendered manner. Among these topics are: the evolution of Bangalore's vulnerabilities, the vulnerability of the poor migrant community (p.18), water scarcity, employment, informal/ formal settlements, among other ones.

The authors of *Climate induced rural-to-urban migration in Pakistan* express that “the poorest of the poor” (p.24) will be the most affected by rural to urban migration but do not explain who this category is ‘made of’ in terms of gender, caste, ethnicity, origin, age, etc. Among the questions highlighted for further research in the paper *Climate induced rural-to-urban migration in Pakistan*, there is one on gender: How is migration affecting and likely to affect the gender roles in SALs? Again, gender is confined mostly to the conclusion. *Indeed, even though* on page 24 there is a paragraph on women's issues⁸, unlike the rest of the paper, this paragraph does not

⁸ “Out-migration and declines in wheat production are likely to affect women, too, given their high socioeconomic vulnerability in rural Pakistan. Most data in Pakistan indicate that while male members of poor farmer households out-migrate to add to family incomes, female household members left behind are often forced to undertake additional roles that traditionally resided with men. Future climate extremes such as heatwaves are thus likely to affect women in terms of (i) their traditional household chores (like securing water and energy supplies); (ii) the additional male-dominated tasks they acquire, such as farming, of which they may hold limited traditional knowledge; and (iii) their overall well-being, as their existing socioeconomic vulnerabilities may be exacerbated during climate shocks (e.g. due to low education status, lack of job opportunities, and limited mobility)” (p. 24)

rely on literature or does not cite the source from which these conclusions on women are drawn.

In the few places where there is mention to gender in *Resilience, equity and growth in semi-arid economies: a research agenda*, the topic is not explored in depth. For example when discussing migration: “Meanwhile, those who can- usually men and the better educated- leave to find work elsewhere, further weakening the available skills base” (p. 24). In general, the authors mention many times “the poor” giving the idea that it is a homogeneous category no matter if we are in Tajikistan or Burkina Faso. *Resilience, equity and growth in semi-arid economies: a research agenda* is setting out a research agenda for PRISE (p.30) and providing some conceptual framing to its research projects. While the main research question of Project 1 gives importance to gender and other potential factors of privileges and oppressions⁹, this paper and the rest of the projects’ main research questions do not give enough attention to gender and other potential factors of inequalities and privileges. There is a certain lack of intersectional perspective, which should be especially present when discussing the fair character of growth. This paper could be revised in order to incorporate a gender perspective (maybe through small context-specific examples and case studies by other authors, and the use of gender disaggregated data as well as eventually a feminist discussion of growth).

The authors of *Social learning and climate change adaptation: evidence for international development practice* signal in their paper as a limitation the fact that their review of the literature on social learning did not give enough importance to gender. However, more than signalling it in the conclusion, they could have given it more attention throughout the paper *and* in their conclusions. For example, while discussing power relations, facilitation, networks and by using case studies as examples, they could have highlighted the gendered consequences of different approaches to social learning.

(ii) Insufficient reliance on the most recent understanding of vulnerability, resilience and/or climate change related migrations, which makes it difficult to integrate concerns for gender and equity

While the authors of *Assessing climate change risks and contextual vulnerability in urban areas of semi-arid India: the case of Bangalore* use the IPCC’s fifth assessment report to discuss the linkages between urbanization and climate change, they rely on the fourth assessment report to define vulnerability (p. 14), which is problematic because it is not contextual, relational and multidimensional enough to adequately integrate discussions on gender. Indeed, as explained, since 2007, the conceptualization of vulnerability has evolved considerably: the most recent work allows for integrating better gender and other potential factors of oppressions and privileges.

The authors of *Climate induced rural-to-urban migration in Pakistan* explain that in the literature, migration is often understood as an adaptive strategy aimed at reducing vulnerability (p.13). It would be important to introduce more complexity in this discussion by highlighting how migration sometimes increase (gendered)

⁹ “How does migration enhance economic opportunities, how do climate extremes affect migrants and how can migration be supported as an adaptation strategy while reducing impacts on women, children and the elderly?”- (p.30)

vulnerabilities of those who migrate and/or those who are left behind. A gender perspective would have helped introducing this argument.

In *Resilience, equity and growth in semi-arid economies: a research agenda*, the definition of resilience that is used in the paper (“the ability to anticipate and/or absorb social, economic and environmental shocks, and adapt to changing risks”) – relates to a linear understanding of climate change, which appears in the earlier IPCC reports (2007). In the latest IPCC report (2014) the understanding of resilience and vulnerability relates to a human- security framing that accommodates better gender concerns. Revising this point would help gendering the part on resilient growth.

(iii) Men’s issues and /or masculinities are not integrated in discussions on gender

None of the papers in this category discusses men’s issues and/ or masculinities.

(iv) Insufficient reliance on gender disaggregated data

Even though *Resilience, equity and growth in semi-arid economies: a research agenda* provides a discussion at the global level, in some places gender disaggregated data could have been introduced. For example when the authors state that “ *Secondary education attainment is low in drylands providing weak capacity for skilled employment (Qaisrani, 2015) ”* p. 24). Even though there may not be available gender-disaggregated data for all the countries, some could have been highlighted as examples.

(v) Gendered discussions are weak – they do not cover gender issues at all scale

In the conclusion of the paper *Assessing climate change risks and contextual vulnerability in urban areas of semi-arid India: the case of Bangalore*, the authors voice their concerns on the gender blindness of city scale policies. However, their own diagnostic is hardly gender sensitive (apart from the last comment in the document- which seems to have been added once the research was written up). Several topics (at different scales) in the same paper could have been discussed in a gendered manner. Among these topics are: the evolution of Bangalore’s vulnerabilities, the vulnerability of the poor migrant community (p.18), water scarcity, employment, informal/ formal settlements, among other ones.

Among the questions highlighted for further research in the paper *Climate induced rural-to-urban migration in Pakistan*, there is one on gender: How is migration affecting and likely to affect the gender roles in SALs? Again, gender is confined mostly to the conclusion. *Indeed, even though* on page 24 there is a paragraph on women’s issues¹⁰, unlike the rest of the paper, this paragraph does not

¹⁰ “Out-migration and declines in wheat production are likely to affect women, too, given their high socioeconomic vulnerability in rural Pakistan. Most data in Pakistan indicate that while male members of poor farmer households out-migrate to add to family incomes, female household members left behind are often forced to undertake additional roles that traditionally resided with men. Future climate extremes such as heatwaves are thus likely to affect women in terms of (i) their traditional household chores (like securing water and energy supplies); (ii) the additional male-dominated tasks they acquire, such as farming, of which they may hold limited traditional knowledge; and (iii) their overall well-being, as their existing socioeconomic vulnerabilities may be exacerbated during climate shocks (e.g. due to low education status, lack of job opportunities, and limited mobility)” (source p 24)

rely on literature or does not cite the source from which these conclusions on women are drawn.

The authors of *Social learning and climate change adaptation: evidence for international development practice* signal in their paper as a limitation the fact that their review of the literature on social learning did not give enough importance to gender. However, more than signalling it in the conclusion, they could have given it more attention throughout the paper *and* in their conclusions. For example, while discussing power relations, facilitation, networks and by using case studies as examples, they could have highlighted the gendered consequences of different approaches to social learning.

(ii) Research methods are insufficiently gender and socially sensitive

There is no evidence in the papers in this category for the use of gender and socially-sensitive research methods.

Acceptable

Three papers were rated acceptable. In the gender assessment scale, a piece of research that is acceptable is defined as follows:

Gender was considered across all aspects of the research design, selection and implementation of data collection methods, analysis and interpretation of findings. The level of integration was sufficient to highlight gender differences.

These papers are:

État des lieux des liens entre migration, transferts et résilience au changement climatique au Sénégal

Social vulnerability in three high poverty climate change hotspots: what does the climate change literature tell us?

Review of Current and Planned Adaptation Action in Bangladesh

(i) The intersectional perspective is present but not fully explored, therefore the paper risks reproducing gendered stereotypes such as women being the most vulnerable and the poorest of the poor, etc.

The authors of *État des lieux des liens entre migration, transferts et résilience au changement climatique au Sénégal* integrate discussions on female migrants throughout the paper. This discussion shows that gender was something considered before writing the paper. There is evidence in the paper for the integration of an intersectional perspective and extensive discussions on how gender, ethnicity, education level, geographic origin, profession, economic possibilities (class) can determine migration opportunities. However, the conclusion is lacking of gender and intersectional perspective.

While the article *Social vulnerability in three high poverty climate change hotspots: what does the climate change literature tell us?* is on social vulnerability, it gives relatively little importance (and explanations) on the role of gender, ethnicity and other social factors in shaping vulnerability (apart from some quick references). It seems that in the article, the discussion on the social part is essentially about poverty linked to specific vulnerable livelihoods. In addition, when highlighting the need for an intersectional perspective “the need for greater understanding of the role of

“social stratifiers” in vulnerability” (p.14), the authors only cite Glazebrook, when more and more advanced work on intersectionality in climate change research has been done in recent years (including by Petra Tschakert who is cited in other parts of the article but also by Kronsell and Kaiser).

The analysis in *Review of Current and Planned Adaptation Action in Bangladesh* shows that in Bangladeshi climate change policies gender is mixed up with women and that women are considered as a homogeneous group characterized by their intrinsic vulnerability to climate change. This is something that the authors highlight. However, the authors could have been more critical of the women being the most vulnerable approach. What will this approach do to Bangladeshi women? The authors highlight that in Bangladeshi climate change adaptation policies and actions, while gender is considered as one of the sectors (!) that require more efforts in terms of adaptation actions, gender equality appears mainly as a factor that increases vulnerability (of women and children). This is shown by the Synopsis Table on the key sources of vulnerability on page ix). In *Review of Current and Planned Adaptation Action in Bangladesh*, gender is mentioned as a priority for adaptation but there is no clear vision about what this would entail. Indeed, the need to “increase integration of gender consideration in climate change management” (p.x) does not say much about how a gender transformative adaptation plan would look like or what the transformation of gender roles and relations in Bangladesh as part of adaptation strategies would entail in terms of shifting power relations, changing roles and relations of women, men, caste and ethnic members, etc.

(ii) Insufficient reliance on the most recent understanding of vulnerability, resilience and/or climate change related migrations, which makes it difficult to integrate concerns for gender and equity

Social vulnerability in three high poverty climate change hotspots: what does the climate change literature tell us? Could be revisited by using the understanding of vulnerability that appears in the IPCC’s latest, fifth report. It would open new horizons to discuss gender and equity issues.

(iii) Men’s issues and /or masculinities are not integrated in discussions on gender

None of the papers in this category discusses men’s issues and/ or masculinities.

(iv) Insufficient reliance on gender disaggregated data

- **The reviewed papers in this category do not rely on gender-disaggregated data.**

(v) Gendered discussions are present but the analysis do not cover gender issues at all scale

The authors of *Social vulnerability in three high poverty climate change hotspots: what does the climate change literature tell us?* do not give attention to intra-household dynamics when discussing vulnerability: while they stress that different groups or households in the same location may experience very different levels of vulnerability, they do not mention that members of the same household may experience different levels of vulnerability too.

In their review of the national policies, actions, finance tools, the authors of *Review of Current and Planned Adaptation Action in Bangladesh* could have

highlighted whether gender was integrated in these policies and actions (in Section 5 for example).

(vi) Research methods are insufficiently gender and socially sensitive

There is no evidence in the papers in this category for the use of gender and socially-sensitive research methods.

Good

Three papers were rated good. In the gender assessment scale, a piece of research that is good is defined as follows:

Gender was considered across all aspects of the research design, selection and implementation of data collection methods, analysis and interpretation of findings. The findings offer useful insights for addressing previous or existing gender inequalities.

The papers are:

One step forward, two steps back? The fading contours of (in)justice in competing discourses on climate migration

The Bihar Paradox: Floating Villages, Floating Lives (blog entry)

Misfortunes never come singly: structural change, multiple shocks and child malnutrition in rural Senegal

(i) The intersectional perspective is present but the complex interactions between potentially oppressive and privileging factors in the context of climate change could have been highlighted in a more nuanced way

One step forward, two steps back? The fading contours of (in)justice in competing discourses on climate migration provides a complex and nuanced discussion of the latest discursive shift on climate migrations. It shows how the shift to a post-interventionist discourse that puts resilience at its centre evaporates concerns for (in)justices. By doing so, the authors introduce in the climate migration debate concerns for gender, race and poverty proper to the intersectional perspective. The question of responsibility is central to *One step forward, two steps back? The fading contours of (in)justice in competing discourses on climate migration*. The latter is important for the integration of gender and equity concerns in discussions on climate and environmental changes (including migrations). Indeed, they should not just be about which groups are more vulnerable to climate change (and likely to migrate) or why are they more vulnerable but also about who are responsible of the processes that make these people vulnerable to climate change. The authors of *One step forward, two steps back? The fading contours of (in)justice in competing discourses on climate migration* mention that the figure of the climate migrant has racialized traits but do not explain why. A stronger intersectional perspective could have helped to reinforce the argument about the problematic character of the figure of the 'climate migrant'.

Some weaknesses remain however:

The Bihar Paradox: Floating Villages, Floating Lives risks reproducing some gendered stereotypes (women being more vulnerable, women-headed households, etc.).

In *One step forward, two steps back? The fading contours of (in)justice in competing discourses on climate migration*, the concept of (environmental) justice is not clearly defined and it is only used in one of its declinations: distribution. While citing David Schlosberg who has extensively written on the need of a threefold conceptualization of environmental justice (distribution, recognition and participation), the authors do not give importance to recognition and participation. The later two aspects could not only have potentially reinforced the main arguments but also helped to gender them better.

(ii) The paper builds on the latest scholarly developments on (climate) vulnerability, resilience and/or adaptation.

The authors of *One step forward, two steps back? The fading contours of (in)justice in competing discourses on climate migration* build on the latest scholarly developments on (climate) migrations.

(iii) Men's issues and /or masculinities are insufficiently integrated in discussions on gender

In *Misfortunes never come singly: structural change, multiple shocks and child malnutrition in rural Senegal*, the authors include the role of mothers in the household as a possible factor for mitigating shock effects. However, no such factor concerning the father is included in the study. It would have been interesting to analyze for example the effect of his level of literacy or absence/ presence on child health and discuss his role (if any). It seems that with only considering factors concerning the mother, the authors reinforce traditional gender roles of raising children (attributed to women) while sometimes (or at least in other contexts or within younger families or migrating families) these roles are starting to change.

(iv) The findings rely on gender disaggregated data and gender differentiated contextual analysis of vulnerability, adaptation or resilience

In *Misfortunes never come singly: structural change, multiple shocks and child malnutrition in rural Senegal*, gender is considered as a potential factor of differences. The authors show how boys are more affected than girls by increasing prices and drought shocks. Also, shock concomitances are associated with particularly negative effects on boys' height-for-age. In addition, in *Misfortunes never come singly: structural change, multiple shocks and child malnutrition in rural Senegal* factors concerning the mother (is she the head of the household, is she the spouse of the head of the household, the daughter or unrelated to him/her, her level of literacy, her presence or absence) are considered in the study.

In the short blog entitled *The Bihar Paradox: Floating Villages, Floating Lives*, gender is discussed under a nuanced intersectional perspective. The blog entry highlights how historical legacies of land tenure systems intersect with caste to (re)create vulnerabilities. This blog entry provides an example of how (climate) vulnerabilities can be discussed not only by identifying those social groups that are more or less vulnerable but also by highlighting the processes that make people vulnerable (to climate and other changes). In this case, among these processes are history, flooding, migrations, other population categories' responses to changes, policies and their evolutions, among other things.

(v) Gendered discussions are present but the analysis do not cover gender issues at all scale

In *Misfortunes never come singly: structural change, multiple shocks and child malnutrition in rural Senegal*, among the knowledge gap identified by the researchers that PRISE consortium should consider (p.42) none of the proposed research question is evidently gendered (for example, question 3 “What has been done and will be done to enhance Senegalese household resilience to climate short-term variability and long-term change?” could have mentioned the need to discuss the role of intra-household (gender) dynamics.

(vi) Evidence for gender and socially sensitive research methods are insufficiently highlighted.

While the research is likely to be based on gender and socially sensitive methods, the papers insufficiently highlight them.

Appendix 4. List of interviews

Table 3. List of interviews

Name	Role in CARIAA	Organization	Consortium	Geographical localization	Interview date
Anjal Prakash	Programme Coordinator	ICIMOD	HI-AWARE	Nepal	24/02/2017
Ayesha Qaisrani	Research Associate/ Gender Focal Point	SDPI	PRISE	Pakistan	01/03/2017
Bernard Cantin	Ex-Program Leader	Ex- IDRC	DECCMA, ASSAR, PRISE, Global	Canada (Ottawa)	15/03/2017
Chanda Gurung Goodrich	Senior Gender Specialist- Gender Lead	ICIMOD	Hi-AWARE	Nepal	06/06/2017
Eva Ludi (in the same interview as Helen Mountfort in the presence of Nathalie Nathe)	Acting Principal Investigator		PRISE	UK	21/02/2017
Evans Kituyi	Senior Programme Officer CARIAA	IDRC	ASSAR	Kenya	03/03/2017
Georgina Cundill Kemp	Senior Programme Officer CARIAA	IDRC	ASSAR	Ottawa	10/03/2017
Helen Mountfort (in the same interview as Eva Ludi in the presence of Nathalie Nathe)	Consortium Coordinator	ODI	PRISE	UK	21/02/2017
Jonathan Lawn	Consortium coordinator	University of Southampton	DECCMA	UK	17/02/2017
Kaia Ambrose	Consultant in Monitoring and Evaluation assisting PRISE	ODI	PRISE	Canada (Ottawa)	07/07/2017
Katharine Vincent	Gender focal point for DECCMA	KULIMA	DECCMA	Southampton	24/02/2017
Lucia Scodanibbio	Consortium Coordinator	University of Cape Town	ASSAR	South Africa	17/02/2017

Name	Role in CARIAA	Organi- zation	Consortium	Geographical localization	Interview date
Mamadou Diop	Associate d Researcher / Gender Focal Point	IED	PRISE	Senegal	21/02/2017
Marc New	Principal Investigator	University of Cape Town	ASSAR	South Africa	08/03/2017
Michele Leone	Programme Officer CARIAA	IDRC	DECCMA, Global	Kenya	07/03/2017
Murali Kallur Subrammanyam	Programme Officer CARIAA	IDRC	HI- AWARE- Global	New Delhi	02/03/2017
Nitya Rao	Researcher / Gender focal point	University of East Anglia	ASSAR	UK	06/06/2017
Phillipus Wester	Principal Investigator and Project Leader	ICIMOD	HI- AWARE	Nepal	15/03/2017
Robert J Nicholls	Principal Investigator	University of Southampton	DECCMA	UK	13/03/2017

Appendix 5. Rating of the papers against the gender assessment scale

	Paper title	Rating against the gender assessment scale				
		1. Unacceptable (Gender Blind)	2. Needs Improvement	3. Acceptable	4. Good	5. Very Good (Gender Transformative)
HI-AWARE	One step forward, two steps back? The fading contours of (in)justice in competing discourses on climate migration				X	
	Migration And The 2015 Gorkha Earthquake In Nepal – Effect On Rescue And Relief Processes And Lessons For The Future					X
	The Bihar Paradox: Floating Villages, Floating Lives				X	
DECCMA and DECCMA/ASSAR	DECCMA's approach to the incorporation of gender					X
	What if gender became an essential, standard element of Vulnerability Assessments?					X
ASSAR	How do we assess vulnerability to climate change in India? A systematic review of literature					X
	Assessing climate change risks and contextual vulnerability in urban areas of semi-arid India: the case of Bangalore		X			
	Policies, Projects and People: Exploring the Adaptation-development Spectrum in India	X				

	Paper title	Rating against the gender assessment scale				
		1. Unacceptable (Gender Blind)	2. Needs Improvement	3. Acceptable	4. Good	5. Very Good (Gender Transformative)
PRISE and PRISE/CARIAA	Climate induced rural-to-urban migration in Pakistan		X			
	Resilience, equity and growth in semi-arid economies: a research agenda		X			
	Misfortunes never come singly: structural change, multiple shocks and child malnutrition in rural Senegal				X	
	État des lieux des liens entre migration, transferts et résilience au changement climatique au Sénégal			X		
CARIAA	Social vulnerability in three high poverty climate change hotspots: what does the climate change literature tell us?			X		
	Social learning and climate change adaptation: evidence for international development practice		X			
	Review of Current and Planned Adaptation Action in Bangladesh			X		
Total	15 papers	1	4	3	3	4

Appendix 6. Consultancy Work Schedule

Table 4. Work schedule

Phase 1: In consultation with the CARIAA Gender and Equity Working Group, ensure agreement on the progress indicators that are proposed in the gender monitoring scale and the scope of the review	
Activity	Result
Scanning the peer reviewed and non-peer- reviewed papers of each consortia	Selection of 15 papers for the review (see Table 1)
Finalize the proposed gender assessment framework and progress indicators in the gender monitoring scale	Revised gender assessment framework
Development of a detailed work plan for the mid-term evaluation in consultation with gender focal points of the consortia and the Program Management Team	Development of the evaluation method in an inception report to be validated by Program Management Team
Phase 2: Assess and rate, through an independent and formative evaluation, how CARIAA's body of research addresses gender and social inclusion from research design to output production	
Data collection and analysis of the sampled research outputs + Rating using CARIAA's gender assessment framework and monitoring scale	Analysis
Preparation of the draft report for feedback and approval by the consortia and IDRC	Draft report
Preparation of a presentation of the draft evaluation report with preliminary findings (including ratings, recommendations and proposed concrete actions/opportunities)	PowerPoint presentation of main findings
Presentation of the draft evaluation report for CARIAA for review and discussion	PowerPoint presentation of main findings
Finalization of the report	Final report

References

- ASSAR. 2016. “Gendered Vulnerabilities to Climate Change: Insights from the Semi-Arid Regions of Africa and Asia Information Brief.” ASSAR. www.assaradapt.org.
- . 2017. “WHAT/WHERE | Adaptation at Scale in Semi-Arid Regions.” Accessed March 14. http://www.assar.uct.ac.za/about/about_ASSAR_project.
- CARIAA. 2015. “M&E and Learning Strategy.”
- Diop, Mamadou. 2016. “Genre, Secteur Privé et Changement Climatique? Réflexions Autour de l’Entreprenariat Féminin en Zones Semi-Arides.” *Agripade*, no. October 2016 (October): 15–18.
- Douthwaite, Boru, Sara Ahmed, and Julie Mundy. 2016. “HI-AWARE Learning Review. Final Report.” HI-AWARE.
- Elmhirst, Rebecca. 2011. “Introducing New Feminist Political Ecologies.” *Geoforum*, Themed Issue: New Feminist Political Ecologies, 42 (2): 129–32. doi:10.1016/j.geoforum.2011.01.006.
- FAO. 2012. “What Is Gender?” Food and Agriculture Organization of the United Nations (FAO) Rome. Rome: Food and Agriculture Organization of the United Nations (FAO). <http://www.fao.org/docrep/007/y5608e/y5608e01.htm>.
- HI-AWARE. 2017. “Preparatory Document for Workshop on Gendered Vulnerability Methodology.”
- IPCC. 2007. “Report of the Intergovernmental Panel on Climate Change.” Cambridge, UK: Cambridge University Press.
- . 2014. “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 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.” Cambridge, United Kingdom and New York, USA: Cambridge University Press.
- MacGregor, Sherilyn. 2010. “‘Gender and Climate Change’: From Impacts to Discourses.” *Journal of the Indian Ocean Region* 6 (2): 223–38. doi:10.1080/19480881.2010.536669.
- Morchain, Daniel, Giorgia Prati, Frances Kelsey, and Lauren Ravon. 2015. “What If Gender Became an Essential, Standard Element of Vulnerability Assessments?” *Gender & Development* 23 (3): 481–96. doi:10.1080/13552074.2015.1096620.
- Ndiaye, Néné Dia, Waoundé Diop, and Assane Bèye. 2016. “Organisations Féminines, Vulnérabilité Climatique et Résilience: Le Créneau de la Vente de Lait sur l’Axe Dahra-Thieul.” *Agripade*, no. October 2016.
- Nightingale, Andrea J. 2011. “Bounding Difference: Intersectionality and the Material Production of Gender, Caste, Class and Environment in Nepal.” *Geoforum*,

- Themed Issue: New Feminist Political Ecologies, 42 (2): 153–62.
doi:10.1016/j.geoforum.2010.03.004.
- Noble, I.R., S. Huq, J.A. Anokhin, J Carmin, D. Goudou, F.P. Lansigan, B. Osman-Elasha, and A. Villamizar. 2014. “Adaptation Needs and Options. In: 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.”
- O’Brien, Karen. 2012. “Global Environmental Change II: From Adaptation to Deliberate Transformation.” *Progress in Human Geography* 36 (5): 667–76.
doi:10.1177/0309132511425767.
- Pelling, Mark, and David Manuel-Navarrete. 2011. “From Resilience to Transformation: The Adaptive Cycle in Two Mexican Urban Centers.” *Ecology and Society* 16 (2).
doi:10.5751/ES-04038-160211.
- PRISE. 2017. “Gender Equality in PRISE: A Mid-Term Learning Review of Stakeholder Understanding and Application of Gender Equality in Policy and Practice.”
- Rao, Nytia, Elaine T Lawson, Wapula N Raditloaneng, Divya Solomon, and Margaret Angula. in review. “Gendered Vulnerabilities to Climate Change: Insights from the Semi-Arid Regions of Africa and Asia Nytia.”
- Ravon, Lauren. 2014. “Resilience in Times of Food Insecurity: Reflecting on the Experiences of Women’s Organizations.” *Policy & Practice*, September.
<http://policy-practice.oxfam.org.uk/publications/resilience-in-times-of-food-insecurity-reflecting-on-the-experiences-of-womens-332311>.
- Singh, Chandni, Sumetee Pahwaa Gajjar, and Tanvu Deshpande. 2017. “Policies, Projects and People Exploring the Adaptation-Development Spectrum in India.” CARIAA- ASSAR Working Paper. Ottawa, Canada and London, United Kingdom: International Development Research Centre and UK Aid. Accessed February 25. www.assaradapt.org.
- Tschakert, Petra. 2012. “From Impacts to Embodied Experiences: Tracing Political Ecology in Climate Change Research.” *Geografisk Tidsskrift-Danish Journal of Geography* 112 (2): 144–58. doi:10.1080/00167223.2012.741889.
- Tschakert, Petra, and Mario Machado. 2012. “Gender Justice and Rights in Climate Change Adaptation: Opportunities and Pitfalls.” *Ethics and Social Welfare* 6 (3): 275–89. doi:10.1080/17496535.2012.704929.
- Tschakert, Petra, Bob van Oort, Asuncion Lera St. Clair, and Armando LaMadrid. 2013. “Inequality and Transformation Analyses: A Complementary Lens for Addressing Vulnerability to Climate Change.” *Climate and Development* 5 (4): 340–50.
doi:10.1080/17565529.2013.828583.
- Tschakert, Petra, and Nancy Tuana. 2013. “Situated Resilience: Reframing Vulnerability and Security in the Context of Climate Change.” *Transformation* 3: 4.
- Vincent, Katherine. 2015. “Opportunities for Integrating Gender and Social Equity Issues into the Pathways to Resilience in Semi-Arid Economies (PRISE) Project.”

Vincent, Katherine, and Tracy Cull. 2015. "DECCMA's Approach to the Incorporation of Gender." DECCMA. www.deccma.com.