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**Climate Change Adaptation and Gender:
Insights from the Adaptation AGORA Project**

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Executive Summary

Climate adaptation requires a comprehensive understanding of how community vulnerabilities are affected by climate adaptation. Gender is a major component of this and one that often gets overlooked. Societal roles often create situations where different genders are more affected by climate-related hazards. While gender can be a critical lens for understanding vulnerabilities, current adaptation policies need to go further when considering intersectionality. Considering intersectionality in climate change is crucial because the impacts are not experienced equally across populations. Factors such as gender, race, class, age, disability, and geographic location intersect to shape how individuals and communities are affected and how they can respond

Despite international efforts and obligations, policies for mitigation and adaptation strategies have mostly failed to address gender inequalities in a meaningful way. For transformative change to be comprehensive, effective, and legitimate, it must be inclusive, progressive and substantive. The Adaptation AGORA Project follows the “gendered innovations” approach, which is harnessed by the creative power of gender analysis to make new discoveries and support innovation. Through various activities, like inception workshops, focus groups, and engagement mapping, the Adaptation AGORA Project has highlighted gendered issues within climate change and adaptation. This report gives an overview of how Adaptation AGORA has incorporated gender within its project activities and showcases project insights.

1. Introduction

Understanding climate vulnerability through a comprehensive lens:

Tackling climate adaptation effectively requires an understanding of how vulnerabilities are not uniform across all groups. While gender is a critical lens for this analysis, adaptation approaches must go further to consider intersecting factors, including biological sex and sexual orientation. Focusing on “women” as a single social category is an oversimplification that can lead to ineffective solutions. The distinction between gender (societal roles, behaviors, and identities) and **sex** (biological and physiological characteristics) is crucial here. Societal norms create gendered inequalities in access to resources, jobs, and power, which directly influence who is most vulnerable to climate shocks. For instance, in many regions, women are disproportionately responsible for water and food collection, tasks made more difficult by droughts.

However, some vulnerabilities are tied to specific biological needs that can affect anyone regardless of their gender identity. A compelling example is the need for appropriate facilities or shade during heatwaves for individuals who menstruate, a biological reality that transcends gender identity. Similarly, sexual orientation can intersect with other vulnerabilities, as LGBTQ+ individuals may face discrimination that limits their access to emergency shelters or relief services during extreme



weather events. By broadening our focus beyond a simplified view of gender, we can design climate adaptation strategies that are truly inclusive, equitable, and effective for all members of a community

The climate crisis impacts all sectors and populations, but it exacerbates inequalities between them, such as gender. These inequalities are closely linked to the major impacts of climate change, like environmental disasters or water scarcity, as well as to the ways mitigation and adaptation policies are designed—whether to counteract or, at times, reproduce these inequalities. From a gender perspective, social norms often assign distinct roles in both the formal and informal spheres, as well as in the domestic economy. These divisions shape how different groups experience the impacts of climate change and influence their access to resources, decision-making, and opportunities for resilience.

We often see gendered roles that are rooted in social and cultural norms. For example, jobs traditionally associated with men are concentrated in physically demanding sectors like agriculture, fishing, or construction. Meanwhile, roles traditionally associated with women are often in societal care, domestic work (both paid and unpaid), or specific segments of manufacturing and personal services.

These gender inequalities not only affect the types of jobs people hold but also their access to resources that shape infrastructural needs, such as private cars and public transport. The project seeks to address these social disparities, not just biological differences, to ensure equitable access to opportunities. Considering intersectionality in climate change is crucial because the impacts are not experienced equally across populations. Factors such as gender, race, class, age, disability, and geographic location intersect to shape how individuals and communities are affected and how they can respond

Despite international efforts and obligations, policies for mitigation and adaptation strategies have mostly failed to address gender inequalities in a meaningful way. For transformative change to be comprehensive, effective, and legitimate, it must be inclusive, progressive and substantive. The Adaptation AGORA Project follows the “gendered innovations” approach, which is harnessed by the creative power of gender analysis to make new discoveries and support innovation. Gender relations are approached from an intersectional perspective to understand and address the multiple ways (dynamics and factors) in which climate change policies can reassert or mitigate structurally caused inequalities and vulnerabilities.

This is important as policy should be supporting behavioral change to limit resource (e.g., energy) consumption at the individual or household level. Indeed, vulnerability (WP2) has been influentially defined as a condition that limits the autonomy and capacity for self-determination of individuals and families. Where data could not be analyzed in gender-specific and intersectional ways within the project, ways to improve data sources and operationalize inequality and intersectionality will be explored in the different project work packages (WP2, WP4, WP5).



Throughout the project, key pilots (WP2) were analyzed in relation to locally and regionally relevant levels of social stratification and segmentation, including but not limited to gender relations, low income, health risks and their various intersections. Based on these identified dimensions, the stakeholder engagement process (WP2 and WP5) reached out to the identified social groups involved to ensure that their specific perspective had a voice in the project. Policy recommendations from the project reflected their potential impact and built on the empirical evidence gained in the project to address the climate crisis and ensure that no one is left behind (WP4).

Incorporating gendered perspectives within climate mitigation and adaptation initiatives is crucial for building comprehensive, robust, and transformative change. The Adaptation AGORA Project has worked to intertwine gender perspectives within project activities and has thus built this report to showcase project learnings.

2. European Pilot Activities

This section explores the intersection of gender and climate change across four pilot regions in Europe: Spain, Italy, Germany, and Sweden. It draws upon documented inception workshops, focus groups, and final events from the Adaptation AGORA project, identifying how gender concerns were integrated — or overlooked — in local adaptation practices.

2.1 Inception Workshops

In the early phases of the Adaptation AGORA project, inception workshops held in cities like Rome and Zaragoza began mapping climate risks and vulnerabilities with a participatory lens. Gender-related vulnerabilities were recognized, particularly in relation to caregiving responsibilities and social exclusion, though the degree of integration varied by country.

The Italian pilot inception workshops took place in Rome, engaging stakeholders from municipal governments, academia, and civil society. Adaptation AGORA's participatory sessions emphasized the vulnerability of elderly women and single mothers in urban peripheries, especially during climate-related events like floods and urban heat islands. A key outcome was the identification of gender-blindness in local emergency protocols. Stakeholders proposed that civil protection plans should incorporate data disaggregated by gender and socio-economic status. Participants advocated for a gender-balanced advisory board to guide adaptation policy in Lazio. Furthermore, energy poverty—more prevalent among older women—was discussed as a critical intersectional issue linked to climate adaptation and justice.

This highlights an important aspect of gender disparities in terms of pensions. As air conditioning unit costs rise, pay gaps between men and women are important to take into consideration. A report from the EU Parliament examines the gender gap in pensions across the EU, stating that many EU countries show a discrepancy between men and women in pension amount, with men earning a much higher average monthly and annual pensions. The report further shows that mothers earn less than women without children (Dessimirova & Bustamante, n.d.). This further underscores the



vulnerability differences between genders and even shows that comfort, in the form of income, has a gender bias.

It is also worth mentioning that based on the initial workshops in Zaragoza and Rome, the project gained attention from other interest groups and additional workshops were organized with senior women citizens both in Italy and Spain. These citizens were not located in the same specific regions as the Pilot in the case of Rome, they were in the southeastern city of Santa Maria Capua Vetere, showing the high exposure of the results. In the case of Spain, they were in the Matarraña region, one of the two sections of the Pilot in this case focusing on rural areas. A focus group with older rural women is essential as it makes their experiences of loneliness visible, helps to understand the social and cultural factors that deepen it, and provides qualitative insights for designing interventions and public policies better suited to their reality. The workshop was titled “Tea for climate” in both cases, and women over the age of 65 came together to firstly learn more about the impact of climate change in their region while comparing and contrasting scientific evidence with their own experiences living in the area, as well as co-designing potential initiatives that they could bring to their town representative, improving the adaptation capacity.

The main project pilot events were not differentiated by gender to obtain a broad analysis of community needs, vulnerabilities, and pitfalls in climate adaptation specific to the pilot regions. Additional gendered events were created to dive deeper into community vulnerabilities and examine climate change through a transdisciplinary lens. These additional events allowed Adaptation AGORA to explore the wide-ranging impacts of climate change outside of the pilot regions and served as a way for the project to make an impact and gain followers outside of the pilot regions. Although the initial project pilot events were not differentiated by gender, these additional events focusing on women helped highlight the added vulnerabilities women may face in the mist of climate change.

2.2 Focus Groups

Throughout the project, focus groups targeting specific audiences were implemented to gain a deeper understanding of climate adaptation impacts. Gender-disaggregated focus groups allowed community members to express differentiated concerns. For instance, in Sweden, the pilot was conducted in Malmö, and women highlighted anxieties around climate-related health risks and access to public services, while men emphasized property risks and infrastructure resilience. In the Malmö Pilot, the reality shows a diverse urban area facing sea level rise, flooding, and socio-economic inequalities. In the Italian Pilot, women healthcare experts stressed the need for pregnancy-specific heat-related guidance in the wake of increased heatwaves affecting the region ([HEALTH OPERATORS notes.docx](#)).

Adaptation AGORA’s engagement methods included walking interviews, storytelling circles, and creative mapping exercises. Women from migrant and refugee communities in the Pilot regions of Zaragoza and Rome expressed concerns about safety in public spaces during climate events, such



as storm surges or infrastructure breakdowns. They also described limitations in accessing health services exacerbated by heatwaves. Women workers also commented on mobility issues for commuting to work, stating that in Rome, there is a lack of resources and unreliable or inaccessible public transit, making a car a necessity for commuting ([20240619 FG WORKERS note EN.docx](#)). Malmö's gender mainstreaming approach—already integrated into urban planning—was cited as a good practice, but participants argued it must go further to reflect intersectional gender identities. Recommendations included child-friendly and women-safe shelter designs and multilingual communication during climate crises. This was also echoed in the migrant focus group in Zaragoza, where participants expressed the need of gender-oriented approaches in climate migration policies ([Facilitators Report Migrants .docx](#)).

Within the focus groups, some discussed gender-related impacts and solutions while others did not. This could be due to cultural traits, or the makeup of focus groups participants. For instance, the migrant focus group in Zaragoza and the workers' focus group in Rome both had more women participants, which may have allowed them to feel more comfortable speaking up about gendered needs. This could also be related to cultural traits, where the migrant and multicultural focus groups in Zaragoza and Rome mentioned women-related risks and solutions, while the migrant focus groups in Malmö and Dresden did not. This could be related to the cultural traits of the different migrant participants in the various pilot regions and the ratio to women and men participants. Participants could also have a personal or career focus on gender issues. For instance, in Rome, the workers focus group included a participant from the organization Casa delle Donne Lucha y Siesta, working as an anti-violence operator. She contributed to the focus group by providing insights on welfare and public funding and promoting the use of public meetings and consultation events for their bilateral engagement between administrative decision-makers and citizens..

2.3 Additional Stakeholder Activities

Across all four pilot countries, additional stakeholder dialogues included NGOs, municipal officers, and climate researchers. These actors increasingly called for mainstreaming gender in planning, linking adaptation to democratic accountability.

Across the pilot countries, a series of dialogues, focus groups, and co-creation events deepened stakeholder understanding of how gender interacts with climate risk. In all regions, stakeholders called for climate adaptation frameworks that promote procedural and distributional justice. The Adaptation AGORA Evaluation Framework (D3.2) included gender equity indicators, such as inclusive representation, knowledge diversity, and gender-responsive budgeting. Indicators were included and expanded upon based on feedback obtained from various Delphi study rounds conducted by WP3. These indicators were piloted and refined through feedback sessions. Furthermore, Adaptation AGORA emphasized the inclusion of marginalized voices—particularly those of caregivers, elderly women, and ethnic minorities—in adaptation scenario planning. The workshops also trialed feminist facilitation tools and participatory governance simulations.



Along with the Pilot regions, the Adaptation AGORA Project also accepts organizations and regions as additional followers of the project. An example is the Casa delle Donne Lucha y Siesta, an anti-violence organization. The womens group provides a feminist and transfeminist space where intersectional gender and commoning policies are developed and practiced. Casa delle Donne Lunch y Siesta provides a concrete example of urban women activism that serves as a social infrastructure for climate resilience, especially for maginalized women.

2.4 Gender and citizen engagement: insights from WP1, WP2, & WP3

Throughout the project, citizen engagement mechanisms and approaches were compiled, examined, and implemented in various work packages. The efforts from work packages 1, 2, and 3 set the groundwork for the engagement events and activities of the Adaptation AGORA Project. The mapping, reporting, and analysis of citizen engagement methodologies and initiatives built upon other information gathered by the other WPs (1, 2, and 3), and helped in the development of future project events, like the inception workshops conducted in WP2 and the capacity building events in WP5. In the context of the project, citizen engagement was defined in the terms of deliberative democracy, where citizens play a key role and are not merely recipients of information. This highlights the essential activities in engagement initiatives that emphasize dialogue over voter-based political participation (D1.1). The importance of compiling and examining citizen engagement within climate adaptation cannot be understated, and the aim of WP1's efforts was to bring together different types of knowledge (i.e. academic, institutional, and practical) to showcase good and bad practices, as well as create recommendations for future citizen engagement design.

Successful citizen engagement initiatives and methodologies were found to have clear objectives, tailored communication strategies, and attention given to the intangibles of the engagement process, like the learning process (D1.2). Equally important in enhancing collaboration is to foster partnerships and networks. The challenges identified include engaging with marginalized groups and ensuring communication and engagement initiatives translate into meaningful policy and action (D1.2). Institutional challenges have also been identified as crucial barriers to successful engagement (D2.3). The analysis of citizen engagement techniques by Adaptation AGORA underscores the importance of adaptability in designing communication and engagement initiatives that suit varied context and needs. In this aspect, gender is vital for truly effective and comprehensive engagement. Incorporating different intersections gender, gender-fluid, and non-binary populations, race, class, age, disabilities enhances our understanding of their vulnerabilities and sheds light on the needs specific to these communities.

2.5 Insights from WP4 on gender and social equity in adaptation

Across its work package 4, the Adaptation AGORA project has conducted a comprehensive analysis of how gender, vulnerability, and social equity are addressed in European climate adaptation. A systematic review of EU, German, and Spanish policies (D4.2) reveals a persistent gap between high-level policy ambitions and on-the-ground implementation. While some frameworks, such as Spain's



National Adaptation Plan, explicitly mention a gender perspective, the broader analysis identifies a systemic failure to actively engage marginalized communities. This policy-to-practice gap is confirmed by practitioners (D4.1), who experience representational challenges and institutional barriers that lead to the underrepresentation of key demographics, particularly youth, future generations, low-income populations, and minority groups. This confirms that simply referencing vulnerable populations is insufficient without dedicated mechanisms for their meaningful participation.

The project adopted a nuanced understanding of inclusivity and Deliverable 4.1 defines an inclusive and integrative approach as one that explicitly considers gender, vulnerability, intergenerational responsibilities and marginality. Furthermore, the analysis embraces an intersectional lens, highlighting the need to support highly vulnerable groups such as the LGTBIQ+ community. By identifying these specific vulnerabilities, the project establishes a robust framework for assessing the equity of engagement practices for adaptation measures, ensuring that the focus remains on the real-world needs of those most affected by climate impacts.

Building on this analysis of gaps and challenges, the project provides a clear roadmap for fostering more equitable adaptation. Recommendations consistently call for mandating explicit input from vulnerable communities through targeted outreach and ensuring their representation in decision-making bodies (Deliverable D4.2). For instance, Deliverable D4.3 suggests transferring digital tools to amplify marginalized voices and establishing youth-specific engagement mechanisms like hackathons and digital innovation labs. By combining concrete policy recommendations with practical tools, the Adaptation AGORA project offers a holistic approach to build gender-responsive and socially just adaptation across Europe.

2.6 Industry and/or Economic sector insights

A central finding from across the Adaptation AGORA project is the critical need to mainstream adaptation out of its environmental silo and integrate it across diverse economic and productive sectors. The project's policy analysis (D4.2) consistently emphasizes that effective resilience requires a holistic approach that embeds adaptation within sectors such as agriculture, water management, urban planning, transport, energy, and industry. However, a detailed review of current adaptation initiatives (D4.1) reveals that this integration is still lacking with adaptation solutions primarily focusing on environmental and land planning, with significantly less attention paid to crucial social and economic areas like tourism, public health, and business development. This sectoral imbalance is a fundamental weakness that limits the effectiveness and sustainability of current adaptation efforts.

This sectoral gap is largely driven by significant financial and institutional barriers identified throughout the project's research. A recurring theme from practitioners (D4.1) is the challenge of resource limitations, including insufficient funding for long-term initiatives and a scarcity of human



resources. This is compounded by institutional inertia, with policy processes often relying on outdated cost-benefit analyses and excessive bureaucracy that hinder agile and cross-sectoral action (D4.2). A notable challenge highlighted in both German and Spanish policy contexts is the limited engagement with key economic actors, particularly small and medium-sized enterprises (SMEs), which are often overlooked in policy design yet are vital for local economic resilience.

To overcome these barriers, the project's findings recommend fostering greater cross-sectoral collaboration and innovative funding models. A key recommendation is the development of multi-sectoral regional climate hubs and the strategic use of public-private partnerships (PPPs) to leverage private sector resources and expertise (D4.2). Furthermore, the project's research on transferability (D4.3) suggests that lessons from digitalization policies can offer a pathway forward. This includes adopting innovative tools like digital incentives for climate finance, transparent funding trackers, and targeted support mechanisms such as digital mentorship programs and innovation incubators specifically for SMEs. By implementing these strategies, adaptation can be reframed from a purely environmental cost to an integrated economic and social opportunity, building a more resilient European economy.

3. Policy Implications

Policy lessons emerging from the Adaptation AGORA pilots emphasize the need for gender-sensitive adaptation strategies with an intersectional point of view. While the EU Green Deal and national adaptation frameworks recognize vulnerable populations, operationalizing gender equity remains a challenge. By examining both barriers and opportunities, this section outlines practical entry points for mainstreaming gender in climate policy.

In the European context, the EU Gender Equality Strategy 2020–2025 sets a framework to mainstream gender in all policies, yet implementation in climate adaptation is still limited (European Commission, 2023). In the Adaptation AGORA pilot countries, policy workshops revealed that gender is often treated as an auxiliary rather than a foundational element in local and national adaptation strategies. For example, Spain's National Adaptation Plan references vulnerable populations but lacks concrete gender indicators or budgeting measures. Similarly, while Italy and Germany have gender equity clauses in sustainability laws, they are not always operationalized in climate programs (UN Women, 2022).

One consistent gap identified across Adaptation AGORA consultations is the absence of mandatory gender-disaggregated data collection in adaptation planning. This data gap weakens the ability of municipalities to conduct vulnerability assessments that reflect intersectional realities. A promising initiative in Malmö, Sweden, incorporated participatory gender audits into its urban resilience program, serving as a model for other cities. However, without national mandates or funding incentives, such practices risk remaining isolated pilots. A similar trend is observed in Canada, where the Pan-Canadian Framework on Clean Growth and Climate Change mentions Indigenous and



gender perspectives but does not bind provinces to specific measures (Government of Canada, 2020).

Beyond Europe, comparative analysis with Australia, New Zealand, Canada, and the USA reveals how gendered perspectives are being integrated into climate adaptation policy and research. Common themes include the burden of unpaid care work, climate-induced migration, and the underrepresentation of women in climate governance.

Australia's National Climate Resilience and Adaptation Strategy (2021) explicitly links gender to adaptive capacity, especially in rural and Indigenous communities. Lessons from Australia's Gender Equality Strategy offer insight into integrating gender across disaster preparedness and environmental health policies (Government of Australia, 2021). In New Zealand, the Climate Adaptation Technical Working Group has recognized the role of women in Māori communities as environmental stewards, prompting culturally sensitive adaptation guidelines. The U.S. and Canadian models, while strong in sectoral focus (e.g., agriculture, housing), tend to compartmentalize gender concerns under social policy rather than embedding them in climate finance or infrastructure planning.

3.1 Areas to improve

While the Adaptation AGORA Project conducted various events and investigated policy with a gendered lens, there was a lack of exploration into engagement initiatives with a gendered focus. For instance, WP1 created various deliverables and reports examining various engagement methodologies. Although these reports do mention gender as a significant contextual factor that can be both an enabler and constraint, there is no specific research into the barriers and enablers of engagement in terms of gender. This is an important aspect to consider when studying citizen engagement, as studies have shown that engagement is a gendered process (Brink & Wamsler, 2019) (Brink & Wamsler, 2019).

Even though Adaptation AGORA Project had some events targeting women, there is always a need for increased gender-disaggregated events to promote understanding gendered differences in climate change and adaptation. There is also a need for increased events with the non-binary and transgender communities, as understanding their specific challenges and vulnerabilities with climate change, adaptation, and engagement is lacking.

4. Additional Considerations

To close the policy gap, stakeholders across the Adaptation AGORA pilots recommended the following actions:

- Institutionalize gender-disaggregated data in all adaptation monitoring systems.
- Mandate gender-responsive budgeting in local climate action plans.



- Include representatives from women-led and minority groups in adaptation governance boards.
- Provide capacity-building on gender mainstreaming for public sector staff.
- Leverage EU funding mechanisms (e.g., Cohesion Funds, Horizon Europe) to prioritize equity-based resilience programs.



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