Dimensions and examples of the gender-differentiated impacts of climate change, the role of women as agents of change and opportunities for women

Synthesis report by the secretariat

Summary

This report, prepared on the basis of submissions from Parties and observer organizations, a review of the contributions of Working Groups II and III to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change and a desk review of academic literature, synthesizes information on gender-differentiated impacts of climate change, the role of women as agents of change and opportunities for women in the context of climate change. It highlights the interplay of gender and social norms resulting in women experiencing greater vulnerability to the impacts of climate change than men, while emphasizing the significant role that women and marginalized groups can play in mitigating and adapting to climate change. It discusses how providing opportunities for women and marginalized groups to participate in decision-making can contribute to the development and implementation of efficient and long-lasting climate-resilient policies, providing examples of ongoing initiatives and projects and emphasizing the importance of continued efforts in this regard.
## Abbreviations and acronyms

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Full Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR</td>
<td>Assessment Report of the Intergovernmental Panel on Climate Change</td>
</tr>
<tr>
<td>GAP</td>
<td>gender action plan</td>
</tr>
<tr>
<td>ILO</td>
<td>International Labour Organization</td>
</tr>
<tr>
<td>IPCC</td>
<td>Intergovernmental Panel on Climate Change</td>
</tr>
<tr>
<td>IUCN</td>
<td>International Union for Conservation of Nature</td>
</tr>
<tr>
<td>LULUCF</td>
<td>land use, land-use change and forestry</td>
</tr>
<tr>
<td>LWPG</td>
<td>Lima work programme on gender</td>
</tr>
<tr>
<td>NAP</td>
<td>national adaptation plan</td>
</tr>
<tr>
<td>NAPA</td>
<td>national adaptation programme of action</td>
</tr>
<tr>
<td>NDC</td>
<td>nationally determined contribution</td>
</tr>
<tr>
<td>REDD+</td>
<td>reducing emissions from deforestation; reducing emissions from forest degradation; conservation of forest carbon stocks; sustainable management of forests; and enhancement of forest carbon stocks (decision 1/CP.16, para. 70)</td>
</tr>
<tr>
<td>SDG</td>
<td>Sustainable Development Goal</td>
</tr>
<tr>
<td>UNDP</td>
<td>United Nations Development Programme</td>
</tr>
<tr>
<td>WECF</td>
<td>Women Engage for a Common Future</td>
</tr>
</tbody>
</table>
I. Introduction

A. Mandate

1. At its twenty-fifth session the Conference of the Parties adopted\(^1\) the enhanced LWPG and its GAP,\(^2\) under which the secretariat was mandated\(^3\) to prepare a synthesis report on the information submitted by Parties, organizations and the research community on:

   (a) Gender-differentiated impacts of climate change;
   (b) The role of women as agents of change;
   (c) Opportunities for women in the context of climate change.

B. Scope and objective of the report

2. This synthesis report has been prepared on the basis of information provided in response to the relevant call for submissions, a review of the contributions of Working Groups II\(^4\) and III\(^5\) to the AR6 and a desk review of academic literature and the publications referenced in the submissions received.

3. The aim of the report is to strengthen the evidence base and understanding in relation to the matters referred to in paragraph 1 above, building on a 2019 synthesis report by the secretariat.\(^6\)

C. Overview of submissions

4. A total of 19 submissions\(^7\) were received in response to the call, which had a deadline of 31 March 2022: 11 from Parties (Antigua and Barbuda, Canada, Central African Republic, Democratic Republic of the Congo, European Union, Indonesia, Kenya, Nigeria, Panama, United Kingdom of Great Britain and Northern Ireland, and United States of America) and 8 from observer organizations.\(^8\)

5. It should be noted that the submissions contain information and examples related to several Parties\(^9\) in addition to those referred to in paragraph 4 above.

6. The submissions vary in detail and length. All but one of the submissions received from Parties address all three of the matters referred to in paragraph 1 above, while the submissions from observer organizations focus on their respective areas of expertise but still each mention at least two of the three matters.

---

\(^1\) Decision 3/CP.25, para. 5.
\(^2\) Decision 3/CP.25, annex.
\(^3\) Decision 3/CP.25, annex, table 1, activity A.4.
\(^7\) Available at https://www4.unfccc.int/sites/submissionsstaging/Pages/Home.aspx (in the search field, type “gender”, and select “2022”).
\(^8\) Climate Heritage Network, DCAF Geneva Centre for Security Sector Governance, ILO, IUCN, Landesa Rural Development Institute, Practical Action, UNDP and WECF.
\(^9\) For example Austria, Bangladesh, Belgium, Brazil, Cambodia, Chile, Finland, France, Germany, Guatemala, Honduras and United Republic of Tanzania.
D. Possible action by the Subsidiary Body for Implementation

7. The Subsidiary Body for Implementation may wish to consider the information contained in this report in reviewing the GAP and providing any guidance on its implementation.

II. Executive summary

A. Gender-differentiated impacts of climate change

8. The gender-differentiated impacts of extreme weather events due to climate change were recognized in all submissions. They highlighted that the adverse effects of drought, floods, hurricanes, extreme rainfall events and sea level rise are often felt more keenly by women than men as a result of systemic gender discrimination and societal expectations related to gender roles. These adverse effects have varied social, financial and economic dimensions. All submissions indicated that a complex interaction of social factors puts women and marginalized groups at greater risk of experiencing the adverse effects of climate change over a prolonged period. This is in line with the recognition in the AR6 that climate change affects groups differently as a result of the intersection of discrimination based on social factors such as urban or rural location, sexual orientation, educational background, income, gender, ethnicity, age, class and (dis)ability.

9. All submissions noted that, while progress has been made in gathering sex-disaggregated data and systematically conducting gender analyses of climate policies, more sex-disaggregated data are needed to better understand the gender-differentiated impacts of climate change in order to implement gender-responsive measures.

10. Since 2019, financial and social constraints due to the coronavirus disease 2019 pandemic have hindered progress in gathering sex-disaggregated data and thus delayed implementation of gender analyses, to differing extents across countries. All Parties called in their submissions for more financial resources and knowledge-sharing opportunities in order to bridge the data gap. Nevertheless, Parties that have managed to gather sufficient sex-disaggregated data and undertake gender analyses of climate policies highlighted the benefits of this approach in relation to developing effective and long-lasting climate-resilient policies. This too is in line with the recognition in the AR6 of the benefits of inclusive governance in terms of enhancing the effectiveness of climate-resilient policies.

B. Women as agents of change

11. The role of women as agents of change and the need for more inclusive governance was highlighted in the submissions, which noted that better integrating women and marginalized groups into decision-making at all levels would help to improve both mitigation and adaptation policies. In particular, the submissions mentioned indigenous peoples, including indigenous women, as the custodians of traditional and indigenous knowledge, which the AR6 notes as being key to designing climate-resilient policies. In order to preserve and apply traditional and indigenous knowledge, such groups must be empowered to share their knowledge through culturally respectful and inclusive approaches.

12. The examples of gender-differentiated impacts of climate change shared in the submissions are mostly context-specific, highlighting gendered experiences and behaviours governed by differing social norms. As such, considering women as a homogeneous group must be avoided, while acknowledging that women as a group are excluded from or restricted in decision-making in many contexts worldwide. This is despite evidence that women, as individuals, will often make more sustainable decisions than men under the same circumstances, be it in relation to their eating or transport habits or investment and budget planning, both within and outside the home. Moreover, a 2019 study demonstrated that
female representation in parliament leads countries to adopt more stringent climate change policies, which in turn result in lower carbon dioxide emissions.¹⁰

13. The submissions highlighted the need for more sex-disaggregated data to be able to fully understand the role of women as agents of change in the context of climate change in both the public and the private sphere, as well as to ensure that the critical role of women – in all their diversity – in delivering more effective and robust climate outcomes is embedded in policy development.

C. Opportunities for women in the context of climate change

14. The submissions emphasized the necessity of implementing transformative social change for overcoming the climate crisis, improving social equity and therefore achieving gender equality. This is in line with the contribution of Working Group III to the AR6, which sheds light on the synergistic potential of inclusive and participatory governance, achieved through social equity, to lead to the creation of effective and long-lasting climate-resilient societies. However, both the contribution of Working Group III and the submissions explain that there is still much progress to be made in this regard, with women and marginalized groups still underrepresented in decision-making processes worldwide. An encouraging trend, however, is that all Parties that made a submission or were referred to in the submissions have undertaken or planned targeted efforts to enhance inclusivity in climate action and decision-making.

15. The submissions highlighted how adverse climate change impacts, especially extreme weather events, are affecting the roles of women and men around the world, particularly in rural areas. In some African countries, for example, rural-to-urban migration has been observed among men, a trend driven by extreme weather events, leaving the women behind in charge of land and the household. While such forced changes in living and working arrangements often cause hardship, they can also catalyse shifts in perception and gender roles, in turn building the capacity, improving the financial situation and promoting the economic empowerment of women and girls.

16. Furthermore, gender mainstreaming in climate policy and action across sectors and at all levels, including through international instruments such as the GAP, is helping to increase and improve opportunities for empowerment of women and girls.

III. Synthesis report

A. Gender-differentiated impacts of climate change

1. Overview

17. The gender-differentiated impacts of climate change were recognized in all submissions, while drawing attention to the fact that power relations and gender and other social discrimination result in many women and girls not having the same right as their male counterparts to, for example, own or control land or other assets or access education, public information or climate finance, as applicable.

18. Most submissions acknowledged that other social factors also influence individuals’ vulnerability to and experience of climate change impacts, in particular place of residence (rural or urban location), income, educational background, ethnicity, (dis)ability and gender and sexual identity (e.g. belonging to the 2SLGBTQQIA+¹¹ community), at the local, national and international level and across economic sectors.


¹¹ Acronym used in the submission from Canada to refer to, without excluding those who use other
19. All submissions called for more research into the gender-differentiated impacts of climate change to improve understanding of the intersectional role of the social factors referred to in paragraph 18 above and the extent to which they influence the adaptive capacity and resilience of individuals in relation to climate change.

20. According to the submissions, further research should be based on sex-disaggregated data and gender analyses of climate and non-climate policies. In their submissions, Parties highlighted the challenges in collecting such data that they have faced over the past three years and will continue to face in the future, such as financial barriers, which have been aggravated by the pandemic. The pandemic has also made it difficult for Parties to collect sex-disaggregated data that has to be gathered in person (e.g. in-person interviews for household data surveys) as a result of protective measures such as social distancing.

21. Lastly, the submissions highlighted the need for local, national and international cohesion and coherence to promote knowledge-sharing on gathering and analysing sex-disaggregated data and conducting gender analyses of policies. Synergies between programmes, projects and initiatives at different levels and across sectors, for example, could be identified so as to reach more individuals and communities and increase understanding of the gender-differentiated impacts of climate change.

2. Gender-differentiated impacts

22. Two broad themes were highlighted in the submissions in this regard: increased vulnerability of certain groups and individuals owing to the intersection of the social factors referred to in paragraph 18 above; and the marginalization of certain groups and individuals and their exclusion from decision-making and positions of power, which in turn limits their access to climate funds and other resources that would boost long-term resilience to climate change.

(a) Vulnerability

23. All submissions noted women’s greater vulnerability to adverse climate change impacts compared with men’s. While acknowledging that gender is a social construct that is not binary and is only one of many social factors at play, as per the call the submissions primarily addressed the gender-related differentiation of impacts of climate change, framing gender as men and women. The detail and focus of the submissions vary by local and regional context, with the examples given of women’s greater vulnerability also being specific to the local or regional context.

24. The submissions are in line with the contribution of Working Group II to the AR6 in terms of the observation that vulnerability to climate change impacts can be increased as a result of gender norms and gender-differentiated access to social, economic and financial resources.

25. The increase in gender-based violence following climate-induced disaster was mentioned across the submissions. Gender-based violence was mentioned in the 2019 synthesis report referred to in paragraph 3 above, but evidence for this phenomenon has since mounted, especially in the light of the pandemic and the extreme weather events that have hit the Global South over the last three years. According to the submission of the Geneva Centre for Security Sector Governance, gender-based violence is prevalent in areas of conflict that are also more at risk of experiencing extreme weather events: notably in Colombia, Mali and Yemen women and girls are particularly at risk of experiencing gender-based violence owing to the combination of adverse climate change impacts, environmental degradation and conflict. The desk review revealed that increased gender-based violence

---

terms, two-spirit, lesbian, gay, bisexual, transgender, queer, questioning, intersex and asexual individuals.
reduces the adaptive capacity and resilience of women and girls, weakening future communities’ resilience to climate change impacts, as observed across regional contexts.\textsuperscript{12, 13}

26. Notably, child marriage, which is considered an act of gender-based violence, has been observed, according to the submissions, in various communities in different countries and regions as a means of coping in the event of disaster.\textsuperscript{14, 15} for example in Bangladesh, Ethiopia and Kenya as a means to secure funds or assets. Another commonly adopted coping mechanism in such communities is taking girls out of school to help in the household, according to the submissions and the desk review.\textsuperscript{16} Such means of coping set progress towards gender equality back decades and negatively affect the long-term resilience and adaptive capacity of the communities.

27. All submissions noted that extreme weather events due to climate change disproportionately affect women and girls and their ability to perform their everyday tasks, which partly explains why some girls are forced to drop out of school. The tasks of collecting firewood and water in some countries, which traditionally fall to women and girls, are heavily affected by adverse climate change impacts, which force the women and girls to travel further from their homes to complete the tasks and provide for their families. In turn, the longer journeys increase their exposure to gender-based violence outside the home.\textsuperscript{17}

28. Furthermore, extreme weather events have been observed to result in increased rural-to-urban migration among men in some countries, leaving women in charge of land and the household and other tasks traditionally performed by men. Men migrate because they are more likely to find employment than women.\textsuperscript{18} Several submissions pointed out that men who secure employment in urban locations do not always return to their rural communities or fulfil their promise to send some of their income back home. This results in an increased workload and decreased income for women, whose opportunities to earn income are limited by gender norms that affect their access to land ownership, thus increasing their current and future vulnerability to climate impacts.\textsuperscript{19}

29. Shifts in social norms and gender roles is another clear theme that emerged from the submissions. The aforementioned phenomenon of male migration can negatively affect the resilience and adaptive capacity of communities by reducing their income potential and general access to resources, since the women left behind often lack the educational background and legal rights that would enable them to secure funding through climate funds, as the desk review revealed.\textsuperscript{20}


\textsuperscript{16} As footnote 12 above.

\textsuperscript{17} As footnotes 12, 13 and 15 above.

\textsuperscript{18} As footnote 15 above.


30. Parties presented in their submissions many examples of legal measures implemented or planned by governments to improve access to resources for women and girls, including rights-based initiatives, as recommended by the Global Gender and Climate Alliance. For example, Antigua and Barbuda explained that its Sustainable Island Resource Framework Fund is legally obliged to prioritize the most vulnerable groups and to act in a non-discriminatory manner. Other Parties like Brazil, Canada, the European Union, Kenya and Panama followed similar approaches as well as measures to promote widespread implementation of gender-responsive climate policies using a rights-based approach. Notably, the Canadian Government adopted its Feminist International Assistance Policy in 2017, placing gender equality and empowerment of women and girls at the heart of Canada’s international climate financing efforts.

31. Lastly, it was acknowledged in the submissions that women are not the only group at particular risk of being adversely affected by the impacts of climate change. Increased vulnerability and reduced adaptive capacity are driven by multiple social factors such as those referred to in paragraph 18 above. However, more research needs to be conducted and data collected to improve understanding of how the intersection of such factors results in increased vulnerability to climate change impacts.

(b) Access to resources and contribution to climate policy

32. As a result of the shifts in gender roles induced by climate change impacts noted in paragraph 29 above, women’s and girls’ access to resources and opportunities to participate in decision-making are increasing (see paras. 71–75 below). However, women and girls still face many barriers to accessing resources and participating fully in climate change decision-making globally. There are several reasons for this. Firstly, women and girls do not always have the same access to education as their male counterparts. This is due to traditional gender norms and may be aggravated by the impacts of climate change, for example if they result in girls being taken out of school or subject to child marriage. Lack of formal education for women and girls and their resulting higher illiteracy rates make it more difficult for them to access government subsidies and other funding. Secondly, while illiteracy can also make it more difficult for women to obtain land ownership, it is not the only factor at play here, but is compounded in particular by discriminatory laws and gender norms in certain contexts, as the desk review revealed. For example, the Landesa Rural Development Institute, a non-governmental organization, highlighted in its submission that women are much less likely than men to have land rights or own land for these precise reasons, especially in the Global South. Indeed, women account for less than 20 per cent of landowners worldwide, but for more than 40 per cent of the individuals working the land. Lastly, women’s access to climate funding, in areas where such funding is available, is limited as, without collateral, they cannot access most of the climate and emergency funds that should be available to them.

33. The submission of WECF highlighted that the limited right of Cameroonian women to land ownership is negatively affecting sustainable forest management and opportunities for generating income; while the submission of the Geneva Centre for Security Sector Governance recognized a similar phenomenon in Colombia, Mali and Yemen. Furthermore, a 2022 study by the United Nations Convention to Combat Desertification on the

---


23 As footnote 17 above.


differentiated impacts of desertification, land degradation and drought on men and women,

demonstrated how women have unequal access to land ownership compared with men

globally: even in regions such as central Asia and the Caucasus where gender equality is

enacted by law, women represent only 23 per cent of landowners. The study also highlighted

that 102 countries still deny land rights to women under customary, traditional or religious

practices and laws. Lack of land titles makes women less identifiable as potential

beneficiaries of governmental or non-governmental capacity-building initiatives.

Submissions from observer organizations reported that rights-based approaches could allow

women to fully benefit from existing financial and capacity-building systems. In their

submissions, the Landesa Rural Development Institute suggested that this could be achieved

through collaboration between national gender and climate change focal points and national

human rights institutions, while WECF recommended the establishment of bottom-up

mechanisms for helping women to obtain or assert their rights.

34. In addition, systemic gender discrimination and bias result in women being

underrepresented in most parliaments around the world, across all levels of power in
government, in executive roles in the private sector and in international governance
structures, including the UNFCCC. This exclusion of women from decision-making
processes in the formal economy is compounded by their overrepresentation in the informal
economy, where often wages are lower and jobs more insecure and without the protection
of labour laws and social protection and benefits such as paid sick leave and pension. Increased
participation of women in the formal economy resulting from shifts in gender norms is one
way of reducing their vulnerability to the adverse impacts of climate change. However, as
highlighted in the submissions, the increased involvement of women in the formal economy
needs to be underpinned by cohesive and efficient collaboration across sectors to mitigate the
risk of unintended negative consequences of formalizing their work, such as increasing the
burden of their unpaid caregiving responsibilities.

3. Identifying gender-differentiated impacts

35. According to the submissions, sex-disaggregated data remain the most common
means of assessing the gender-differentiated impacts of climate change, with both Parties
and observer organizations calling for the collection of further such data and financial
resources for doing so. This would help to enhance understanding of the gender-differentiated
impacts of climate change and how social factors render certain individuals more vulnerable
to such impacts. Canada, for example, has pledged USD 134 million for increasing the
representativeness of data collected through Statistics Canada’s Disaggregated Data Action
Plan with the aim of enhancing statistical analysis of sex-disaggregated data and supporting
efforts to make decision-making in the country fairer and more inclusive. All submissions
highlighted that collecting more sex-disaggregated data will help to improve the fairness and
inclusivity of planned climate policies.

36. Moreover, some Parties have implemented tools for conducting gender analyses of
climate policies, reporting much progress since 2019 in understanding the positive
contribution of gender analyses to policymaking. Gender-based Analysis Plus, an analytical
tool in Canada used to assess how different groups of women, men and gender-diverse people
may experience policies, programmes, services and other initiatives in different sectors, was
recognized as a success in the Canadian submission. The European Union, meanwhile,
requested the European Institute for Gender Equality to enhance gender analyses of climate
policies through three deliverables by 2023:

(a) Preparing a report on sex-disaggregated data in the context of climate policy;


See https://data.ipu.org/women-averages.


(b) Incorporating gender–climate linkages into the Gender Equality Index 2023;

(c) Developing a communications package to help member States to understand the links between gender and climate.

37. The submissions showed much progress in gathering sex-disaggregated data since 2019, with Parties planning to gather more data in the future with the help of relevant organizations in order to promote an inclusive transition towards climate-resilient economies. For example, Antigua and Barbuda has conducted and analysed the findings from a national gender survey, yet to be published, while Kenya and the United Republic of Tanzania have started collecting similar data according to IUCN. The United Kingdom referred in its submission to the pledge in its Net Zero Strategy to promote the collection of transparent and disaggregated data in order to highlight gaps in participation with a view to taking action towards inclusive participation across industry in the green economy.

38. Overall, however, the sex-disaggregated data gathered so far are not sufficient to support the inference that local and context-specific findings apply in general. Moreover, the pandemic has hindered progress in gathering sex-disaggregated data worldwide owing to budgetary adjustments and health measures taken in response to the crisis (e.g. social distancing). Furthermore, those tasked with gathering sex-disaggregated data in rural communities require the appropriate knowledge and training, something most governments are currently unable to provide. Nevertheless, collaborative efforts to bridge the data gap in this regard are being stepped up around the world. For example, a 2022 technical paper of the Alliance of Small Island States and UNDP provides valuable information on how the impacts of climate change in small island developing States differ depending on social factors, including gender.

B. Women as agents of change

1. Overview

39. The submissions acknowledge that all individuals, regardless of gender, have a role to play in overcoming the climate crisis, implementing meaningful, effective and long-lasting climate-resilient policies and promoting necessary systemic changes. The submissions and the AR6 agree on the need for inclusive governance to overcome the climate crisis.

40. However, gender norms and socially constructed gendered behaviour mean that women still find it harder to get their voices heard than men do. This is despite evidence that, both individually and collectively, women and those in marginalized groups, such as indigenous peoples, make decisions that support adaptation and mitigation efforts (this naturally varies by context).

41. Moreover, indigenous peoples, including indigenous women, tend to be the custodians of traditional and indigenous knowledge, which is recognized in the AR6 as fundamental to planning and implementing climate policies that support both adaptation and mitigation efforts. As such, increasing the participation of these groups in decision-making would lead to more effective and long-lasting climate policies and should be promoted through innovative capacity-building and empowerment measures, following a rights-based, transformative approach with a view to achieving inclusive governance over time.

42. However, in order to improve understanding of the role of women, in all their diversity, as agents of change, more comprehensive and generally applicable sex-disaggregated data need to be gathered. Currently, examples of the different roles of women and men as agents of change are context-specific. Deriving generally applicable inferences from these data would therefore involve homogenizing women’s experience and behaviour, which is problematic given the diversity of women and the multitude of culturally specific contexts influencing the role of women as agents of change.

2. Adaptation

(a) Adaptive capacity

43. The adaptive capacity of women and men differs owing to women being less integrated into the formal economy, which in turn affects their position in decision-making processes. In Antigua and Barbuda, for example, women are more likely than men to generate income from informal tourism-related activities, which reduces their adaptive capacity in cases of extreme weather events such as hurricanes. In its submission, ILO highlighted that informal employment affects access to health and safety mechanisms at work, increasing the risks for informal employees in the event of climate-related disaster. Generally in the submissions, women were observed to have less capacity to adapt than men on account of their lower social status, poorer educational background and difficulties accessing resources.

44. In the cases of most marginalized groups, such as the 2SLGBTQQIA+ community and indigenous peoples, their capacity to adapt to the impacts of climate change is lessened owing to the multi-faceted intersection of social factors, which makes them more vulnerable to such impacts. This is despite women and indigenous peoples being identified as custodians of traditional and indigenous knowledge. The AR6 highlights that adaptation efforts could be improved by integrating such knowledge into decision-making through inclusive governance mechanisms, such as civil participation initiatives.

45. According to several submissions from Parties and observer organizations, women in traditional gender roles as water providers and subsistence farmers in some countries have a microcosmic understanding of their local environment, such as local weather conditions. Some women in the Central African Republic and Kenya, for example, can predict changes in rainfall patterns and adapt their daily activities accordingly. Moreover, in its submission WECF reported that in some countries women of different generations often live together in one household and participate in similar gendered activities, during which they share orally traditional knowledge, which could be used to improve adaptation action. Their lack of involvement in decision-making, however, limits their contribution to and thus the integration of traditional and indigenous knowledge into policymaking.

(b) Resilience

46. Owing to legal and social gender norms placing limits on their ownership of assets and access to education, finance and capacity-building related to climate change, women are not only more vulnerable but also less resilient to the adverse impacts of climate change than men. However, the submissions indicate the potential for women to increase the resilience and adaptive capacity of future generations by taking action within the home and their communities.

47. Many of the submissions include examples of such action. The Landesa Rural Development Initiative and Practical Action reported that women involved in farming activities (cash crops and subsistence farming) tend to make climate-resilient choices towards achieving food security within their households. Practical Action observed that women act on early warning information more swiftly than men. Moreover, several submissions, including from the Central African Republic, Kenya and Panama, reported that in female-headed households children’s education remains a priority even in the wake of disaster and thus the school dropout rates for girls are lower than for male-headed households.

48. The submissions highlighted that women tend to take future generations into account in their decisions and therefore make choices that could help to increase resilience in the future. However, their lack of involvement in decision-making limits their potential as

---

32 As footnote 11 above.
35 Joireman J and Liu RL. 2014. Future-oriented women will pay to reduce global warming: Mediation
agents of change. Moreover, a lack of data means that it is not possible to infer anything that is not context-specific in relation to women’s roles as agents of change in decision-making.

49. As such, initiatives focused on empowering women and girls to participate in decision-making and policymaking are likely to help in improving adaptation efforts in the long term. The submissions include examples of successful initiatives in this regard, such as workshops held to address the lack of women on natural resource governance bodies despite the large number of female beneficiaries of natural resource governance programmes. These workshops were held with male beneficiaries to change their perception of gender roles and thus promote inclusion of women in decision-making. As a result of the workshops, female participation in natural resource governance bodies in Guatemala and Honduras increased. Moreover, several Parties have pledged to increase efforts to integrate women into decision-making in all sectors. For example, the United Kingdom Partnering for Accelerated Climate Transitions programme has published gender equality and social inclusion guidance for its country programmes, while the United States Agency for International Development is putting inclusivity and gender equality at the forefront of its activities as part of its 2022–2030 strategy.

3. Mitigation and the role of women as agents of change by sector

50. Empowering women and educating men towards achieving inclusive decision-making could lead to improvements in mitigation as well as adaptation efforts.

(a) Transport

51. In order to change individual mobility patterns, it is necessary to understand the reasons behind them, including safety; create effective and inclusive policies; and make sustainable options available to users without them having to make compromises. Collecting and analysing sex-disaggregated data is therefore critical.

52. The desk review highlighted that studies on mobility patterns in both the Global North and the Global South have shown that women tend to have more sustainable transport habits than men.36 Women tend to make shorter journeys, use several forms of transport and choose transportation modes that produce less pollution where possible.

53. These more sustainable mobility habits are also dictated by gender norms, however, with women changing their patterns as needed for safety reasons.37 Well-designed climate policies should encourage both women and men to make use of sustainable transport options. In particular, making modes of transport safer for women through smart urban planning has co-benefits for society as a whole. Finland, for example, increased the safety of its bicycle lanes and took measures to increase the frequency of public transportation.38 The number of users of public transport increased as a result, thereby reducing both the number of cars on the road in many cities and the associated greenhouse gas emissions.

(b) Land use, land-use change and forestry

54. Many submissions indicated that women tend to have more sustainable eating habits than men and plan more sustainably to guarantee food security within their household. Meanwhile a German study found that the diets of women in developed countries tend to include more of the foods that are less resource-intensive to produce and less meat compared


with the diets of their male counterparts. As for developing countries, the Landesa Rural Development Institute observed that women were behind many of the early innovations in subsistence farming, creating virtuous cycles from farm to fork.

However, women and girls do not tend to be among the beneficiaries of initiatives aimed at reducing the impacts of LULUCF, such as REDD+ programmes, according to the academic literature desk-reviewed. According to the Central African Republic, there is a gender gap in REDD+ initiatives, with women generating less income and being included in programmes to a lesser extent than their male counterparts.

Taking more account of women’s knowledge in initiatives aimed at preserving land and forest would further benefit the targeted communities. Social norms often dictate that women are in charge of collecting water and firewood, which means that on the one hand they are increasing forest degradation but on the other their traditional knowledge can contribute to preserving biodiversity and land coverage. In the Central African Republic, for example, women have adapted their cooking habits towards consuming less firewood. In the submission of WECF the example was presented of Indonesian women being given a platform by a grass-roots organization to share their traditional knowledge of water management practices, including preserving and replanting trees around water sources to increase water security.

Overall, the findings on women’s contributions to mitigation efforts in the LULUCF sector are contradictory because most studies are context-specific, with cultural contexts shaping women’s roles and behaviours. More studies and data are needed in order to support general inferences on the role of women as agents of change in this sector. Nevertheless, the AR6 and many submissions expressed the view that promoting inclusive governance and thus including the custodians of traditional and indigenous knowledge in decision-making could help to improve mitigation efforts in the LULUCF sector.

(c) Energy

Energy is the sector with the biggest gender gap, with women accounting for only 22 per cent of employees in the sector overall or 32 per cent of employees in the renewable energy subsector (albeit in mostly administrative rather than leadership positions), according to the International Energy Agency. It is a promising sector in terms of potential for both innovation and employment and is one of the cornerstones of successful climate-resilient societies. However, without their involvement in decision-making in the sector, there is a risk that women, and therefore more effective measures, will be left behind during the energy transition.

Many tasks that traditionally fall to women relate to energy, from gathering firewood in the Global South to domestic tasks in the Global North, meaning that women’s inclusion in debates on energy transition is essential to reducing household energy demand. Including women in decision-making related to the energy transition therefore has the synergistic potential to help to both reduce energy demand and ensure fairness in policymaking.

Some context-specific studies mentioned in the submissions and desk-reviewed have found a gender divide when it comes to energy consumption, with women believed to consume less energy than men. For example, a gender-differentiated study of energy consumption in four European countries, referenced in the European Union’s submission, found significant differences in overall energy consumption between female- and male-

---

40. As footnote 34 above.
headed households. Overall, however, inclusion of gender aspects in energy consumption analyses was limited in the literature reviewed.

Against this background, more data are needed to improve understanding of the role of women as agents of change in the energy sector. There was consensus across the submissions that increasing the inclusion of women in decision-making in the energy sector would bring benefits for policymaking, with several Parties already taking measures to drive this forward. For example, Canada and Finland are leading the Equal by 30 campaign to advance the participation of women in clean energy globally, while the Government of Antigua and Barbuda has pledged to increase the access of 20,000 female-headed households to clean energy.

4. Women as agents of change in decision-making

The role of women as agents of change was acknowledged in the submissions, as well as their continued lack of inclusion in decision-making as a result of gendered power dynamics. Women could be more effective agents of change across different sectors and at different levels if their inclusion in governance were facilitated.

The submissions provided many examples of initiatives of governmental and non-governmental bodies for promoting inclusion of women and marginalized groups in decision-making, from workshops held by IUCN and the United States Agency for International Development across Central America to UNDP assistance in integrating gender considerations into national development strategies. Gender mainstreaming is helping to empower women and girls around the globe. For example, the United Kingdom has taken steps to mainstream gender in its climate finance programming by considering gender at every stage, while UNDP, through Climate Promise, is supporting Parties in conducting gender analyses of climate policies as part of revising and enhancing their NDCs.

Furthermore, from its 2022 review of updated NDCs, IUCN noted that 79 per cent of the 89 considered NDCs mention gender compared with 40 per cent of NDCs in 2015, and that more Parties name women as key stakeholders or agents of change in their updated NDCs (43 and 18 per cent, respectively, in the updated NDCs compared with 14 and 2 per cent, respectively, in the NDCs in 2015).

Empowering women and traditionally marginalized groups, while building their capacity for policymaking and decision-making, could encourage invaluable knowledge-sharing across contexts, sectors and levels. Empowerment initiatives can promote integration of traditional and indigenous knowledge into policymaking towards establishing more inclusive and effective climate-resilient policies. The AR6, in line with the submissions, recognizes the effectiveness of inclusive governance and the role of traditional and indigenous knowledge in informing adaptation and mitigation efforts.

For better integration of women into decision-making processes in the future, observer organizations recommended rights-based gender-responsive policies aimed, for example, at promoting women’s access to the right to land ownership. They mentioned the power of economy-wide transformative measures and emphasized the importance of pursuing structural societal changes. If women were fully integrated into the formal economy, for example, this would increase their capacity to earn and help to protect them in the event of disaster, which in turn would increase their adaptive capacity and resilience, and the associated increase in their decision-making power could lead to more effective and long-lasting climate-resilient policies. However, many challenges remain (see chap. III.D below).


C. Opportunities for women in the context of climate change

1. Overview

66. Climate change and its adverse impacts are leading to shifts in social norms that could benefit women; for example, opportunities to participate in decision-making may arise in rural areas hit by extreme weather events, forcing men to migrate to urban areas and leaving the women behind in charge.

67. These shifts present opportunities for women to increase their income and access to financial, natural and other resources, thereby empowering them to be included in decision-making. Adaptation and mitigation efforts could be improved as a result of women seizing these opportunities.

68. The AR6 recommends that climate-resilient policies and sustainability initiatives be aimed at achieving equity and inclusivity in governance bodies and actions. Synergies have been identified between climate-resilient policies that have a positive impact on social equity, including gender equality, with positive feedback loops for climate change adaptation and mitigation actions.

69. For women and marginalized groups to be able to make use of any opportunities presented by climate change, they need to be empowered through, for example, rights-based approaches and capacity-building to actively participate in climate-related decision-making, which remains a challenge.

2. Opportunities for women

70. Several submissions mentioned the phenomenon of men being forced to migrate as a result of adverse climate change impacts. Meanwhile, the literature reviewed indicates that gender norms and the gender pay gap\footnote{World Economic Forum. 2021. Global Gender Gap Report 2021. Geneva: World Economic Forum. Available at \url{https://www.weforum.org/reports/global-gender-gap-report-2021/}.} which persists despite international efforts to address it – result in men being more employable and having the opportunity to earn more than women. According to the ILO submission, women and children account for 80 per cent of the population displaced due to climate change, but women do not benefit as men do from the employment opportunities that can result from migration. This means that, in the event of disaster, it is often the men that migrate to urban areas, leaving women in rural areas – provided these are still liveable – in charge of land and the household.

71. This presents an opportunity for the women remaining in rural locations to become involved in decision-making both within and outside the household.\footnote{Bertolani B. 2020. Timmerman, C., Fonseca, ML., Van Praag, L., and Pereira, S. 2018. Gender and Migration. A Gender-Sensitive Approach to Migration Dynamics. Leuven: Leuven University Press. 268 pp. Nordic Journal of Migration Research. 10(4): pp.117–120. Available at \url{http://journal-njmr/articles/10.33134/njmr.363/}.} For example, women in rural areas of Antigua and Barbuda were included in farmers associations after a hurricane struck the islands in 2017, resulting in men migrating in mass to urban locations. Difficulties faced by women, notably in relation to water scarcity, were identified as a result, and the Government took legal action to address the needs of the women and their households. Climate-induced migration of men can also give women the opportunity to move from the informal to the formal economy as they become the head of the household.

72. Increased participation in local associations can also present capacity-building opportunities for women and girls. Their enhanced social status gives them access to governmental and non-governmental initiatives, though barriers such as difficulty securing land ownership may still prevent women from fully benefiting from them.\footnote{As footnote 33 above.} In their submissions, ILO and WECF emphasized the importance of land rights in relation to both identifying beneficiaries and allocating climate finance funds. Since women often still lack access to land rights owing to gender norms, they may still be marginalized from initiatives that would otherwise be available to them.
73. Employment opportunities may also be generated by government initiatives. For example, in Antigua and Barbuda many women have benefited from an initiative of the Department of Environment within the Ministry of Health and the Environment to enhance women’s employment in climate-related fields. The United Kingdom, meanwhile, has focused on providing training for green jobs in science, technology, engineering and mathematics to increase the participation of underrepresented groups, including women, in this sector.

74. Parties’ efforts to implement the LWPG and its GAP are set out throughout the submissions and include offering women better employment opportunities, especially in traditionally male-dominated sectors. In the European Union, for example, several member States are participating in the Clean Energy Education and Empowerment International initiative led by the International Energy Agency and the Clean Energy Ministerial to increase the number of women in jobs in the clean energy sector and close the gender gap in the energy sector through awareness-raising, education and empowerment activities.49

3. Empowering women and girls

75. As mentioned throughout this report, with men’s climate-induced migration to urban areas, women may acquire social status and empowerment opportunities. Many rural communities rely on women working together to provide for their families, which can lead to the creation of women’s groups. Maasai women in the United Republic of Tanzania have indicated finding women’s groups to be empowering and a helpful way of sharing knowledge related to climate-resilient agriculture as well as voicing their needs, ideas and concerns.50 The women involved in these groups feel more confident taking part in decision-making with local farmers associations. The outcomes of an Indonesian initiative presented by WECF in its submission support such findings, with collaboration between grass-roots organizations, local government and a women’s group resulting in improved access to water, sustainable forest management and food security for the community and helping women’s voices to be heard at the government level.

76. Several submissions mentioned that girls were less likely to drop out of school if they resided in female- rather than male-headed households. The submission of the Landesa Rural Development Institute presented examples from academic literature showing that women heads of households who had secured land ownership were unlikely to take their children out of school, even in the event of disaster.51 This shows that women’s empowerment also benefits children, particularly girls, and their education, thus improving girls’ empowerment opportunities in the long term.

77. Parties and observer organizations expressed the view in their submissions that the SDGs and the LWPG and its GAP have contributed to the political will to empower women and girls and promote inclusive decision-making. Parties have taken numerous initiatives to promote participation of women and girls in decision-making. The Feminist Action for Climate Justice Action Coalition is an example of international cooperation among governmental and non-governmental actors aimed at empowering women and girls globally to act on climate justice.52

4. Inclusive governance

78. The climate emergency has prompted countries to implement innovative and inclusive governance tools, which present an opportunity to include women in decision-making and policymaking. Participatory tools are still predominantly used by developed countries, however, with national initiatives in Belgium, France, Spain and the United Kingdom

---

49 See https://www.c3e-international.org/about/.
51 As footnote 29 above.
supported by the European Commission’s newly appointed Competence Centre on Participatory and Deliberative Democracy. The AR6 too highlights the benefits of developing inclusive governance tools, which can help in creating long-lasting and effective climate-resilient policies while promoting equity.

79. Inclusive governance can only be achieved if social equity is improved, and thus any resulting opportunities for women must be underpinned by cooperation between individuals, systematic and inclusive information- and knowledge-sharing, and ongoing cohesive action by institutions at all levels.

(a) Cooperation between individuals and inclusive knowledge-sharing

80. The submissions indicated consensus on the need to reinforce cooperation among individuals and systematic and inclusive information- and knowledge-sharing for increasing individuals’ resilience and adaptive capacity and thus helping them to deal with adverse climate change impacts. The AR6 highlights the need for better cooperation between individuals in general, such as through initiatives aimed at disseminating information more widely, increasing knowledge-sharing and facilitating participatory decision-making, which also present opportunities to better integrate women into decision-making at all levels.

81. Making information more accessible to women can increase their resilience and adaptive capacity in many contexts. For example, if information on weather patterns were disseminated more equally among potential beneficiaries it would benefit households in their daily activities, with positive implications for food and water security. WECF noted in its submission that a project in India aimed at reducing water scarcity only offered technical information in one language, preventing it from reaching many potential beneficiaries (predominantly women, who often take on the role of water provider). Translating and simplifying the information helped spread the message to more women. Meanwhile, in its submission IUCN highlighted that building systems that enable information to reach more individuals can help to increase households’ resilience in the event of disaster by enabling them to be more prepared and thus respond faster. As a result of gender norms, women are often not the primary recipients of such information, despite them usually being the first responders to disaster on account of their caregiving responsibilities. As such, more inclusive information systems would reduce disaster risk for all individuals while empowering women to take decisive action, thus benefiting social equity generally.

82. Knowledge-sharing initiatives can reinforce cooperation among individuals. With women and some marginalized groups being custodians of traditional and indigenous knowledge, initiatives aimed at better integrating these groups into decision-making would lead to the creation of more effective climate-resilient policies. Putting these groups at the heart of knowledge-sharing and empowerment initiatives would benefit them by enabling their perspectives to be integrated into climate decision-making, while also benefiting other individuals by giving them access to the knowledge. This would facilitate dialogue between different groups of people, thus promoting better cooperation among individuals, and highlights the importance of using complementary knowledge in addressing climate change impacts.

83. The desk review revealed that participatory decision-making initiatives can help to improve cooperation among individuals. Such initiatives in relation to climate change, which put citizens at the heart of decision-making, in Belgium, France, Spain and the United Kingdom, for example, have already promoted inclusive governance and cooperation between individuals.

84. These initiatives rely on knowledge- and information-sharing related to climate change issues and solutions; communication and cooperation among individuals on climate-resilient policymaking; and inclusion of different groups of people in decision-making. They can help to improve the effectiveness of climate-resilient policies and promote social equity thanks to the principle of inclusivity underpinning them. As such, they have the potential to

---

53 As footnotes 4, 5 and 38 above.
promote empowerment of women and marginalized groups and present an opportunity for these groups to participate in decision-making, according to a 2022 study. 54

(b) Cooperation and coherence among institutions

85. Cooperation at the institutional level could help to improve the effectiveness of climate-resilient policies while presenting an opportunity to empower women and girls. Submissions from Parties and observer organizations highlighted the synergistic potential in international institutions and national Governments aligning their goals and values to promote social equity in the face of climate change.

86. Adopting and promoting social equity values aligned with sustainable development goals has the potential to facilitate both women’s empowerment and implementation of effective climate-resilient policies over the long term. The submissions highlighted synergies in this regard between the SDGs, NAPAs and NDCs. In particular, aligning national development efforts with the SDGs is expected to result in social equity values being included in NAPAs and NDCs. Promoting social equity as an end goal and a means of achieving sustainable development has helped to provide a vision of what sustainable societies could look like. The AR6 emphasizes the transformative role of social equity in green transition.

87. Many Parties are promoting female empowerment initiatives at different levels. The empowerment of women and marginalized groups is at the heart of Canada’s international action, for example, while Belgium’s development initiatives in the Sahel region in Africa are also promoting women’s empowerment, similarly to measures taken by France in French-speaking developing countries.

88. According to all submissions, efforts to promote social equity, including gender equality, must continue on the basis of a clear vision and planned actions. Parties and observer organizations emphasized that so far initiatives to empower women and girls have been disparate and lacking sufficient high-level planning and knowledge-sharing at different levels. This is limiting empowerment opportunities for women and girls around the world and hindering efforts to achieve gender equality.

D. Gaps and challenges

89. Parties and observer organizations highlighted in their submissions that, to complement the collection and analysis of sex-disaggregated data and integrate opportunities for women as agents of change into policies, there is a need to bridge the information gap between governmental and non-governmental organizations. They called for decisive measures to be taken to improve communication on the successful models and methods used at the local level (by governmental and non-governmental entities) so as to be able to adapt them to and replicate them in other contexts. These measures could include toolkits and good practice workshops at the regional level, which would boost communication and cooperation and promote mass cohesive efforts to better inform women and marginalized groups and include them in decision-making. Better planning of and follow-up on such cohesive efforts is required in relation to empowerment initiatives, planned actions, replicable models and projects, and good practices.

90. Bridging the information gap between individuals, regardless of gender, and between governmental and non-governmental organizations would facilitate cohesive action, leading to inclusive governance, which would facilitate implementation of gender-responsive and gender-transformative solutions to the differentiated impacts of climate change on women and men. Since the adoption of the LWPG and its GAP, rights-based approaches to empowering women and girls have been recognized as the most sustainable and efficient way to promote gender equality. However, some countries still implement their gender-related

---

actions within a gender-sensitive rather than a gender-responsive framework, with few Parties promoting a gender-transformative approach.

91. According to the submissions and the desk review, more sex-disaggregated data are needed so as to avoid homogenizing women as a group by making general inferences on the basis of the limited data collected so far, which would be problematic as women exist and behave in a variety of sociocultural contexts. It is important in data analyses not to exaggerate or fabricate women’s intentions or wishes in relation to climate change adaptation and mitigation efforts. In other words, though women can be agents of change, this should not be expected of them as it could place additional undue burden on them in the transition to green economies, increasing their work- and mental load.

92. In addition, a lack of sex-disaggregated data that can be used to make inferences that apply in general can lead to policy responses that are insufficiently climate-resilient, while lack of inclusivity in policy planning and decision-making may result in policies that will not stand the test of time. In their submissions, Parties and observer organizations highlighted that promoting gender-transformative actions has the potential to lead to climate-resilient policies and social equity. However, Parties are still struggling to implement and plan gender-transformative actions as they require economy-wide paradigm shifts.

E. Recommendations

93. In their submissions, Parties and observer organizations called for United Nations bodies and other international actors with similar capacities to support dissemination of information on good practices for collecting and analysing sex-disaggregated data, suggesting that information could be shared through national gender and climate change focal points. Some Parties also called for support in budgeting and planning for both the collection and analysis of sex-disaggregated data and the gender analysis of policies, as well as capacity-building for addressing any data gaps.

94. Moreover, some submissions highlighted the importance of considering the intersectionality of social factors other than gender (such as age, class, place of residence, educational background, ethnicity, sexual orientation, income or (dis)ability) in analysis of policies, which many Parties still lack capacity for.

95. Implementing a framework for sharing good practices and information via national gender and climate change focal points was recommended in some submissions. Such a framework would promote implementation of coherent gender analyses at different levels while allowing Parties to gain more accurate understanding of the differentiated impacts of climate change on women and men and the role of women as agents of change in specific contexts. In turn, this could facilitate inclusive climate-resilient policymaking and promote creation of effective policies and opportunities for women, as noted in the AR6.

F. Conclusions

96. Climate change is adversely affecting women and girls specifically because of their gender. That said, women can act as agents of change. It has been shown that when women are making decisions it has resulted in, for example, improved school attendance rates for their children, increased food security, greener mobility patterns and reduced energy demand. On top of this, climate change can result in opportunities for women to access more resources and participate in decision-making owing to shifting gender norms as a result of its impacts. Furthermore, it has been shown that inclusive governance, promoted by international bodies and national Governments, can result in long-lasting and effective climate-resilient policies that lead to improved social equity in general, and gender equality specifically, through integration of more women and marginalized groups into decision-making.

97. To improve understanding of the gender-differentiated impacts of climate change, the role of women as agents of change and opportunities for women in the context of climate change, more sex-disaggregated data need to be collected and gender analyses of climate policies and actions conducted systematically. This is subject to many barriers, however, including budget constraints, lack of gender-related expertise and guidance, and lack of knowledge and financial support. These barriers could be overcome by sharing good practices (e.g. in technical documents or at workshops for national gender and climate change focal points), experience and models to support Parties in implementing gender analyses swiftly; and by assisting Parties in gathering more sex-disaggregated data, including data on other social factors, to enable them to understand how social factors intersect to shape how climate change affects groups and individuals.

98. Lastly, Parties and observer organizations have called for coordination of international efforts to implement inclusive governance measures in the face of climate change. Aligning goals and values at all levels has already created synergies between the SDGs, NAPs and NDCs, and social equity aspects are now taken into account in a way that benefits gender equality. Despite this progress, efforts to support Parties in implementing efficient rights-based approaches to closing the gender gap must continue. In particular, sharing good practices related to data collection and analysis, gender analyses of policies and budgeting could help to promote coherence and communication between stakeholders involved at all levels in order to improve identification of synergies between gender initiatives set out in NAPAs and NDCs and those developed by United Nations bodies and local governmental bodies and non-governmental organizations. Coordination at different levels must also be improved to facilitate sharing of good practices that can be replicated in different contexts with the aim of empowering women and girls and marginalized groups and including them in decision-making. While Parties and international bodies are already taking steps to implement gender-transformative actions for adapting to and mitigating climate change, ultimately more actions need to be taken to be able to observe and monitor their long-term benefits.