CITY-LEVEL CLIMATE CHANGE ASSESSMENTS

A CHECKLIST FOR MAINSTREAMING GENDER

Rachael M'Rabu

May 2011

Revised by Kareem Buyana June 2011

1. INTRODUCTION

Climate Change is now recognized as one of the key challenges of the 21st century. The future of hundreds of millions of people in urban areas across the world will be affected by the different impacts of climate change. Global warming will put cities at risk by exacerbating existing environmental, social and economic problems, while bringing new challenges. The most affected, are the world's urban poor who, are systematically excluded from the formal economy of the city, forcing them to live in the most hazardous sites and thus making them most vulnerable to the risks associated with climate change.

Evidence is emerging that the impacts of climate change-related natural disasters exacerbate existing inequalities in transport, urban housing, agriculture, education, health, water, employment and other sectors, and yet these are not only the building blocks of women's as well as men's livelihoods, but are also crucial in enhancing their adaptive capacities in the face of risks associated with climate change. Climate change transmits and reinforces gender and racial inequalities, often affecting poor minorities and poor women more than any other groups.¹ As such, there is need for a gendered response to climate change. What is required in such a response, over and above a set of gender disaggregated climate information showing that climate change has differential impacts on women and men, is an understanding of existing inequalities between women and men, young and old, disabled, ethnicity, and of the ways in which climate change can exacerbate these inequalities. Conversely, an understanding of the ways in which gender inequalities can intensify the impacts of climate change for all individuals and communities is required. This inverse relationship between gender and climate change is illustrated, for example, by situations where the social arrangement places women's mobility under men's control which in the end restricts their participation in climate change extension services. On the other hand, women's dependence on non-motorized transport relative to men, in balancing domestic and community responsibilities may be the disenabling factor in cases where mobility is unrestricted by men.

Therefore the gender-climate change relationship focuses on the relational differences between women and men, structured by socially constructed roles and rights, and how the differences shape women's relative to men's, concerns, needs, involvement, contributions, and attitudes towards the risks and hazards associated with changes in climatic conditions. However, for a deeper analysis, attention should be paid to the unequal power relations and patriarchal cultural norms ² that underlie gender relations. This is because such gender imbalances are to the greatest extent responsible for women's lesser socio-economic position across all sectors, which limits their capacity to adapt to the existing and predicted impacts of climate change. If these gender differentials and imbalances are not adequately considered right from conception to actualisation of vulnerability assessments, the subsequent follow-up actions and policies will not only be gender-

¹ See Cities and Climate Change : Global Report on Human Settlements 2011

² Society is associated with natural order linked to hierarchy. Gender relations are basic power relations that show power imbalance which arises from the ideologies of femininity and masculinity with masculinity perceived as dominant and therefore more equal.

blind but also produce outcomes that worsen the existing inequalities between women and men.³ For this reason, there is need to mainstream gender into city level climate change vulnerability assessments. This can be achieved through applying the present checklist tool to assist in mainstreaming gender concerns, while at the same time building linkages between climate change and gender in the urban context, and fostering open discussion on this inter-linkage, to ultimately design gender responsive adaptation and mitigation action plans.

The present Checklist has been developed under UN-HABITAT's Cities and Climate Change Initiative (CCCI). This Initiative seeks to enhance climate change mitigation and adaptation capacity of cities in developing and least developed countries. The Checklist will look at the gendered impacts of climate change and the opportunities for women relative to men to feed their own knowledge into community, city or national-level adaptation and mitigation strategies to strengthen processes of reducing climate change impacts in the short and long-term. It will also look at climate change and urban governance, specifically in the context of implementing mitigation and adaptation actions, and how gender-specific issues can be mainstreamed to ensure that women together with men, of different social categories, have the capability and equal access to mitigation and adaptation opportunities, such community-led capacity building initiatives on climate change, that can greatly contribute to the promotion and incentivization of green micro and small enterprises, for example in urban agriculture and the waste sector.

Below is the Cities and Climate Change Initiative (CCCI) Process Model which has been used to undertake climate change assessments and additional actions in different cities world-wide. The Model includes:

- 1. Initial climate change assessment;
- 2. Follow-up in-depth assessment;
- 3. Development of strategies and action plans;
- 4. Consolidation, institutionalisation and mainstreaming.

³ See Gender, Cities and Climate Change: A Thematic report prepared for Cities and Climate Change Global Report for Human Settlement 2011

CCCI Process Model



For the purposes of this Checklist, only the first two stages of the Process Model, i.e., Initial climate change assessment; and Follow-up in-depth assessment, will be addressed.

2. INITIAL CLIMATE CHANGE ASSESSMENT

Cities around the world are increasingly exposed to new hazards due to climate change. This phenomenon is not gender-neutral because climate change has differential affects on women, men, boys and girls, young and old, people with and without disability. Such gender-differentiated impacts give rise to unequal adaptive capacities and modes of engagement in decision spheres pertaining to climate change adaptation and mitigation efforts, including how local, national and alobal funding is to be used. The urban poor, majority of which are women, are disproportionately at risk due to a variety of reasons. Firstly, the fact that majority of the poor in cities are women in informal employment ⁴ characterised by comparatively less pay and un-protective city regulations, results in a lack of income or assets base that relegates them to poor guality housing, in dangerous sites such as flood-plains and unstable slopes. These locations not only lack all necessary infrastructure, but also security of tenure. Secondly, in many parts of the world, women, due to the tripartite nature of their gender roles (reproductive, productive and community roles), utilize residential and commercial places for domestic and commercial purposes, a condition that forces them to work from home or nearby surroundings, with responsibilities of taking care of the young and old. This puts women at a higher risk and vulnerability than men, to the effects of any disaster including climate change. For instance, women unlike men are most times responsible for climatesensitive tasks such as securing food, water, energy and child safety during times of flooding. As such, gender-differentiated vulnerability assessments can potentially provide a deeper understanding of how women in comparison with men interface and cope with climatic stressors, such as floods and prolonged dry spells.

The hazards that are related to climate change include the following:

⁴ UN-HABITAT (2003)

- 1. Increased temperatures;
- 2. Increased precipitation;
- 3. Decreased precipitation;
- 4. Rising sea levels and;
- 5. Frequency of extreme events.

In case the aforementioned incidents occur, the level of women's relative to men's exposure is likely to be unequal because of differences in socio-economic status. Majority of the women are likely to face greater exposure due to their lower earnings, which might lead them to stay in lowincome settlements where their coping options may be limited, for instance due to lack of productive assets such as financial capital, that can offset the health care costs associated with climate change. Women are also proportionally more dependent on the natural resources, in activities such as urban agriculture, which are threatened by climate change. In addition, women in urban areas are taking up a substantial share of breadwinning responsibilities alongside domestic work, a condition that is likely to create more time and labor costs in performing climate-sensitive tasks such as securing food and ensuring child safety during floods. They are specially affected because of taking over the biggest part of unpaid domestic work as well as providing the daily essentials. ⁵ There is also a great link between urban poverty and vulnerability to climate risks, explained by gender imbalances in access and control over resources and opportunities. However, in cities with relatively equal rights for women and men, these gendered vulnerabilities may be easier to minimize, as compared to cities where patriarchal norms are still deeply seated into the legal, social and economic fabric.

The table below shows the different climate variables and their possible gender-differentiated impacts ⁶ in cities and potential urban planning related consequences of these variables. It is placed here at this early stage to assist in both the initial and In-depth climate change vulnerability assessments, in describing some of the possible impacts of climate change on women relative to men.

CLIMATIC VARIABLE	POSSIBLE IMPACT	GENDER-DIFFERENTIATED IMPACT	POTENTIAL URBAN PLANNING – RELATED CONSEQUENCES
1.IncreasedTemperatures	 Ground and surface water depletion Water shortages and use conflicts Water resource degradation Fuel shortage including fuel wood and charcoal 	 Women and girls traveling longer distances and spending more time in search of water, food and fuel wood thus increasing their workload in terms of commuter time and costs Girls and boys absence from school to assist mothers in offsetting the burden of water shortage Female and male household expenditure on piped water increased Insecurity and exposure to rape while searching for safe drinking water 	 Strained water infrastructure and deficiencies in water resource management Overstretched health care systems resulting from water- related disease burdens

[ahlo]	1.	Climatic	variahlos	and the	aondor.	.difforoi	hatsite	imnacts	in	citiac
abic	۰.	Cimatic	variabics	and the	ychuch	unicici	illaluu	impacto		CILICS

⁵ Source AWID – Janice Duddy (2002) Is climate change a matter of gender?

⁶ Gendered impacts here would men highlighting women-specific impacts as well as those that affect both sexes.

CLIMATIC VARIABLE	POSSIBLE IMPACT	Gender-Differentiated Impact	POTENTIAL URBAN PLANNING - RELATED CONSEQUENCES
	 Forced Migration and Displacement 	 Dependence on contaminated water sources thus increased exposure to water-borne epidemics Lack of adequate shelter for all Girls dropping out of school, early marriages and forced prostitution Inadequate support for female- headed households during recovery due to lack of access to funds because men are often prioritised 	 Distress migration to cities/towns due to droughts in rural areas
		 Weakened defences of entire communities Risk of HIV/AIDS increases due to early marriage, forced prostitution, etc. Conflict and violence due to increasing scarcity of natural resources, resulting in gendered patterns of violence Increased energy, water and food prices in cities and women's low purchasing power 	 Interruption of food supply networks and higher food prices Potential energy price increases (e.g., from reduced hydro-electricity generation in places where it exists)
	 Degraded air quality (smog) Heat related deaths Increase in skin and respiratory diseases, meningitis, exacerbates HIV and AIDS 	 Over-stretched health care system due to cold and heat-related disease prevalence Increased burden for women due to care for young, sick and elderly in the community Mental health problems of women and men due to trauma and stress, with different stress factors and reactions of women and men Malnutrition due to food insecurity. Potential increase in maternal and infant mortality rates due to lack of health care services including reproductive health services 	 Exaggerated urban heat island effect Increased energy demands for cooling Population health impacts (e.g., increased mortality during heat waves, decreased access to food/nutrition)
2. Increased Precipitation	 Increased risk of flooding Increased risk of landslides or mudslides on hazard slopes Increase in crop production Crop failure Risk of Displacement 	 Increased food prices in cities and women's low purchasing power Malnutrition of women because of food insecurity and women prioritising feeding of children and other family members Lack of adequate shelter Loss of household properties for both 	 Interruption of food supply networks Property damage (homes and businesses)

CLIMATIC VARIABLE	POSSIBLE IMPACT	GENDER-DIFFERENTIATED IMPACT	POTENTIAL URBAN PLANNING – RELATED CONSEQUENCES
		 women and men due to floods Access to basic services hampered Impassable commuter routes and drainages which women depend on to perform productive and reproductive roles using non-motorized transport 	 Flooding of access routes to sanitation facilities and water points Damage to infrastructure not designed to standards of occurrences being experienced
		 Loss of livestock for those involved in poultry, piggery and goat rearing, a productive asset for women in urban agriculture Loss of livelihoods and income from informal work at home Conflicts; Inadequate support for female-headed households during recovery due to lack of access to funds because men are often prioritised 	 Disruption of livelihoods and city/town economies
		 Mental health problems of women and men due to trauma and stress, with different stress factors and reactions of women and men; 	Distress to migration to cities due to floods in rural areas
		 Sexual harassment for women and girls in post-disaster relief shelters; Loss of traditional land tenure, e.g. where women can only access land through male relatives, women might lose access to land 	 Displacement and population movement from informal settlements built on steep slope hazard lands, etc
	 Increase of diseases like cholera, malaria and dysentery 	 Increased burden for women due to care for sick family and community members Potential increase in maternal and infant mortality rates due to lack of health care services Lack of family planning and reproductive health care in disaster zones Greater incidence of mortality for women, children and the elderly 	 More favourable breeding grounds for pathogens (e.g., mosquitoes and malaria) Population health impacts (increased incidences of water borne diseases like cholera etc)
3.Decreased Precipitation	DroughtResource scarcity;	 Extra burden on women who spend more time in search of clean water; 	 Water shortages
	 Natural resource degradation; 	 Household food provision will decrease leading to women working longer hours in agricultural work; 	 Interruption of food supply networks and higher food prices
		 Crop failure due to prolonged dry spells for women and men who depend on urban agriculture as an alternative source of income 	
		 Malnutrition of families and especially women because of food insecurity and women prioritising feeding of children and other family members; Increased food prices in cities and women's low purchasing power; 	

CLIMATIC VARIABLE	POSSIBLE IMPACT	GENDER-DIFFERENTIATED IMPACT	POTENTIAL URBAN PLANNING – RELATED CONSEQUENCES
	 Sand storms; 	 Loss of ecosystems and biodiversity; Conflict and violence due to increasing scarcity of natural resources, resulting in gendered patterns of violence that increase gender inequalities; Ecological migrants / refugees; Male out-migration due to resource shortages, generating increased work for women; Increase burden for women taking care of the sick who suffer from respiratory and eye diseases; Food supply – when it is covered by a layer of sand; Housing destroyed, especially poorly 	 Displacement and population movement from drought stricken areas; Population health impact (increased incidents of eye and respiratory diseases; Interruptions in construction (especially of roads when they are covered by a layer of sand)
		 built houses blown away eg roofing etc Sexual and gender-based violence in post-relief shelters 	
4. Sea-level Rise	 Coastal flooding Increased storm surge hazard 	 Loss of traditional land tenure as a result of displacement by the sea, women might lose access to land Sexual harassment for women and girls in post-disaster relief shelters 	 Displacement and population movement from coastal flood areas Property damage (homes and businesses) Damage to infrastructure not designed to standards of occurrences being experienced
		 Loss of income from informal work at home Inadequate support for female- headed households during recovery due lack of access to funds because men are often prioritised Loss of natural resource- dependent livelihoods 	 Disruption of livelihoods and city/town economies
		 Increase burden for women taking care of the sick Lack of family planning and reproductive health care in disaster zones 	 Population health impacts (injuries, increased mortality and illness)
	 Salt water intrusion into groundwater supplies in coastal areas 	 Increased burden of having to look for fresh water for women and girls 	 Increased cost of purifying water for human consumption
5. Increased extreme	More intense floods	Loss of legal or traditional land	Property damage (homes and

DRAFT NO	. 6		
CLIMATIC VARIABLE	POSSIBLE IMPACT	GENDER-DIFFERENTIATED IMPACT	POTENTIAL URBAN PLANNING -
weather episodes (storms, cyclones, hurricanes etc)	Higher risk of landslides/ mudslides on hazard slopes	 tenure, e.g. where people are displaced by either floods or landslides. Greater exposure to hazards due to living on floodplains or unstable slopes, leading to reduction of life expectancy 	RELATED CONSEQUENCES businesses)
		Access to basic services hampered	 Damage to infrastructure not designed to standards of occurrences being experienced Access routes to sanitation facilities and water points are blocked or flooded
		 Loss of the principle health care takers due to greater incidences of female related mortality Increase burden for women taking care of the sick 	 Population health impacts (injuries, increased mortality, distress)
		 Inadequate support for female-headed households during recovery due lack of access to funds because men are often prioritised Loss of income from informal work at home Less adaptive capacity for women due to the fact that they lack the income to move to better quality housing or less dangerous sites 	Disruption of livelihoods and city/town economies
		 Increased food prices in cities and women's low purchasing power 	 Interruption of food supply networks

Source: Adapted from Developing Local Climate Change Plans, UN-HABITAT/International Institutes for Environment & Development (2010) and Willbanks et al (2007)

Bearing in mind the gender-climate change linkages suggested above, the following checklist should be useful in assessing the gendered risks⁷ faced by cities due to climate change. Its application will result in a profile of vulnerability which should help to establish the extent to which men in comparison with women are susceptible to impacts of climate change in cities. It will illustrate and determine whether or not a city has the capacity to equitably ensure that women as well as men adapt to climate change for the benefit of all city dwellers. The checklist looks to establish in a general manner, the hazards, vulnerability and adaptive capacity of the city and its citizens – female relative to male, young and old and other social groups. Specifically it will:

• Characterize the hazards associated with climate change at the city level, looking at if there is a gender issue that specifically contributes to particular hazards;

⁷ Risk is defined as the product of the three vectors: hazards, vulnerability, and adaptive capacity

- Identify the most vulnerable gender group in the city and;
- Assess the city's ability to adapt to anticipated changes in climate in an equitable and sustainable way (World Bank, 2009).

Table 2: Gender responsive checklist for initial assessment of climate change impacts at city level

Name of City:	
Gender responsive vulnerability assessment	Findings/ Comments
1. What are the social-demographic characteristics of the city?	
Disaggregated by sex, age, location (planned and planned and neighborhood characteristics (multi-family and single family dwellings)	
2. What are the present and predicted climatic variable in the city?	
3. What social, economic and environmental factors make women relative to men vulnerable to the risks associated with climatic variables in the city?	
4. Which reproductive, productive and community roles do women relative to men take on, what resources do they utilize to perform these roles and how does the combination of gender roles and resource utilization contribute to and get affected by the emission of green house gases, which contribute to global warming and other climate change-related impacts?	
5.What urban sectors are most affected by climate change, and how does this impact on women's relative to men's access and control over resources and opportunities in these sectors?	
6.How is urban infrastructure e.g. road and drainage works, affected by climate change, and how does this impact on the survival and safety of women relative to men in the city?	
 9. How do the following social groups get affected by climate change: Children People with disabilities (PWDs) The Elderly The Youth 	
Gender responsive assessment on adaptation	Findings/ Comments

|--|

capacities	
10. State the climate change hazard/s in the city.	
Explain the mechanisms used by women to cope with such hazards.	
Explain the mechanisms used by men to cope with the same hazards?	
What social, economic and environmental risks do women relative to men face in using such mechanisms to cope with climatic hazards?	
11. Amongst women and men, who is likely to migrate as a result of climate change and how effective is such migration in enabling women relative to men safeguard against climatic hazards?	
12. What resources and opportunities do women as compared to men need in order to effectively handle climatic hazards?	
Who has access to such resources, disaggregated by sex and why?	
Who has control over the resources, disaggregated by sex and why?	
13. What resources, if different from those under12, do the following social groups needs to be able to handle climatic hazards:	
 Children Youth Disabled 	
Elderly	
Who of these social groups has access and or	
CONTROL OVER THESE RESOURCES AND WHY?	
neighbourbood schemes or community-based	
organisations (CBOs) that operate in the city, and	
how do these groups engage with women relative	
to men in addressing the issue of climate change?	
15. Mention the local and or international non-	
government organisations (NGOs) that operate in	
the city, and how do these engage with women	
relative to men in addressing the issue of climate	
cnange?	

16. How do city authorities deal with climate change, and are these mechanisms sensitive to gender concerns in climate change?	
17. Which partner organizations does the city work with to facilitate gender responsive climate change adaptation, and how are the activities undertaken?	
18. Does the city have a climate change strategy, and how are gender concerns addressed in this strategy?	
19. What methods are used by the city to commit human, financial, technological and other types of resources to climate change adaptation, and how effective are such methods in enhancing women's as well as men's capacity to handle climatic hazards?	
20. Which stakeholders does the city collaborate with to mobilize resources for climate change adaptation, and how are these stakeholder committed to gender concerns and needs?	
21. How does the city monitor and evaluate its strategies on climate change, and how are gender concerns captured in this process of monitoring and evaluating the strategy?	

National-level Assessment

A city's success to effectively address gender concerns in climate change partly depends on policy and stakeholder commitments at national level. While cities can drive the gender agenda at the local level, national governments have to be committed to mainstreaming gender into the conception, design, operationalization and evaluation of climate change policies and programmes. If gender mainstreaming at national level is effectively undertaken, cities are likely to respond similarly, although care should be taken not to assume that what has worked at national level can effectively respond to urban-specific gender concerns. This is because national level assessments and responses tend to be characterised by generic strategies, which seek to address rural and urban gender issues. This means that cities ought to customize and downscale national-level strategies to urban-specific gender concerns. Nevertheless, mainstreaming gender into climate change at city level partly has the weight of its success on the effectiveness of national guidance systems. For this reason, below is a set of questions that can assist in determining whether the national government is committed to mainstreaming gender into climate change and if it is not, provide an opportunity to start looking at climate change through gender lens.

Table 3: Gender responsive checklist for initial assessment of climate change impacts at national level

Name of Country:	
	Findings/ Comments

1. What climate information related to the livelihoods of men as compared to women is the government providing?	
2. How is this information being disseminated and is it equally accessible to men in comparison with women?	
3. Which economic sector is most vulnerable to climate change?	
How does this affect women relative to men?	
4. How do the different sectoral policies address the issue of climate change, and how integral are gender concerns in these policies?	
5. Which central government agencies are responsible for implementing climate change strategies, and to what extent are these agencies committed to making gender an integral part of their decisions and action-plans?	
6. Through what mechanisms are national- level partners (development partners, CSOs and the private sector) involved in climate change policies and programs?	
How effective are these mechanisms in enabling gender concerns become a central element of climate change policies and programmes?	

3. FOLLOW-UP IN-DEPTH ASSESSMENTS

3.1 Gender, climate change and urban sectors

Both climate change and gender are cross-cutting issues in urban planning and development and therefore require mainstreaming into sectoral policies and programs at city level. While some authorities at city or municipal level have endeavoured to mainstream climate change into their policies, gender concerns have remained the least acknowledged, and this limits the effect that climate change policies and programs can have on the end-users of city infrastructure and services. This is most times due to insufficient information about the urban-specific and gender-differentiated impacts of climate change, and how the failure to address these, can downplay the effectiveness of mitigation and adaptation programmes.⁸ To address this shortfall, in-depth gender responsive assessments ought to be undertaken. At the beginning, emphasis can be laid on risk mapping for a particular vulnerable neighbourhood to determine the real issues affected by climate

⁸ See Gender, Cities and Climate Change: A Thematic report prepared for Cities and Climate Change Global Report for Human Settlement 2011

change and the levels of vulnerability for men relative to women of different social categories. This entails the cycle of designing tools for collecting, analysing and synthesising gender disaggregated information on vulnerabilities pertaining to businesses, housing, energy, public and private transport use, water and sanitation, urban health extra. This can also provide possibilities for generating gender disaggregated information on mitigation, in terms of how women's relative to men's activities across these sectors, contribute to or are likely to be hampered by the continuous emission of green house gases, to ultimately design strategies that are attuned to women's as well as men's mitigation tasks and needs.

The gender responsive checklist for in-depth assessment is divided into two parts. The first half focuses on in-depth neighbourhood assessments,⁹ and the second half addresses urban sectors affected by climate change and how such effects are differentiated by gendered variables. For either approach, effectiveness is highly dependant on the active participation and reciprocal relationship between different stakeholders to dialogue and equally learn from each other, through consensus-building on the sectoral and gender-differentiated impacts of climate change.

Urban sectors most affected by climate change vary from city to city depending on the climate variable or hazard that the city is exposed to. These should be identified in the initial assessment phase through participatory and gender inclusive stakeholder consultations, such as neighbourhood schemes that comprise of female and male participants, organized gender groups from the community, community development officers, urban sector staff from the city council and local leaders. This brings out gendered experiences, knowledge and interests on climate change vulnerability, adaptation and mitigation. Examples of urban sectors where climate change impacts may be different for women relative to men include:

- a) Water and sanitation
- b) Waste management
- c) Health
- d) Housing
- e) Transport
- f) Energy

An in-depth examination then could be carried out on priority urban sectors to establish and identify key vulnerabilities and their gendered impacts on society while at the same time look at possible interventions with regard to mitigation and adaptation. This gender- sensitive risk mapping in which social groups map their own vulnerabilities will give more concrete results to the broad generalization recorded during the initial assessment. In this sense, diverse contexts can be explored and locally effective solutions developed, rather than a one-size-fits-all understanding of vulnerability.¹⁰ The mapping should be able to determine the differentiated vulnerability of men and women to the impacts of climate change to the city. Gender division of labour should be outlined, taking into consideration local gender roles and available resources.

Governments often have ministries that deal with gender issues, as well as parastatals that carry out activities related to gender and climate change in the sectors mentioned above. Where an indepth sectoral assessment is carried out these entities should be mapped, clearly stating their

⁹ For details on how to conduct Neighbourhood Assessments, kindly refer to appendix 2

¹⁰ Hartmann B. (2006)

objectives, who they work with in the specific locations and whether their objectives are being achieved. The same should apply for NGOs, CSOs and private sector activities on the ground. Most important to note is whether these entities are using participatory and inclusive processes that take into account the strengths of women and men and their ability to address the different climate change issues that they encounter. This will in some ways give an indication of whether the city as an entity has the capacity to adapt to effects climate variability.

Table 4	1: Cheo	klist for	In-depth	Assessments
I UDIC	. 01100		in acpui	71336331101113

City:	
Specific area:	
Population:	
(1) Noighbourbood assassment	
Questions/activities	Comments and findings
1. What inequalities and injustices are apparent between men and women?	
Begin with elaborating on the gender division of labour in the area. Paid/unpaid	
Gender differential in income/ economic resources	
Cultural patterns and social roles – are men/women restricted to do certain things?	
How many hours per day do women do unpaid work like collection water/ food preparations/care work etc?	
2. How dense is the area? - Population vis as vis area	
3. What climate change hazard/s affects this specific area and how is it manifested?	
What is the intensity?	
4. Who lives in the areas most exposed to effects of climate change?	

DRAFT NO. 6	
What characterises the poorest of the poor?	
5. Assess gender differentials knowledge of	
climate change?	
6. Availability of post-disaster relief shelters?	
Are these responsive to the human security	
needs of women relative to men?	
7. Is the City Council doing anything in the area	
to address gender issues in climate change?	
What are they doing and with whom	
8. What is the adaptive capacity of the	
community? Are these capacities gender	
differentiated?	
Do the city /communities have any organized	
groups in place that assist in building capacity	
for resilience?	
List NGOS/parastatais/government departments	
dealing with issue of gender and climate change	
In the specific area stating which urban sector/s	
they are covering and with whom?	
Are they addressing mitigation or adoptation?	
Are they addressing miligation or adaptation?	
0. Cius susmalas of gonder on solfic militation	
9. Give examples of genuer specific miligation	
and adaptation measures in the area.	
Who is lunding them?	
Are they market based?	
To what extent are they successful?	
10. How do womon in the area contribute in	
disaster risk reduction thus ophancing	
usasier risk reduction, thus enfiditulity	
resilience of the community?	
(2) Sectoral assessments	
(2) 35610101 03353311151113	
Questions/activities	Comments and findings

DRAFT NO. 6		
What urban services are available in the area and which ones are vulnerable to climate change?		
What are the gender imbalances by sector?		
 Water How is this sector affected by climate change? 		
 What are the contributory factors to GHGs? – Look at gender roles and decisions that influence GHG emission in the water sector. 	S	
• Is there a safe water network?		
How do men/women cope with drough flood, contaminated water etc	1	
• What is the source of water for the area? Eg spring/river/tap etc. Map-out where the water points are in the area vis a vis access to them when climate related disasters occur		
How many community water points in the area?		
Homes with running water?		
What specific disaster affects provision of safe water in the area?		
• What is the gender division of labour with regards to water collection and what happens when disasters occur?		
Gendered impact?		
What is it that makes women or men particularly vulnerable?		
How do men/women manage the situation?		

 Sanitation How is this sector affected by climate change? 	
 What toilet-types are in the area – how many people per toilet? 	
• Normally cities have codes and by-laws to protect inhabitants against water and sanitation hazards eg. How deep a septic or pit-latrine should be. What are these codes? Are they respected? If not, what is happening on the ground?	
 What is it that makes women/men particularly vulnerable when sanitation is threatened? Look at the factors related to their sex 	
Other infrastructure	
 Is there a Power grid? How is it affected by climate change? 	
 Is there a road network? What are the gendered impacts of climate change? 	
 Are all these systems designed or are they haphazard? 	
Waste management	
How is this sector affected by climate change?	
• What are the contributory factors to GHGs? –Look at gender roles and decisions that influence GHG emissions in the waste management sector.	
• Look at factors that lead to the production of waste. Who is the largest producer of waste (men or women)?	
 Who manages waste/ Any recycling of waste initiatives in place? 	

•	How is the waste disposed?	
•	What is it that makes women /men particularly vulnerable to effects of climate change and what are their priorities	
Health		
•	How is this sector affected by climate change?	
•	What kind of climate change related diseases is the community vulnerable to?	
•	Who are most affected/ who takes care of the sick and how does it affect their other functions in the community?	
•	Does the community have health centres? – who manages them and how well stocked are they to deal with disaster in the area?	
•	Where are the health centres? Are they designed to withstand disasters and remain up and running no matter what?	
•	What is it that makes women particularly vulnerable?	
Energy		
•	How is this sector affected by climate change?	
•	What are the contributory factors to GHGs? – Look at gender roles and decisions that influence GHG emissions in the energy sector.	
•	List the types of energy used in the area and usage	

	NO. U	
•	Estimate household energy consumption by type	
•	How is use of a particular type of energy affected by climate change, and how does this translate to vulnerability for women and men?	
•	How is availability of access to energy (sources) affected by CC?	
Housir	D	
•	How is this sector affected by climate change?	
•	Look at female headed households and compare them to male headed households in terms of design and materials used in construction	
•	What is the culture of the area in terms of the rights of men and women to own land and housing?	
•	How does this cultural practice make women /men particularly vulnerable?	
•	What are some of the adaptation measures and how successful are they?	

3.2. GENDER, CLIMATE CHANGE AND GOVERNANCE

The equal participation of women and men in local government decision-making is critical in ensuring that any decisions made are relevant to the living conditions and needs of the local men and women. It is therefore not only important that the provision of services and all local government activities are effective and efficient but also they have to cater for the poor in the cities, majority of the poorest being women. It is for this reason that local authorities must be accountable to all social groups and especially poor women whose priorities have not been included in municipal policies, planning frameworks and budgeting guidelines. Local authorities must adopt participatory approaches that are gender inclusive, identify strategies that will help overcome constraints holding the different stakeholders (men and women, girls and boys, young and old, ethnic minorities etc) back from participating in activities related to climate change. Failure to consult all groups could result in inadequate identification of problems and solutions, leading to further environmental

degradation and loss. On the other hand a balanced participation could lead to a more complete perspective, could better take into account the diversity of social groups and their life situations.¹¹

Not enough attention has been paid by authorities in charge of rehabilitation, to the uneven impacts of climate change on gender groups. Women are rarely involved in decision-making processes regarding natural resource management, disaster responses and the lack of participation of women in particular, in the planning and execution of mitigation and adaptation strategies ensures that women continue to be more vulnerable, marginalized and their specific issues go unnoticed, thus exacerbating inequalities even further. Bureaucratic disaster responses tend to be short term in their scope and fail to link community gender roles and adaptation responses with development activities. In many cases, women are left to cope on their own.

In order to be involved and influence decision in climate change mitigation and adaptation, women must use their strength and natural networking abilities to create women's groups and civil organisations so as to form a critical mass of women dealing with priorities at the local level and making decisions that concern women. Women who are active in policy advocacy can influence effective, gender-responsive legislation in their local governments. This will ensure that women are viewed as partners in climate change action including risk assessment and decision making on community actions that have solutions that will improve lifestyles.

In northern Ghana, for example, work is on-going with local communities and district officials to promote the integration of climate change adaptation into participatory development planning processes. The project is supporting women to assume leadership roles in community and local government organizations by providing training and mentoring, as well as by strengthening the capacity of women's organizations to advocate for women's rights. These efforts, alongside district-level action to reduce vulnerability, are reducing systemic inequalities that prevent women from fully contributing to the resilience of their households, communities and society.¹²

Good governance at local government level can be an effective approach to successfully mainstream gender into climate change. The actions listed below may assist in the inclusion of women in approaches to climate change at city level. For the in-depth assessment this checklist may be used to determine to what extent a city is gender compliant in its climate change undertakings. The checklist can be used to tick off what is already in existence in a given city and what is yet to be put in place and therefore inform the in-depth assessment on the commitment of the city to gender mainstreaming. The checklist also suggests steps that a local authority can take later in the process to mainstream gender and climate change concerns into policies and procedures.

 Table 5: Climate change checklist for Inclusion of women in Local Authority Governance

¹¹ Alber et al (2006)

¹² CARE International(October 2010) International Climate Change Brief: *Adaptation, gender and women's empowerment*

Has the local authority:

- Developed a policy position on inclusion of gender in climate change projects for adoption by Council, and publicize this commitment.
- Established a "Gender and Climate Change" working group to "proof" all policy documents.
- Reviewed information that is currently available on mitigation and adaptation, and identify roles for both men and women.
- Identified future_gender disaggregated information requirements based on realistic monitoring of the climate vis a vis rate of growth of the city, ratio of women to men etc.
- Ensured that all, including women participating in decisions related to climate change have access to capacity building programmes.
- Undertaken gender training on climate change for technical and political officers as well as local development partners.
- Applied gender planning and budgeting to climate change departments¹³
- Undertaken professional and community development activities such as attending Forums to enhance understanding of gender and climate change, and awareness of potential climate change actions that involve both men and women.
- Engaged the community including councilors, residents men and women, schools, clubs and businesses in dialogues on climate change.
- Found out what other councils are doing to mainstream gender into climate change and whether there can be benefit from collaboration.
- Investigated what community groups and in particular women, are doing and if there may be synergies in working together.
- Articulated council's strategic objectives in regards to gender and climate change and incorporate into strategic planning where possible.
- Shared and celebrate achievements internally, in Council reports, with the community, with other councils and in the media.

Adapted from Local Government and Shires Associations - New South Wales (Australia) Climate change checklist

4. GENDER AND THE CCCI PROCESS

The following are general principles which should be taken into consideration in the latter stages of the CCCI Process, after initial and in-depth assessments are completed. Cities should:

- Ensure that gender-sensitive stakeholder consultations begun in the assessment phases continue in latter phases of the process;
- Ensure that gender needs identified in the assessments are translated into action items later;
- Collect and publish gender-disaggregated information on the effects of climate change wherever possible;¹⁴
- Ensure that women (and men) are provided with an enabling environment to access their full rights as citizens of the city¹⁵;

¹³ In the cities of Munich and Genova, for instance, the municipal budget is assessed for benefits to women and men –(Alber and Roer)

¹⁴ Adapted from Gender CC- Women for Climate Justice (2009) Gender into Climate Policy: Toolkit for climate experts and decision-makers

¹⁵ JAGORI – A handbook on Women's Safety Audits in Low-income Urban Neighbourhoods: A Focus on Essential Services.

- Recognize the vital urgency of gender equality in addressing the growing crises of climate change issues and demonstrate leadership through top-level support for gender mainstreaming at city level¹⁶;
- Ensure that cities have enough women (account for at least 30%)¹⁷ at decision making level to participate in all decisions related to climate change. This will be critical in the consolidation and institutionalisation stage where political will and establishment of relevant gender and climate change policies, regulations and procedures will be crucial.

5. CONCLUSION AND WAY FORWARD

Climate change is not gender neutral – it impacts on men and women differently and even that, is determined by individual economic wealth, with the poorest being affected more and urban women headed households falling amongst the poorest of the poor. Determining who is most vulnerable to climate change will assist in drawing up gender responsive strategies that are meaningful and relevant to all and that will lead to equality between women and men. How poor urban women and men currently manage the risks, assets, and resources, is critical for mitigation and adaptation strategies. It is important to note that while the risk of occurrence of climate change hazards might be the same for men and women, patterns regarding their vulnerabilities and roles in society may mean that strategies for promoting protection at the local and community level need to target men and women differently, given their different abilities and knowledge of the environment they live in.

In general, women have proved effective in mobilizing the community to respond to disasters and in disaster preparedness and mitigation. Local governments can be proactive in strengthening these abilities as well as by building resilience for adaptation, mitigation and coping strategies that will ensure that in the event of a disaster just as many women as men are not threatened. Vulnerability anticipation – knowing who is more vulnerable, early warning and taking preventive actions including gender-sensitive training, are effective ways to reduce victims when disaster strikes.

Gender responsiveness in consultation and decision-making is essential for effective mitigation and adaptation responses to the vulnerabilities caused by climate change. When the capacity of both women and men to contribute important knowledge is recognised through participative processes, the strategies and interventions established can be effective and processes that respond to local realities put in place.

Given that climate change will have a major (albeit unequal) impact on the lives of people living today, and even more so on future generations, and given the fact that urban vulnerability to climate change depends upon disaster preparedness, both women and men must share the right and responsibility of defining priorities and developing sustainable development strategies and plans.

¹⁶ Adapted from Gender CC- Women for Climate Justice (2009) Gender into Climate Policy: Toolkit for climate experts and decisionmakers

¹⁷ Beijing Platform for Action (1995) on Affirmative Action

DRAFT NO. 6 REFERENCES

Alber Gotelind. and Roehr Ulrike (2006) Climate Protection - What's Gender Got to Do with it?

AWID – Janice Duddy (2002) Is climate change a matter of gender?

CARE (October 2010) International Climate Change Brief: *Adaptation, gender and women's empowerment*

Gender CC-Women for Climate Justice (2009) "Gender into climate policy: toolkit for climate experts and decision makers"

Hartmann Betsy (2006) Gender, Militarism and Climate Change – Znet Commentary

JAGORI in collaboration with Women in Cities International (2010) A handbook on Women's Safety Audits in Low-income Urban Neighbourhoods: A Focus on Essential Services

Local Government and Shires Associations (2010) New South Wales (Australia) Climate change checklist

Moser C, Norton A., Stein A, Georgieva S (2010) Pro-poor Adaptation to Climate Change in Urban Centers: Case Studies of Vulnerability and Resilience in Kenya and Nicaragua

UN-HABITAT (2000) *Integrating Gender Responsiveness in Environmental Planning and Management:* The EPM Source Book Series.

UN-HABITAT (2003) The Challenge of Slums: Global Report on Human Settlements

UN-HABITAT/International Institutes for Environment & Development (2010) and Willbanks et al (2007) Developing Local Climate Change Plans

UN-HABITAT (2010) Gender Cities and Climate Change: A Thematic report prepared for Cities and Climate Change Global Report on Human Settlements 2011

UN-HABITAT (2011) Cities and Climate Change: Global Report on Human Settlements

World Bank (2009) Framework for City Climate Risk Assessment: Buenos Aires, Delhi, Lagos, and New York: Fifth Urban Research Symposium Cities and Climate Change: Responding to an Urgent Agenda; Marseille, France June 2009

APPENDIX I

KEY TERMS AND CONCEPTS RELATED TO GENDER AND CLIMATE CHANGE

Cities are, in this report, understood both as urban agglomerations, and local governments or authorities governing and managing these.

Sex indicates the physical differences between women and men, based on their sexual and reproductive functions. The sex of a person is usually unchangeable except through operation or hormone treatment.

Gender indicates the differences between women and men that are socially and culturally constructed. It involves gender identities and attributes, roles and relationships, including power relations. Gender roles vary substantially across different cultures and societies and can be changed over time. Like the concepts of age, class, race, disability and ethnicity, gender can be used as an analytical tool to analyse social processes. The term gender is often misunderstood or misused, for instance in the context with data, 'gender-disaggregated' instead of 'sex-disaggregated'.

Gender mainstreaming¹⁸ 'is the process of assessing the implications for women and men of any planned action, including legislation, policies and programmes, in all areas and at all levels, and as a strategy for making women's as well as men's concerns and experiences an integral dimension of the design, implementation, monitoring and evaluation of policies and programmes in all political, economic and social spheres so that women and men benefit equally and inequality is not perpetuated. The ultimate goal is to achieve gender equality.¹⁹

Gender equality '...means that women and men enjoy the same status. Gender equality means that women and men have equal conditions for realizing their full human rights and potential to contribute to national, political, economic, social and cultural development, and to benefit from the results. Gender equality is therefore the equal valuing by society of both the similarities and differences between women and men, and the varying roles that they play as for example the different roles of women and men in water resources management.²⁰

Gender equity 'is the process of being fair to women and men. To ensure fairness, measures must often be available to compensate for historical and social disadvantages that prevent women and men from otherwise operating on a level playing field. Equity leads to equality. In the water sectors gender equity often requires specific policies that focus on the technical capacity development of women and the hiring and promotion of women in water resources management to address their historical disadvantage in decision making in these sectors.²¹

Climate justice is about the ethical dimensions of climate change which, according to the proponents of climate justice, have been neglected in climate policy debates. The justice concept

^{18. &#}x27;Gender mainstreaming' was formally introduced at the Fourth World Conference on Women in Beijing 1995. It has been defined and reaffirmed by ECOSOC resolutions, see 'Resolution 1997/2' and 'Resolution 1998/34'.

^{19.} UNECOSOC, 'Resolution 1997/2'.

^{20.} GWA, 2006.

^{21.} GWA, 2006.

emphasises the antagonism between polluters and victims both on a global and sub-national scale, and seeks to tackle the underlying power relations in order to work towards equity.

Gender justice, within the climate justice debate, highlights the gender aspect of climate justice.

Care work can be paid or unpaid work and involves direct care of persons, including intense care for young children, ill and frail persons, and also for able-bodies adults.

Unpaid work includes unpaid care work (excluded from the system of national accounts and gross domestic product) and a broader range of activities, e. g. work in the family business (which should be included in the system of national accounts), and collection of water and fuel for own household consumption in the household (should be included in the system of national accounts, too, but is often omitted).

Unpaid care work is mainly done within households or families, but involves also work for friends, neighbours, community members or within any kind of organisations.²²

The term 'unpaid care work' is used to refer to the provision of services within households for other household and community members. ... Each word in the term 'unpaid care work' is important: 'unpaid' meaning that the person doing the activity does not receive a wage for it; 'care' meaning that the activity serves people and their well-being; and 'work' meaning that the activity has a cost in terms of time and energy and arises out of a social or contractual obligation, such as marriage or less formal social relationships'.²³

Reference

ECOSOC Resolution 1997/2: Mainstreaming the gender perspective into all policies

- GWA (Gender and Water Alliance) (2006) 'Complete Glossary of the Gender and IWRM Resouce Guide', http://www.genderandwater.org/page/5407
- Razavi, S. (2007) *The political and social economy of care in a development context: conceptual issues, research questions and policy options*, United Nations Research Institute for Social Development (UNRISD), Geneva
- UNIFEM (United Nations Development Fund for Women) (2005) *Progress of the world's women* 2005: Women, work, and poverty, UNIFEM, New York

^{22.} Adapted from Razavi, 2007.

^{23.} UNIFEM, 2005.

PRELIMINARY GUIDE ON HOW TO CONDUCT A NEIGHBOURHOOD ASSESSMENT²⁴

- 1. Carefully select 3 groups, each comprising of eight participants. One group should have women only, another to have men only and the last group to include a mixture and women and men in equal numbers. This will ensure a proper gender audit;
- 2. Give them a brief introduction and training on the Checklist. They will be expected to walk through the selected area to identify issues as indicated on the Checklist and where necessary add questions they deem necessary for a complete assessment;
- On average, it should take about 2 days to do both the training and Neighbourhood Assessment. The length of the training will depend on their knowledge of climate change and its gendered issues;
- 4. Each team should have a note-taker who will take notes of the observations as per the checklist and a leader to take charge of the group and also take pictures where necessary;
- 5. The area should be decided before hand to include areas that have been identified as vulnerable to climate change;
- 6. Have the groups start the walk from different directions to ensure a wholesome assessment;
- 7. Although the ideal period to have the Assessment would be during the occurrence of a hazard, it is also possible to conduct it and get credible results during any season of the year.
- 8. Getting government representatives and/or city officials to join the walk would be of great benefit. They could be from different departments related to the provision of essential services. with sufficient knowledge to address some of the identified problems;
- 9. Hold a debriefing session immediately after the Neighbourhood Assessment or the next day to discuss the observations of the groups;
- 10. Collate the findings and identify the priority issues that need to be addressed;
- 11. Discuss limitations of the Checklist and make recommendations.

²⁴ Adapted from JAGORI (2010)