

Gender-Responsive Disaster Risk Reduction practices in Europe

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Introduction

The relevance of gender in the OSCE is best portrayed in a statement issued by Helga Maria Schmid, OSCE Secretary General:

“We must continue to lead by example and support women to take their seats at the table so we can build a more equitable, prosperous and secure society for us all.”

Disasters pose a great challenge to people’s livelihoods around the world. The frequency and intensity of natural hazards, such as floods, landslides, wildfires or heatwaves are expected to further increase due to climate change. Women, men, girls and boys are often unequally affected by the consequences of disasters.

Gender differences and inequalities influence capacities, needs and access to resources, information and participation. Globally, women often suffer disproportionately due to existing socio-economic conditions, and at the same time, the roles and potential contributions of women in disaster risk reduction (DRR) are often overlooked.

It has been widely acknowledged and recognized in international policy frameworks that the consequences of natural hazard events do not impact everyone equally, and that a profound understanding of gender relations and roles is needed to build resilience. To support strategic planning for response to emergencies and to support the resilience of communities, it is vital to understand the complexity of communities, through an all-encompassing approach that focuses on its physical and social characteristics¹. As such, **gender matters throughout the phases of disaster management – before, during or after a disaster.**

¹ Council of Europe - Centre of Expertise for Good Governance 2020.

The EU has embedded gender equality and empowerment of women and girls in its founding documents of the Treaty on European Union and the Charter of Fundamental Rights. These commitments have been further substantiated in Action Plans and Communications. Moreover, the EU has also been an influential voice advocating for gender justice at a global level, setting out clear objectives in the Gender Equality and Women's Empowerment (GEWE) strategy in all its external support actions.

Men and women have different relationships to the environment, to livelihoods and the economy. Although often stereotyped, women are more likely than men to be responsible for household work, care for children and family members. These gender relations influence **social roles and power structures** and are fundamentally rooted in every society. This social construct leads to **gender differences**, resulting in inequality and unequal distribution of the resources that everyone needs to sustain daily life – most likely benefiting men rather than women.

Globally, women are more likely to die in the context of natural hazards, but due to regional, contextual and hazard-specific differences, the picture cannot easily be portrayed in numbers and statistics. This is particularly true of the EU, because gender and sex-disaggregated data remain largely unavailable. Gender is not the only aspect to influence the ability of communities to anticipate, prepare for, cope with, respond to and recover from disasters². **Other cultural and social aspects** also need to be understood, and included in DRR activities, such as **age, social status, disability, and marginalization**.

The key EU document supporting the goals outlined in the **Sendai Framework for Disaster Risk Reduction** (SFDRR) is the **Roadmap³ to guide Europe's activities**, as well as a strategic agreement to **integrate Gender Equality in Disaster Risk Reduction (DRR) and Climate Change Adaptation⁴** at EU policy level. An effective gender-responsive DRR strategy to mainstream gender equality into future activities should help to **better consider women's situations and vulnerabilities, as well as promote their participation**,

2 Wisner et al. 2004.

3 EFDRR 2020.

4 EUR-OPA 2020.

potential and capabilities in all aspects of DRR decision-making, policies, and programmes. Contributing to these global goals, the EU has set high ambitions contained in **Gender Equality and Women’s Empowerment in EU External Action**⁵. By “engendering” international aid, the EU aims to accelerate progress to address structural inequalities and build more inclusive societies.

However, ambitions clearly set out at transnational policy level are not necessarily mirrored in national DRR policies among EU Member States. The **UN Women policy tracker**⁶ looks at all UN Member States’ progress in achieving inclusive disaster risk reduction strategies. The tracker shows that, in 2020, only 26 countries (out of 193) had a policy or practice in place that includes strategies for explicitly ensuring inclusivity in all Sendai-identified marginalized groups.⁷ This could further lead to the question whether policies and frameworks at EU level are strong enough to successfully implement and document activities that include gender aspects locally.

Examples of good practice around the globe show the **benefits of inclusive gender-sensitive decision-making, participation, and disaster risk reduction** to ensure resilience. However, peer review publications containing a comprehensive compilation of examples of good practice in gender-responsive DRR in the European context are missing.

This publication offers an **assessment of the importance of mainstreaming a gender perspective in DRR**, its relevance in **the European policy frameworks**, EU international aid, and **showcases examples of gender-responsive activities in the European context**. The examples provide a variety of initiatives on how to apply gender analysis and gender inclusiveness in DRR. They may serve to inspire and serve as models for enhancing community resilience by transferring them into other national contexts. Geographically, the examples focus on Europe and offer examples from **Austria, Germany, Greece, Italy, Poland and Serbia**.

5 European Commission 11/25/2020.

6 UN Women 2020.

7 Women and girls, children and youth, persons with disabilities, economically disadvantaged people, migrants and refugees, indigenous peoples and ethnic minorities, older people.

Gender and social aspects in the context of DRR

► **Key message 1:** *Gender matters throughout all phases of disaster management – before, during or after a disaster. Women, men, girls and boys are often disproportionately and unequally affected by disasters. There is a strong relationship between gender equality and community resilience to the impact of disasters.*

► **Key message 2:** *Gender should encompass men, women, girls, boys and gender diverse people in a community. It is important to target all marginalized groups, including the disabled and the elderly.*

DRR needs to respond to **changes driven by climate change**, which are expected to alter the frequency and magnitude of hazardous events such as floods, landslides, forest fires, earthquakes, tsunamis and heatwaves⁸. Associated increases in economic losses and damage, e.g. to buildings, roads, infrastructure also add to the **socio-economic challenges**.

Gender equality is a fundamental component of increasing community resilience to disasters. Disaster risk management requires that gender inequalities are addressed by including a “gender, age, disability and cultural perspective in all policies and practices”⁹, to reach positive outcomes for sustainable DRR.

Research on gender and DRR – especially in the global South – evolved from evidence that **women are disproportionately and unequally affected by disasters**. Women are

8 IPCC 2012.

9 UNISDR 2015.

more likely to be discriminated, excluded, or violated. The explanation of why women may suffer disproportionately lies in a variety of reasons, **including access to resources, shelter or information**, and the way **gender roles** construct people's experience of disasters¹⁰. A more nuanced understanding of **women's capacities and contribution to DRR** highlights that:

- Women are strong risk communicators
- Women are involved in recovery work and in post-disaster organization
- Women have vital capacities to build strong networks and important roles in communities
- Women are agents of change, including in the context of climate change adaptation¹¹

In addition to gender, **other aspects** reveal why certain groups of people are **more likely to suffer severely** from the impact of disasters. Poverty and economic pressure are often a consequence and a driver of disaster risk. The combination of certain factors leads to increased pressure on certain groups¹². These factors include:

- **Demographic characteristics** such as age, race or ethnicity, having recently migrated, family structure (e.g., single-parent families) and language proficiency.
- **Socio-economic characteristics**, such as household income to compensate for losses and destruction after hazard events
- **Health**, including access to health-related infrastructure and medicine, or stress, disease and mortality
- **Coping capacities** that reflect competencies to adapt to adverse short- and long-term impacts at individual, household, and societal level
- **Risk perception** refers to the subjective judgment that individuals make about the characteristics and severity of a risk¹³

10 Rushton et al. 2019.

11 UN Secretary-General Press Release 2009.

12 Rufat et al. 2015; Wisner et al. 2004.

13 Slovic and Weber 2002.

- **Neighbourhood characteristics**, including access to transportation systems, population density and urban sprawl, housing and resource dependency.

Additionally, recent debates¹⁴ follow the approach of recognizing **gender outside the binary of women and men** – and to acknowledge that neither sex nor gender are fixed terms, but their meanings are open to fluidity and interpretation. Currently, the term LGBTIQ+¹⁵ is used in the western context. Like past debates on women and DRR, future discussions should not only stress the challenges facing people who self-identify outside the binary, but also understand their strengths, capacities and contributions to DRR.

¹⁴ Rushton et al. 2019.

¹⁵ LGBTIQ+ - includes lesbian, gay, bisexual, transgender, intersex, queer, asexual.

Consideration of gender issues in International DRR Policies

► **Key message 3:** *Both the Sendai Framework and the Sustainable Development Goals strive to achieve gender equality and gender mainstreaming. Now is the time to put words into action.*

Internationally, efforts to integrate gender into DRR shifted **from a women-focused approach to a gender-focused approach**. This implies the need to analyse the roles and relationships of women and men in DRR within the cultural context. In parallel, the overall strategic approach of disaster risk management (DRM) turned **from reactive disaster response to long-term proactive DRR to enhance community resilience**.

Efforts to include a gender perspective in the **global disaster discourse** have been ongoing for more than a decade, accompanied with attempts to **“engender” development since 1970**, explicitly addressed in the Brundtland report 1987, by considering equity in terms of both **intra- and intergenerational equity**.

Background and previous frameworks

The **Hyogo Framework for Action** (HFA, 2005-2015) and the **Millennium Development Goals** (MDGs, 2000-2015) marked key policy initiatives in the previous decades. During that decade, a key declaration in terms of Gender and DRR was **the Manila Declaration for Global Action on Gender in Climate Change and Disaster Risk Reduction**, as the outcome of the Third Global Congress of Women in Politics and Governance, on Gender in Climate Change Adaptation and Disaster Risk Reduction, that took place in Manila,

Philippines in October 2008. The declaration urged **“all stakeholders to ensure that climate change and disaster risk reduction measures are gender-responsive, sensitive to indigenous knowledge systems and respect human rights”**. Moreover, it called for **equal participation of men and women in decision-making processes at all levels in climate change and disaster risk reduction**. It also urged governments to enable access to information and to include all genders in awareness and training programmes. Among other issues, governments should also **collect sex-disaggregated data**¹⁶.

Following the Manila Declaration, the **Beijing Agenda for Global Action on Gender-Sensitive Disaster Risk Reduction** was the outcome of the International Conference on Gender and Disaster Risk Reduction, adopted in April 2009 in Beijing, China. The declaration urges national governments to include gender issues and mainstreaming in policies, strategies and practices, to collect gender-specific data and statistics, to carry out gender-sensitive vulnerability, risk and capacity assessments, to increase public and media awareness of the issues and to improve participation. The Agenda was to be implemented by 2015 (UNISDR, 2016).

Current frameworks and Agendas

Current EU commitments related to Gender and DRR revolve around the **Sendai framework for disaster risk reduction (SFDRR-2015-2030)**, **Sustainable Development Goals, Agenda 2030 (SDGS 2015-2030)** and targets to reduce global emissions to tackle climate change (**The Paris Agreement**, UNFCCC).

SFDRR: The SFDRR serves as an agenda of the post-2015 development for the Member States of the United Nations. Its progress depends on **all-of-society engagement and partnership**¹⁷. SFDRR’s seven targets will significantly support the achievement of the SDGs.

¹⁶ United Nations 2009.

¹⁷ “A gender, age, disability and cultural perspective should be integrated in all policies and practices, and women and youth leadership should be promoted.” UNISDR 2015, SFDRR, p.13

SFDRR explicitly mentions “Gender” in Priority 4¹⁸ to “**Empowering women and persons with disabilities to publicly lead and promote gender-equitable and universally accessible response, recovery, rehabilitation and reconstruction approaches is key**”¹⁹. Within SFDRR, **women and their role of stakeholders** throughout the different phases of DRR are acknowledged²⁰.

Critics noted that, despite efforts to make the topic stronger in the SFDRR, the text on women, women’s rights and gender remained relatively weak²¹. **Women** are often mentioned together **with girls and other marginalised groups continuing their portrayal as victims**. The goal to implement gender analysis and to provide a framework to consider gender topics is mentioned across the document, however, “gender” is only discussed in relation to women. The term **“gender equality” does not appear in the text**.

SDGs: Gender equality, empowerment, and the need to support gender equality for women and girls are regarded **as a cross-cutting issue**, therefore relevant across the goals, but explicitly addressed by **SDG 5 “Achieve gender equality and empower all women and girls”**. SDG 5 targets aim at²²:

- the ending of all forms of discrimination against all women and girls
- the elimination of violence in public and private spheres
- the participation and equal opportunities for leadership
- and the recognition of unpaid care and domestic work

The **frameworks** explicitly strive to attain synergies and support each other’s goals.

18 Priority 4 - Enhancing disaster preparedness for effective response and to “Build Back Better” in recovery, rehabilitation and reconstruction.

19 *ibid*, p.21.

20 “Women and their participation are critical to effectively managing disaster risk and designing, resourcing and implementing gender-sensitive disaster risk reduction policies, plans and programmes; and adequate capacity building measures need to be taken to empower women for preparedness as well as to build their capacity to secure alternate means of livelihood in post-disaster situations.” *ibid*, p.23.

21 Lewis 2016. Rushton et al. 2019.

22 Link to SDG Targets: sdgs.un.org/goals

„Disaster risk reduction is at the heart of the 2030 Agenda. Development that is not risk-informed cannot be sustainable. Recurring disaster losses are a significant brake on poverty eradication. The implementation of the Sendai Framework for Disaster Risk Reduction is essential for the achievement of the Sustainable Development Goals.“²³

Some synergies on the topic “Gender” in SFDRR and the SDGs include:

- **Addressing inequalities:**

- SFDRR – addresses inequalities as an underlying driver for risk. Furthermore, the need to *“support the capacity of developing countries to implement **inclusive and people-centred disaster risk reduction strategies can help to reduce inequalities**”*²⁴.
- SDG 10 aims to reduce income inequality²⁵.

- **Empower women and promote gender equality:**

- SFDRR provides for: *“(…) women to publicly lead and promote gender-sensitive, equitable and accessible disaster risk reduction policies, plans and programmes, and for adequate capacity building measures to empower women for preparedness as well as to build their capacity to secure alternate means of livelihood in post-disaster situations.”*²⁶
- SDG 5 „Achieve gender equality and empower all women and girls“.

²³ Robert Glasser, Special Representative of the Secretary-General for Disaster Risk Reduction; UNISDR 2016

²⁴ Ibid.

²⁵ “By 2030, empower and promote the social, economic and political inclusion of all, irrespective of age, sex, disability, race, ethnicity, origin, religion or economic or other status”.

²⁶ UNISDR 2016.

European policies for internal and external DRR activities

► **Key message 4:** *EU member states should include gender aspects in DRR strategies and programmes to ensure gender equality and gender mainstreaming.*

► **Key message 5:** *DRR strategies should support an all-of-society approach, enable and promote gender-balanced participation in decision-making and DRR activities.*

“Gender equality is a core principle of the European Union, but it is not yet a reality. In business, politics and society as a whole, we can only reach our full potential if we use all of our talent and diversity. Using only half of the population, half of the ideas or half of the energy is not good enough.”²⁷

At the EU level, the **Treaty of Amsterdam (1999)** established gender mainstreaming across the policy landscape, as **the official objective of the European Union’s equality policy**. The EU has made progress²⁸ since then to pursue gender equality, but gender gaps remain. Women are still over-represented in lower-paid sectors and under-represented in decision-making positions.

Therefore, the current **Gender Equality Strategy 2020-2025**²⁹ aims at:

- closing gender gaps in the labour market
- achieve equal participation across different sectors of the economy
- ending gender-based violence
- challenging gender stereotypes
- addressing gender pay and pension gaps
- closing the gender care gap
- achieving gender balance in decision-making and politics.

27 European Commission President Ursula von der Leyen

28 A detailed timeline is available here: EUR-OPA 2020.

29 European Commission 2020.

The strategy supports the Sustainable Development Goals, by pursuing **gender mainstreaming** and targeted actions, and **intersectionality**³⁰ as a horizontal principle for implementation. It is also relevant for implementing DRR activities.

For **internal activities of the EU**, regulations such as the one on “**Establishing a Rights, Equality and Citizenship Programme for the period 2014 to 2020**”³¹ support gender mainstreaming across different sectors.

Indirectly, different EU policies address gender issues relevant to DRR. An example is **gender mainstreaming in decision-making**. The Council of the European Union calls on member states, the European Parliament, the European and national parliaments and parties to recognize the need for and pursue gender balance at all levels of decision making³². This could have an impact on gender mainstreaming in the decision-making in the field of DRR.

In the field of climate change, gender mainstreaming in the EU policies is more evident. The **European Institute of Gender Equality**³³ suggests that the main causes for gender inequalities at policy level include:

- Women’s under-representation in the environment and climate change decision-making institutions
- Gender differences in mitigation and adaptation strategies
- Gender differences in the effects of climate change

In more detail, the report on “Women and Climate Change” calls on the Commission and Council to **mainstream and integrate gender in all climate policies** from concept to financing and evaluation. This will be achieved by the following activities³⁴:

30 All women are different and may face discrimination based on several personal characteristics. For instance, a migrant woman with a disability may face discrimination on three grounds.

31 EU 2013

32 COUNCIL OF THE EUROPEAN UNION 12/7/2015.

33 EIGE 2016.

34 *ibid.*

- To facilitate and support networking of women’s organizations
- To mainstream **gender-sensitive statistics** in all environment-related policy areas
- To strive for **female representation of at least 40%** in all relevant bodies for climate financing
- To encourage women to **pursue technical and scientific training** careers in the environment and energy technology sectors
- To encourage inclusive decision-making.

„Integrate the gender issue into strategies for preventing and managing the risks associated with natural disasters, and to promote women’s empowerment and awareness through capacity building before, after and during climate-related disasters, along with their active involvement in disaster anticipation, early warning systems and risk prevention as part of their role in resilience building.”³⁵

In the field of DRR, the **European Roadmap for the implementation of SFDRR**³⁶ prioritizes areas of action to guide Europe’s contribution to SFDRR targets, as well as build coherence on outcomes of the Agenda 2030 and the Paris Agreement:

Focus Area 1:

- Enabling national and local-level strategies on DRR (review of existing strategies/development of new strategies)
- Governance, including a **whole of community approach**, including the full participation of **persons with disabilities**, and ensuring an approach that meets **equal access** and functional needs of all individuals
- Risk assessment
- Disaster loss database, offering European guidelines on standards of information to be collected³⁷

35 KIIL-NIELSEN 2012 p.9.

36 EFDRR 2020.

37 Groeve et al. 2013.

- Peer reviews
- Focus Area 2:
- **Mainstreaming** and integrating disaster risk reduction in key areas of focus – Strengthen the roles of key civil society actors and stakeholders, **to foster cross-sectoral co-operation.**
- Climate change adaptation, environmental and natural resource management: strengthen synergies of DRR and climate change adaptation, especially in the fields of land-use planning, forestry and urban risks.
- Economic management of risks and strengthen the contributions of private sectors
- Critical infrastructures in health services, focusing on public health

Activities at national level should therefore support all-inclusive disaster risk management by:

- National DRR coordinating bodies / National Platform include representatives from **persons with disabilities**
- National DRR coordinating **mechanism to include gender-sensitive representation**
- Strengthen the engagement of science in national coordination mechanisms or platforms for DRR
- Enhance co-operation between health authorities and other relevant stakeholders to strengthen country capacity for DRM.

According to a high-level agreement on Gender Equality (EUR-OPA), effective gender-sensitive DRR strategies should consider women's situations and vulnerabilities and promote their participation, potential and capabilities in all aspects of DRR decision-making, policies and programmes³⁸. By actively promoting gender equality gender issues in future DRR activities and projects, these should ensure that **experts of both genders** are included **in the design and conduct of projects**. Future activities should further ensure that

38 EUR-OPA 2020.

they promote gender equality in DRR projects by:

- ensuring **balanced participation of women and men** in political and public decision-making women's participation
- supporting **women's participation** in DRR policy-making at all levels as well as in disaster recovery and reconstruction planning and programmes
- enhancing women's leadership role
- mainstreaming gender-sensitive DRR in **land use and urban planning policies** and disaster preparedness planning
- enhancing **national and local early warning systems** and developing **disaster contingency plans** based on the results of gender-sensitive vulnerability analysis and risk assessments
- mainstreaming gender needs and concerns in **disaster preparedness planning**.

These future activities are needed to promote gender equality and gender issues in DRR. Although the EU is considered to actively pursue gender equality and gender mainstreaming, gender issues are **not specifically integrated in national Disaster Risk Reduction Plans and Programmes**³⁹. Globally, gaps remain, and progress is slow:

- Between 2009 and 2011, more than 8 out of 10 (62 out of 70) countries participating in the mid-term review of the Hyogo Framework did not collect gender-disaggregated capacity and vulnerability information.⁴⁰
- Current reporting trends show that disaggregated data by sex, age and disability is still limited,⁴¹ with barely any change in 13% of countries when it comes to addressing marginalized groups in their policies (26 out of 193, in 2020⁴²).
- Focusing on the EU, only a few countries have policies to target marginalized groups (see UN Women Policy Tracker⁴³)

39 United Nations 2015.

40 *ibid.*

41 UNDRR 2019.

42 UN Women 2020.

43 *ibid.*

However, as the EU is **involved in humanitarian aid activities** around the world, many regulations and directives, related to gender and DRR, deal with **external actions** in non-European countries.

The current **Gender Action Plan for 2021-2025, GAP III** ⁴⁴, draws on the EU gender equality strategy 2020-2025. It covers EU activities in third countries, especially developing countries or countries suffering from conflict and violence. It combines gender mainstreaming, targeted actions and political dialogue. The strategy acknowledges that, in the 21st century, **disasters and human-made crises**, including conflict, have become **more complex**, and increasingly linked to global challenges such as climate change, environmental degradation, displacement, and, more recently, pandemics. It is, therefore, necessary for preventive action to adopt a risk-, needs- and rights-based approach. Activities should (among others) **support and implement capacity-building** and **mentoring on women's leadership** for women negotiators and mediators, to improve their **effectiveness and the quality of their participation** in peace processes.

The following EU Council Regulations address gender issues and are relevant for future DRR activities, as they ensure strengthening the gender perspective, and women's participation and leadership among others:

- European Voluntary Humanitarian Aid of Corps⁴⁵, in the field of humanitarian response
- Council Conclusion on women, peace and security⁴⁶
- Council Regulation on integrating gender issues in development and co-operation⁴⁷

An interesting tool that aims to improve the quality of humanitarian actions is the **Gender-Age Marker Toolkit**⁴⁸. It uses criteria such as gender and age, adapted assistance, adverse effects and adequate participation to assess to what extent each humanitarian action integrates gender and age considerations.

44 European Commission, 11/25/2020.

45 EU 2014 Paragraph 20

46 Council of the European Union, 12/10/2018.

47 Council of the European Union, 1998.

48 European Commission 2013.

Policies on Gender and DRR at national level

► **Key message 6:** *A lack of gender-responsive DRR Policies and Programmes persists at national level in EU member states.*

EU member states operate within the framework of European policies and are committed to supporting the development of gender-sensitive policies and transposing the objectives into national legislation. At national level, gender topics are often anchored in the constitution or legislation related to anti-discrimination but not addressed in sectoral policies or agendas. Some countries, including Austria and Sweden, address gender issues in the context of DRR and climate change adaptation and mitigation.

The Austrian Ministry of Agriculture, Regions and Tourism (BMLRT) commits itself to implement the gender mainstreaming strategy at national level⁴⁹. The year 2020 marks the 20-year anniversary of gender mainstreaming in Austria. It has been implemented in the political and ministerial context, and anchored as a cross-cutting issue in the BMLRT, which is also responsible for climate protection and adaptation.

Austria developed a strategic concept to tackle **climate change adaptation** in 2012, updated in 2016. The action plan and recommendations are fundamentally driven by the outcomes of the Austrian Panel on Climate Change⁵⁰ supported by the related scientific evidence. The strategy addresses the need to strive for equality among women and men, and makes the following recommendations⁵¹

- Gender-specific analyses of the subject of climate change in Austria and adaptation to climate change should be encouraged, in order to be able to take account of the different needs and concerns of women and men and align programmes and strategies accordingly.
- Women and gender experts should be involved in the planning, development and implementation of all climate-relevant strategies and measures.

⁴⁹ Council of Ministers decision of 11 July 2000.

⁵⁰ APCC 2014.

⁵¹ BMLRT 2017 p. 59

- Women’s participation in discussions related to adaptation to climate change should be promoted.

The strategy addresses the social aspects of climate change and acknowledges that *“The treatment of the environment and the related risk perception is influenced by individual factors as well as by the social environment”*⁵². It claims that there is a need for research into the effects of climate change on communities, e.g. social justice and individual rights (fundamental rights, economic concerns of individuals, gender equality, discrimination).

In addition, the BMLRT itself, and its Department IV/5 “Torrent and Avalanche Control” responsible for DRM in Alpine catchments, made significant steps towards implementing the gender mainstreaming strategy by introducing administrative procedures enabling the integration of gender aspects through gender budgeting, engendering strategies, internal and external sensitization etc.⁵³

In Sweden, the Swedish Civil Contingencies Agency (Myndigheten för samhällsskydd och beredskap, MSB) is the primary agency responsible for risk prevention and preparedness and response in disaster and crisis situations. The **Swedish Government’s National Action Plan (NAP)** (2016-2020), aimed at implementing UN Security Council Resolution 1325 (2000) and its subsequent resolutions, on “Women, Peace and Security” ensures a gender perspective in all its activities, and focuses on interrelated aspects of environment, gender, safety and health and human rights, by addressing the root causes. Based on experience and broad commitment, a variety of projects have already been implemented. One example includes a process to strengthen women’s participation in conflict prevention and crisis management operations within the framework of the Organization for Security and Co-operation in Europe (OSCE)⁵⁴.

52 BMLRT 2017.

53 A collection of projects funded and initiated by different Austrian ministries, cities and municipalities, dealing with gender mainstreaming, is available online at www.imag-gmb.at/service/projekte.html, provided by the Austrian Federal Chancellery.

54 Government Offices of Sweden 2016.

Gender-sensitive approaches in DRR – practical examples

► **Key message 7:** *At policy level, the EU and its member states aim to promote gender equality and gender mainstreaming, yet there is still potential to improve implementation in DRR practice.*

This section presents a collection of activities and tools supporting a gender-responsive perspective in DRR and related issues in Europe. These involve:

- a special focus on disaster vulnerable groups,
- awareness-raising on gender equality,
- women's and girls' empowerment.

However, there are very few initiatives in the European DRR context which are clearly labelled as gender-sensitive approaches. Besides that, in compiling the examples, it was found that practical examples at local level are often only available in national languages (not translated into English). This collection, therefore, does not claim to be exhaustive. Bearing in mind the relevance of gender issues in DRR (before, during and after natural hazard events), the selected examples provide initial ideas and inspiration on how to integrate a gender dimension into future DRR projects and initiatives.

What makes the examples inspiring?

Table 1 shows the thematic issues derived from the selected examples that provide a framework to easily capture the highlights and recommendations within each approach. Each thematic topic is explained in more detail below and substantiated by results obtained through international research.

Table 1: Thematic topics to integrate gender in DRR

	1	<p>Data – The examples collect, process, analyse or store gender-disaggregated data. There is still a lack of gender-disaggregated data on the impact of natural disasters on diverse vulnerable groups and women’s participation in DRR.</p>
	2	<p>Access – The examples provide access to information (hazard and risk information, information on adaptation measures), by (En-)Gendered information & communication and information tailored to target groups.</p>
	3	<p>Increase women’s participation – The examples address women’s underrepresentation in decision-making institutions and emergency services.</p>
	4	<p>Gender Relations – The examples show how gender shapes unequally distributed power relations. These can increase inequalities between men and women.</p>
	5	<p>Exchange and Visibility – The examples show female professional networking groups and approaches to connecting and encouraging women, increasing the visibility of women in DRR and empowering women and girls.</p>
	6	<p>Integrate the gender dimension – Examples show the relevance of integrating a gender dimension in policies and programmes.</p>
	7	<p>Educate – The examples show approaches to develop tools to conduct education and training on gender and DRR topics.</p>

1) Data – Why is there a need for gender-disaggregated data?

The Beijing Agenda for Global Action on Gender-Sensitive Disaster Risk Reduction

calls for **disaster data to be disaggregated by gender**. Gender disaggregated data is essential for policymakers, researchers and practitioners to understand how gender differences affect mortality, impact, needs, roles and capacities, to develop recovery strategies and to build back better after disasters. Research shows that, in terms of flood-related deaths in Europe and the USA, men account for 70% of deaths⁵⁵. Comparing the flood fatalities from Portugal and Greece over time, men are more vulnerable than women in both countries due to cultural reasons and risk behaviours⁵⁶. In contrast, in other regions, women are more likely to die⁵⁷.

A more solid database is needed to provide a more nuanced picture, and conduct gender impact assessments, communicate the outcomes to the general public through facts and figures, and thereby monitor gender mainstreaming and gender equality. Collecting data also includes the need to collect **data on the roles, needs and strength of women in disaster risk management** and ensuing consequences, such as gender-related health risk or gender-based violence (in unsafe humanitarian settings). However, in the aftermath of disasters or crisis situations, a standardized system of collecting gender-disaggregated data is still not well established. The focus lies mainly on the collection of data on total numbers of victims, damages, and monetary losses.

► **Key message 8:** *There is a need for a standardized system of collecting gender-disaggregated data in order to identify challenges, inequalities and disproportional consequences related to natural hazards.*

55 Doocy et al. 2013.

56 Pereira et al. 2017.

57 Chineka et al. 2019.

2) Access – How to provide equal access to risk information?

Risk communication plays an essential role in all segments of risk governance. It enhances the **public's knowledge about risks** and influences the willingness to take precautionary measures and thereby **increase the resilience** of individuals and communities.

There are different ways to integrate a gender dimension in risk communication and information activities:

- **Engendering information** means attempting to provide all groups of society equal access to risk information, making them more aware of risks and managing disaster risks at local level. The EU Floods Directive⁵⁸ addressed this issue in the EU context. In accordance with the Directive, all member states were obliged to prepare preliminary flood risk assessments (PFRAs) and flood hazard and risk maps (FHRMs) before 2013. This Directive strengthens the right of the **public to access** this information and the right to participate in planning processes. Therefore, all critical geodata should be available online to the public, free of charge.
- **Target group oriented approaches** address particular groups defined by gender, age, ethnicity or cultural factors to support their needs and capacities. This supports the idea that **people perceive information differently and take action on different issues**.

Children are primarily users of external help during an evacuation, but can also play an essential role during recovery by bringing together community networks (e.g. through friendship networks, leisure or schooling) and, with special support and training, can act as multipliers for the dissemination of risk information.⁵⁹

The **Elderly** often rely on others for help during disasters, especially during evacuations. Reduced mobility or impaired vision and hearing can restrict their ability to escape from and cope with potential harm, such as floods or prolonged warm spells or heat waves. Age may contribute to enhanced risk experience and coping knowledge, but can also lead to underestimation of risks, especially if past events, such as flooding, were less severe.

⁵⁸ European Commission 2007.

⁵⁹ For a toolkit to support child-centred DRR see Plan International 2010

Overall, **marginalized groups, including people with mental or physical disabilities, homeless people or refugees**, are more likely to suffer disproportionately from disasters, as they are usually less visible during the aftermath of a disaster. According to the SFDRR, disability-inclusive DRR should ensure the inclusion of persons with mental or intellectual disabilities, as they likely need additional support during crisis situations. Hence, it is of great importance to target emergency personnel and caregivers in DRR.

► **Key message 9:** *Access to DRR data should be ensured for all marginalized or vulnerable groups, taking into consideration their special needs and specificities (language, level of education, access to technology, physical challenges).*

3) Increase WOMEN'S participation

"Women are often the drivers, strong networkers, managers, organizers, caretakers in the community. However, when you talk about disasters at the highest level, the ones who are talking – and making the decisions – tend to be men."⁶⁰

According to UNESCO, only 35% of women are represented in science, technology, engineering and mathematics (STEM) students in higher education globally⁶¹. **In the EU, women remain underrepresented in decision-making positions in the areas of politics, economics and society⁶².** Likewise, women are also often underrepresented in DRR decision-making institutions, emergency services and the engineering professions. Local (voluntary) fire brigades, for instance, play a key role in the European DRR (fire and flood management) and they are still male-dominated, due to cultural and traditional backgrounds. There are ongoing efforts to increase women's participation in search and rescue, e.g. the Women in SAR initiative to empower women in maritime search and rescue⁶³. A gender balance of teams of experts can widen perspectives and subsequently include more knowledge in support of DRR. Women's local knowledge of social networks and

60 UN Special Representative of the Secretary-General for Disaster Risk Reduction, Margareta Wahlstrom in 2015.

61 UNESCO 2017.

62 European Institute for Gender Equality 2020.

63 International Maritime Rescue Federation.

community resources, for instance, can contribute to more resilient communities; nonetheless, they are usually not in decision-making positions⁶⁴.

► **Key message 10:** *There is a need to strengthen and promote women's participation in decision-making related to DRR.*

4) Gender relations

Gendered power relations deeply rooted in society mirror increase inequalities between men and women. In most societies, a gender-specific division of labour is apparent: women are responsible for parenting and domestic tasks such as cooking, cleaning, healthcare and hygiene, while men traditionally hold the “breadwinner’s” role “. In EU countries, it is also common for women to shoulder the household tasks as well as their paid employment (often informal jobs). This sort of division of labour means a double or triple burden. It is crucial, therefore, to address the root causes of unequal access to power, which can further influence resilience. The current COVID-19 pandemic and lockdown also impact social inequalities, and women will very likely suffer more than men from the health, economic and social consequences in the long term. It is essential to ensure the protection of women’s and girls’ human rights and counteract economic and social inequalities.

► **Key message 11:** *Gender relations must be investigated to understand the underlying causes of vulnerability to natural hazards.*

⁶⁴ Lewis 2016.

5) Exchange and visibility

“Women can play an important role in the DRR agenda, which is something that is often overlooked.”⁶⁵

DRR integrates knowledge and expertise developed within a variety of disciplines (e.g. geology, mountain risk engineering, environmental engineering, geography, landscape and spatial planning, sociology, psychology, rights) and needs practical implementation across all levels (local, regional, global) and sectors of society. This implies the need to understand different terminology and approaches, to develop a common understanding of approaches to risk, broadcast new findings and enable mechanisms for sharing of evidence between the scientific world, administration, policymakers and practitioners. Networks can be regarded as part of this exchange. The added value of networks can be summarized as:

- Offering new possibilities for individuals or groups,
- Enabling new ideas and projects to emerge,
- Assisting in daily life by opening up new possibilities of life phases and careers (e.g. addressing topics of work-life balance),
- Increase awareness about a specific topic.

As there is still a need to enhance the visibility of women and raise awareness on gender issues in the field of DRR, networks offer a way of increasing awareness of this topic.

► **Key message 12:** *The establishment of networks and communication among women working in DRR is a prerequisite to increasing the visibility of existing inequalities and challenges. Consequentially, it can help to eradicate inequalities.*

► **Key message 13:** *Share lessons learned and good practices from projects and initiatives with gender-responsive approaches – including examples within the context of climate change adaptation – which offer opportunities to exploit vital synergies.*

65 Ms. Paola Albrito, Head of UNISDR's Regional Office for Europe.

6) Integrate the gender dimension in policies

Integrating a gender dimension in national and local DRR policies and programmes is highly relevant. Sometimes, even seemingly gender-neutral approaches have gender-specific impacts that need to be considered. For example, the design of emergency shelters, including the extent to which they have women-only rooms, can, in some cultures, determine whether and how women use them. Similarly, disaster preparedness plans must consider whether and to what extent women have access to information in an accessible language and medium.

► **Key message 14:** *Awareness of experts, policymakers, media and the public about the link between gender and DRR should be enhanced and strengthened.*

7) Educate

“There is increasing evidence that students of all ages can actively study and participate in school safety measures, and also work with teachers and other adults in the community towards minimizing risk before, during and after disaster events.”⁶⁶

Education and training can empower the most vulnerable groups by enhancing knowledge and skills about the local environment and how to reduce risks. In most European countries, there is a potential to increase awareness, knowledge and risk perception about natural hazards and DRR across all levels of the population. Education is central to building a society’s resilience to hazards and to developing capacities at individual and community level.

► **Key message 15:** *Educational and training programmes should be developed targeting women and other marginalized groups to empower them in different aspects of DRR (individual, professional or governance level).*

66 UNICEF 2011.

► **Key message 16:** *Encourage and support young women to study and pursue careers in disciplines related to DRR (e.g. natural sciences, engineering, emergency planning and practice, governance).*

Activities with a european and international dimension

Examples that operate on the European scale or are funded by EU funds

1. Women exchange for Disaster Risk Reduction – we4DRR – Europe

The Network “women exchange for Disaster Risk Reduction”⁶⁷ is a **European network for female experts engaged** in research, policy and practice in the field of DRR. It was initiated in March 2016, by the Austrian Ministry of Agriculture, Regions and Tourism (BMLRT) after national discussions addressing ways to improve the implementation of the Sendai Framework Agreement. The network activities are coordinated by the University of Natural Resources and Life Sciences (BOKU), Vienna.

The Network aims to:

- raise awareness about the different impact of natural disasters on women and men
- widen perspectives of managing natural hazards by diversifying expert teams

The gendered nature of natural disasters is addressed by the Network from two aspects: raising **awareness of gender-based vulnerabilities related to DRR** and **promoting the visibility of women DRR experts**. The we4DRR Network also plays an important role in facilitating the transnational exchange of knowledge and experience between women experts in science, policy and practice. The exchange between different age groups and disciplines is very inspiring, especially for younger women professionals. The we4DRR provides a forum

⁶⁷ we4DRR.net

for established women disaster experts to transfer their experience and knowledge of how to deal with discrimination in the workplace, how to achieve a work-life balance, and how to cope in a male-dominated work environment. Through different engagement opportunities, women professionals who are at the beginning of their career have connected to 'role models' who are ready to provide advice on a needs-basis.

Currently, the Network has **112 members from various European countries**, mainly from German-speaking Alpine countries, including Austria, Switzerland and Germany, but also from Italy, Serbia, France, Estonia, Netherlands, Greece and Belgium. The experts have set up a knowledge library, providing regular contributions in the areas of the natural and social sciences, DRR practice and policies.

Exchange and communication are fostered through:

- Annual meetings of the "General Assembly" (Figure 1), aimed at empowering women experts by building their capacities through workshops and presentations delivered by eminent women experts, tailored to address topical issues related to DRR and provide a forum for discussion on enhancing gender-sensitive DRM among women professionals
- Quarterly newsletters addressing ways to enhance community resilience by engendering DRM
- Presentations at international gatherings including the General Assembly 2020 of the European Geosciences Union (EGU), Global Mountain Safeguard Research, International Conference on Building Resilience, Security and Gender in Emergency Situations
- Organizing a lecture series for graduate students and DRR experts at BOKU, Vienna, including presentations from established international experts:
- Expanding a database related to gender and DRR in the European context and further developing awareness-raising material
- Populating the we4DRR website and disseminating information through social media



Figure 1: General Assembly, we4DRR

Why is this a good practice example?



Strengthens community resilience by addressing gender-based vulnerabilities and advocates for the engagement of women and girls in DRR.



Increases the visibility of female experts, connects natural hazard and DRR experts across Europe.



Triggered by policy discussion to implement Sendai Framework for Disaster Risk Reduction.

2. Increasing the visibility of women in DRR – OnSTAGE exhibition concept

The OnSTAGE exhibition was developed by graduate students within the course “Gender and Diversity Aspects in Planning and Professional Practice”. The students developed poster presentations of women experts, engaged in, or affiliated to diverse areas of disaster risk management, showing their career development and work/life balance. The goal of the exhibition was to increase the visibility of women experts in a male-dominated profession. The course is part of the master’s degree programme, Landscape Planning and Landscape Architecture, at the University of Natural Resources and Life Sciences, Vienna. The “OnSTAGE”⁶⁸ concept was launched in Hannover in 2010, continued in Valencia in 2011 and held four times in Vienna.

Each exhibition focused on a different issue⁶⁹:

- 2014 – a presentation of accomplished women architects, landscape architects and planners, geographers and spatial planners (held at BOKU /TU, Vienna)
- 2016 – **presented a historical overview of women in natural hazard management**, organized by the we4DRR Network and BOKU (at the Women’s Museum, Hittisau, Vorarlberg)

68 Zibell et al. 2016.

69 More information rali.boku.ac.at/onstage.html.

- 2018 – presented women experts engaged in forestry (BOKU, Vienna)
- 2020 – showcased women professionals who have been affiliated with BOKU in recent years, held to mark the 100th anniversary of women’s studies at the University of Natural Resources and Applied Life Sciences, Vienna (BOKU, Vienna).

The 2020 exhibition was also a kick-off event for the research project **“Women’s Mentoring in Forestry”**, aimed at fostering women’s professional engagement in forestry. The project is implemented through the co-operation of the Institute of Landscape Planning (BOKU, Vienna) and the Federal Research Centre for Forests (BFW), with financial support from the Federal Ministry of Agriculture, Regions and Tourism (BMLRT) and BOKU. The mentoring programme aims to address informal and mandatory procedures applied in the forestry sector, link women professionals to existing networks and provide practical advice to achieve the highest professional standards.

Students were assigned projects to interview experts related to their professional work as well as their, not always straightforward, career paths, as well as personal life stories. By doing so, the students had the opportunity of gaining an understanding of how to develop professionally and reconcile career and family life. The interviews provide an insight into day-to-day work, composed of different types of occupations including wage work, housework, care work etc., and which are not always distributed equally among men and women (Figure 2).

Furthermore, the students were responsible for developing and organizing the exhibition, from the concept and design to the set-up. The findings of the interviews were presented on posters displayed in the premises of the public library, accessible to a wide range of visitors, enabling spontaneous interest in the topic of gender (Figure 3).

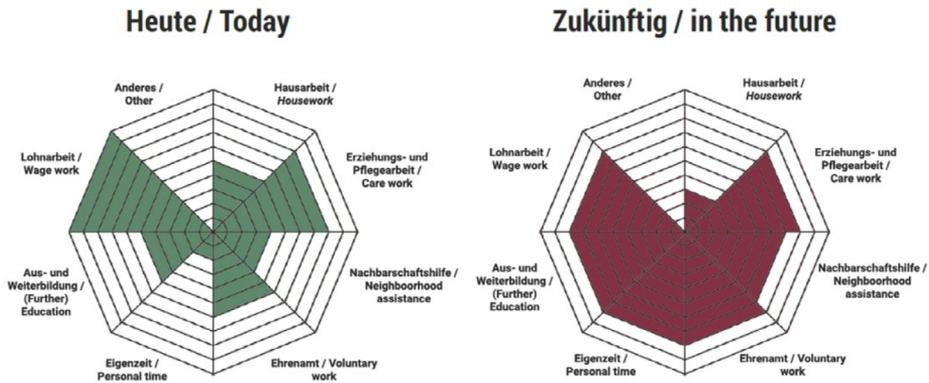


Figure 2: Example of average time-distribution charts – Today and desired future, © On-STAGE 2020



Figure 3: Exhibition “OnSTAGE” 2020 © BOKU, Vienna

Why is this a good practice example?



Increases the visibility of women experts in DRR.



Students developed the exhibition as part of a graduate course, which contributed to advancing their skills and knowledge about gender-sensitive DRR.

3. Supporting people with mental disabilities in emergencies and disasters – a Trainer Handbook

A **Training Handbook to support people with mental disabilities in emergencies and disasters** (including medical emergencies, natural and human-made disasters) was developed, based on a study conducted by the University of Innsbruck, Austria in 2017. The publication targeted **first responders, social workers and mental health professionals**. The Handbook was one of several outcomes of the EUNAD IP project (European Network for Psychosocial Crisis Management - Assisting Disabled in Case of Disaster)⁷⁰. The project, funded by the Directorate-General for European Humanitarian Aid and Civil Protection (DG ECHO) and co-financed by the European Commission, was intended to develop and implement concepts of psychosocial crisis management for disabilities including hearing impairments, visual impairments, intellectual disabilities, dementia and autistic spectrum disorder and physical impairments. The motivation for this project derived from perceived gaps in knowledge among organizations and professionals working in disaster preparedness and response about specific reactions, needs and demands of mentally disabled people in disaster situations. The underlying topic of research addressed the following question: **How do people with mental disabilities experience disasters/emergencies** and what challenges do persons with dementia and the elderly face in emergency situations and disasters.

⁷⁰ Eunad Project: <http://eunad-info.eu/home.html>, last accessed on 03-12-2020.

The project outcomes included general and policy recommendations, networking and strategic planning. The results show that the most important activities in the prevention phase include awareness-raising and training, whereas a speedy return to “normal” and additional care are key in the recovery phase. Further results of the project included **instructions for a role play and tabletop exercise** supplemented by 18 case examples, a **guide for evacuation exercises and drills**, and a framework for developing emergency plans and checklists in facilities for persons with mental disabilities. The manual is of high value because it focuses on specific target groups and their needs and vulnerabilities, bringing together the expertise of two occupational groups: caregivers as experts in assisting people with mental disabilities, and emergency personnel - experts in emergency preparedness and response.

Why is this a good practice example?



Evidence-based data was collected about vulnerabilities of people with disabilities and the elderly during disasters.



Recommendations were developed for practitioners and preparedness and response measures.



Instructions for evacuation exercises and role plays (communication tools) were developed to prepare for the needs of vulnerable target groups during disasters.

4. Enhancing disaster management and preparedness for the elderly population in the EU –PrepAGE Project

The PrepAGE project (2014 - 2016) focused on the **needs of vulnerable groups among the elderly** (including those with reduced mobility or care needs) **during disasters**. The project addressed ways in which the elderly can be a **resource to support each other and all age groups** throughout the phases of the disaster management cycle. The project outcome was conveyed to geriatric health and social care workers, organizations responsible for disaster relief, disaster preparedness and policymakers. PrepAGE was co-financed by the EU's Civil Protection Financial Instrument and implemented in co-operation with the Red Cross Societies in Austria, Bulgaria, Croatia, Latvia and the UK, and the University of Innsbruck. According to the study, the challenges and needs of the elderly population during disasters can be grouped as follows:

- Invisibility of elderly persons, discrimination and lack of protection, lack of financial support,
- Need for additional health resources and support, adequate facilities and accessible distribution points, tailored nutritional regimes,
- Higher risk of stress during emergencies and difficulties of evacuation,
- Lack of adequate warning systems for the elderly,
- Low level of preparedness among older adults and agencies caring for the ageing population.

These challenges are related to vulnerabilities linked to the elderly, their low social status and a generally low level of DRR preparedness among organizations caring for them. To identify those needs and raise awareness, five community training sessions were held in the partner countries during the project. The **resulting Guide** summarizes the lessons of the training sessions and provides **practical knowledge and recommendations** for organizations on conducting such training themselves.

Why is this a good practice example?



Communication tailored to meet the needs of the specific target groups of the elderly.



Existing gender relations showed that senior groups were not sufficiently visible throughout the emergency cycle.



A guide was developed to support organizations caring for elderly persons during disasters.

5. Awakening young women's interest in the natural sciences - Girls on Ice Austria

Girls on Ice Austria⁷¹ is an expedition in which young women between the ages of 15 and 17 are provided with an opportunity to explore the Alpine glaciers of Tyrol, under the supervision of earth scientists, artists and mountain guides. The aim is to trigger curiosity and interest among young women in the natural sciences, discover the nexus between art and science, break traditional gender roles and strengthen their confidence in their physical abilities in a relaxed environment. Through various activities, participants increase their knowledge about glaciers, alpine landscapes, weather, climate and climate change during the week-long camp among the glaciers.

The activity was developed based on the US initiative "Inspiring Girls Expeditions", which seeks to:

- Increase the participation and diversity of women in field sciences, art and outdoor recreation, encourage attitudes which foster supportive and inclusive science and outdoor communities.
- Foster young women's self-confidence in their physical, intellectual, and leadership abilities, while creating lifelong advocates for earth science and wilderness stewardship.

⁷¹ <https://www.inspiringgirls.org>.

- Support a network for current early-career scientists, artists, and guides through continuing development opportunities and collaboration.

The headquarters is at Oregon State University in Corvallis, Oregon, with branches in Alaska, Colorado, Canada, Switzerland and, recently, the EU, represented by Austria.

Why is this a good practice example?



Fosters engagement of young women in environmental sciences.



Supports cross-sectoral networking among young female experts.



Empowers future women experts to gain practical experience in challenging outdoor environments.

Activities with a transnational dimension

Examples that are carried out in more than one European country or funded by transnational funds

6. Searching for gender-disaggregated data in event documentation – EXTEND – Austria

The EXTEND project⁷² contains a review of the current standardized methods of post-event analysis related to extreme precipitation events in Austria, and the responsible authorities including local authorities, insurance companies, infrastructure providers, research institutes and emergency services (fire brigade, Red Cross etc.). This review was expanded to the neighbouring German-speaking countries in the Alpine region (Switzerland, Germany and Italy), which made it possible to identify the main motivation behind every post-event analysis: monetary loss compensation, damage statistics, in-depth understanding of trends, processes or meteorology, knowledge for planning processes (hazard maps, mitigation measures) and detailed documentation for disaster relief operations.

According to the study, social aspects including age, gender, income or social networks of the affected society that can reduce the consequences of natural hazards, and gender-disaggregated data are very rarely collected. Based on international good practice examples, the importance and added value of understanding the interplay between these aspects were highlighted within the project. One of the outcomes of the project included the development of a template to improve post-flooding event documentation and to track social challenges during emergencies (Figure 4). The project aimed to contribute to

⁷² Wernhart et al. 2018.

a better understanding of community reactions and responses to natural processes. Activities were carried out by an interdisciplinary project team from the University of Natural Resources and Life Sciences, Vienna and funded within the StartClim2017 programme, the Federal Ministry of Agriculture Regions and Tourism (BMLRT), the Austrian Federal Ministry of Education, Science and Research (BMBWF) and federal state of Upper Austria.

Schematic survey sheet "people" - EXTEND project			
	Level	Topic	Factors
Attention, this data is subject to data protection	Level 1	Minimal information	Gender
			Age
			Income
			Special needs population
	Level 2	Information about aspects on social vulnerability	Demographic aspects
			Socio-demographic status
			Property rights and ownership structure
			Risk perception
			Coping capacities
			Health-related issues
	Level 3	Psychosomatic issues	Emotional aspects after the event
			Psychosomatic issues
			Return to normality, response capacity
Adaptive capacity			

Figure 4: The proposed schematic survey sheet © Wernhart et al. 2018.

Why is this a good practice example?



A standardized template including gender-disaggregated data was developed for post-event analysis.



The relevance of integrating social aspects in post-event analysis and an understanding of the added value was communicated to experts in the field.

7. Developing new and innovative tools for risk communication RiKoST – Italy, Austria

The Interreg Italy-Austria Project “RiKoST – Risk communication strategies”⁷³ aims at **improving risk communication strategies and developing new and innovative tools for risk communication**. The project involves three partners: the Civil Protection Agency of the Autonomous Province of Bolzano (Italy), Eurac Research (Italy) and the local government of Carinthia (Austria). The underlying idea of the project is that risk communication must be tailored to the needs of specific target groups, e.g. different age groups, to be effective and to support risk communication. These groups often have different risk perceptions and use various information sources. The project is being implemented in selected pilot municipalities in South Tyrol (Italy) and Carinthia (Austria).

Within the selected pilot municipalities, a survey was conducted to determine knowledge about natural hazards, communication habits (information channels used, trusted information sources), and communication needs of the different age groups.

⁷³ Information on the project: <https://afbs.provinz.bz.it/>.

Feedback obtained from young respondents in South Tyrol (18-29 years) is summarized below:

- More young respondents indicated that they do not know about the existence of the natural hazard map (43%), compared to the average among other age groups (27%)
- Young respondents more often answered that they do not know if any further protection measures were needed in their municipality
- Young respondents more often obtained information from the Internet
- Young respondents, as well as senior citizens (+70 years), referred to relatives and friends as sources of information related to natural hazards
- Young respondents consider appropriate training of the population, families and schools to be an important step towards dealing with risk situations

Based on these results, **actions were developed specifically for youth** and implemented in schools (Figure 5). During the activities, students were handed out a print of the natural hazard map of their municipality and the different natural hazards and risk-related concepts were explained. The students could also locate their house on the map, determine if it was located in a hazard zone and ask questions on how they and their families could prepare for a natural hazard. A highlight of the exercise, which was received with enthusiasm, was **3D glasses with which they could watch a virtual reality video simulating possible impacts of natural hazard events.**



Figure 5: School activities in South Tyrol. All photos © Eurac Research, Bolzano, Italy.



The research project received funding from Interreg Italy-Austria – European Regional Development Fund, under Grant Agreement ITAT3015, RiKoST – Risk Communication Strategies.

Why is this a good practice example?



Communication strategies were developed to meet the needs of youth groups between 18-29 years.



Training courses, especially for the youth, were developed, with awareness about natural hazards and DRR was enhanced through interactive tools.

8. Communicating with youth to increase risk awareness at local level – a role play and tabletop exercise - Austria

Within the European strategy for the Alpine Region (EUSALP), Action Group 8 aims to improve risk management in the context of climate change. Among diverse activities, a **role play and tabletop exercise** for young people (Figure 6) was developed in co-operation between the Austrian Torrent and Avalanche Control and Protection (WLV) and a communications consulting agency specializing in crisis management (Clavis)⁷⁴. The initiative was part of the communication activities of the WLV, a department of the Austrian Federal Ministry of Agriculture, Regions and Tourism (BMLRT). The main idea of this ongoing initiative is to increase risk awareness of natural hazards and DRR at local level.



Figure 6: Roleplay and tabletop exercise © Clavis

⁷⁴ More information: <https://www.alpine-region.eu>; <https://clavis.at>; <https://www.bmlrt.gv.at>; last accessed on 03-12-2020.

The roleplay “natural hazard management” was designed for **students aged between 14-19 years** in Austria. The activity took place in several locations, including in Tirol, which assembled 42 students, enrolled in the Technical School for Construction and Design, including natural hazard experts (men and women) and professional crisis communication moderators. Introductory presentations by experts on natural hazards provided insights into the local natural hazard situation, responsible authorities, effective policies and financing opportunities. The students were given a task to develop and agree on measures addressing natural hazards through small group discussions. Experts acted as observers, providing technical information, without intervening in the selection of DRR measures. The teams presented their joint actions to a broader audience, followed by a feedback session involving experts and local authorities. Overall, the students came up with very technical approaches, which is why the goal of the future workshops will be to offer more examples of integrated natural hazard management.

There was a high level of engagement among the students, especially among the upper grades. Group work that included different ages opened up new opportunities for fruitful discussion. There was keen interest in this topic, particularly among technical school (HTL) students, because they are familiar with the technical aspects of mountain risk engineering and DRR. The initiatives were communicated to other students and regional media representatives.

Why is this a good practice example?



Enhances practical knowledge of technical school students about DRR through desktop exercises.



Developed training courses, especially for the youth, for awareness-raising of the characteristics of natural hazards and DRR.

Activities with a national dimension

Examples that are implemented or funded by national funds

9. Raising awareness and enhancing the visibility of women in research and technology in Austria

With the initiative FEMtech, the Austrian Federal Ministry for Climate Action, Environment, Energy, Mobility, Innovation and Technology (BMK) **supports women engaged in research and technology and promotes equal opportunities** in industrial and non-degree research at universities of applied sciences. The underlining idea is to support women in the field of innovation and technology, and create an enabling environment in industrial and non-faculty research conducive to the **needs of both women and men**. By increasing the contribution of women and improving their professional position in these facilities, FEMtech strives to unleash women's innovative potential by creating more equal opportunities for women and men in society as a whole.

To reach this goal, ongoing activities include a database of women experts, an online presentation of a woman expert every month (interview, pictures, video), regular networking meetings and knowledge transfer⁷⁵.

⁷⁵ Femtech.at. BMK - Federal Ministry Republic of Austria, Climate Action, Environment, Energy, Mobility, Innovation and Technology 2020.

Why is this a good practice example?



Aims to increase women's and girls' participation in research and innovation.



Enhances the public discourse on social roles and power relations.



Increases the visibility of female experts and provides a platform to connect.



Attempts to promote gender-sensitive policy implementation.



Figure 7: Woman surveyor in the Austrian Alps

10. Implementing gender mainstreaming in the German Environment Agency – Germany

The final report of the German Environment Agency's (UBA) internal project "Gender relation and sustainability"⁷⁶ sets out the challenges, as well as a number of **key drivers, in successfully implementing gender mainstreaming**. It states that:

- In order to establish new approaches in an organization, it is helpful if some persons already identify with the topic and can act as opinion leaders.
- The management should actively support the implementation of gender mainstreaming
- The implementation of gender mainstreaming is not possible without a collective effort and changes in current procedures.
- There are always good opportunities for implementing gender mainstreaming, such as those linked to imminent restructuring, including the adoption of new programmes, reorganization within a company, etc.
- Good examples of how integrating a gender perspective can have an added value for other sectors are particularly beneficial. However, such evidence is not always easy to provide.

⁷⁶ Umweltbundesamt 2017.

Furthermore, the “nordwest2050” project of the UBA is an example where gender mainstreaming was integrated into a practice-oriented research project as an innovative element. It aimed to increase the ability of the Bremen-Oldenburg region in Germany to deal with climate change and implement measures in regional planning and development processes. In co-operation with the regional stakeholders, a “**roadmap of change**” regarding climate-adapted innovations in key economic sectors of the North West region of Germany was developed, tested and documented. Moreover, a gender analysis of employment effects was conducted, and recommendations on gender equality were developed as a “Sectoral Roadmap of Gender Equality”. However, the researchers describe the process itself – both within the research network and in discussions with external actors – as difficult. The importance of the cross-cutting dimension of gender justice had to be defended again and again. A positive outcome observed by the project team was increased attention paid to gender mainstreaming, through this discussion process⁷⁷.

Why is this a good practice example?



Presents a gender analysis of the employment situation of an area.



Identifies key drivers to successfully implement gender mainstreaming.

⁷⁷ Metropolregion Bremen-Oldenburg im Nordwesten e.V. und Sustainability Center Bremen 2016.

11. Supporting work-life balance and addressing women's underrepresentation in the ICT labour market – Poland

Another European example includes the “Girls as Engineers and Girls Go Science” initiative, implemented in Poland, aimed at attracting more women to the Information, Communication and Technology (ICT) sector. The project, which has been ongoing since 2001, is underpinned by the strong need to engage more specialists in this fast-growing and economically important sector. This initiative aims to **introduce technical and engineering studies to high-school female students** by organizing mentoring programmes, tech camps or voluntary campaigns, and by promoting the potential long-term benefits of a career in any one of the ICT professions. Due to the widespread use of digital technology in managing natural hazards, stronger involvement of women will contribute to engendering DRR.

Actions that have been introduced to **reconcile work and family life** include e.g. flexible working hours or teleworking, financial support for childcare and the possibility to take the children to the office, support for summer camps for kids, and health packages that optionally insure family members. The initiatives are managed under the auspices of the Ministries of Science and Higher Education, National Education, Administration and Digitization, and Labour and Social Policy; the Government Plenipotentiary for Equal Treatment, the Patent Of-

fice and the Ombudsman. In recent years, similar initiatives were introduced across the EU⁷⁸.

Why is this a good practice example?



Empowers women and girls for the ICT sector.



Education on gender mainstreaming is strengthened through training for young women.

⁷⁸ European Institute for Gender Equality 2020.

12. Honouring women in civil protection – Greece



On the occasion of International Women’s Day, the Executive Committee of the Greek Firefighters organized an event in March 2018, in Amarousion municipality, Athens, Greece, to **honour women working in the field of civil protection**⁷⁹. The event included presentations and speeches on a variety of topics including the **vulnerability of women to natural hazards, women in the fire brigade and women as rescuers**. Women firefighters were honoured with awards.

On this occasion, an insightful presentation was developed showing gender-specific statistics (see Figure 8). The statistical data suggest that women comprise 4.9% of the core personnel in the fire brigade and female firefighters occupy only 13.4% of the leading positions. At least 75% of them are mothers, and 36.4% of them have a university degree. The event was supported by the municipality of Amarousion, Athens, Greece and contributed significantly to the visibility of female firefighters and employees in the field of civil protection.

Why is this a good practice example?



Aims to increase women’s and girls’ participation.



Gender relations became visible.



Increased the visibility of women in DRR.

⁷⁹ http://www.epayps.gr/2018/03/blog-post_4.html, last accessed on 03-12-2020.

13. Integrating a gender perspective in climate change – Germany

The GenderNETCLIM project sought to disseminate further knowledge about the significance of **gender dimensions for climate mitigation and climate change adaptation**, and thus contribute to establishing gender-equality approaches and concepts. The **resulting Handbook on Equal Opportunities in Climate Change**⁸⁰ provides entry points linking climate change and gender. The Handbook presents 12 key messages (also available in English) on equal opportunities in climate change, based on discussions held during several workshops and a Conference “Climate needs change: Fostering the potential of gender research”. The event assembled experts in the area of climate change and gender equality, and took place in 2016 in Berlin, Germany⁸¹. The second part of the Handbook shows the link between gender aspects and climate issues in the fields of energy, construction, spatial planning, nutrition, mobility, and health. First, the relevant aspects, policy implementations and interdependencies between each field and climate change adaptation and gender aspects are explained. Next, guiding questions and good practice examples provide suggestions for gender-sensitive planning and implementation of measures. Proposed guiding questions are, for example:

- Are gender experts involved on a regular basis?
- Which target groups are reached by the planned measures? What knowledge is available about their motives, information needs and possibilities for action?

80 Available only in German, Weller et al. 2016.

81 University of Bremen 2016.

Why is this a good practice example?



A handbook that provides entry points linking climate change and gender in diverse projects was developed.



The relevance of the gender dimensions for climate mitigation and climate change adaptation was highlighted.

The third part of the Handbook is focused on the cross-cutting issues of communication, work and participation. The publication concludes with a chapter about the need for research, and recommendations for political and practical implementation. The **Handbook can be used when developing projects in order to ensure a gender-sensitive approach**. It was funded by the German Federal Ministry for Education and Research and carried out by the Artec Sustainability Research Center University, Bremen in co-operation with the Gendercc – Women for Climate Justice network⁸².

82  www.gendercc.net.

14. Collecting data in flood-affected areas on gender-specific differences related to risk, rescue and return – Serbia

The **OSCE Mission to Serbia supported the Aarhus Centres Network** in conducting a pilot study assessing information **collected through in-person interviews to evaluate the impact of floods from a gender perspective**⁸³. In May 2014, Serbia was hit by a catastrophic flood event in which 51 people lost their lives, 32 000 people were evacuated and enormous damage occurred. The goal of the research was to identify and document gender-specific differences in all phases of the disaster. According to the study, communities were unprepared to respond to the state of emergency and sudden evacuation. However, **men** who served in the army had an advantage over women, because **they had previous knowledge and training in emergencies, rescue and evacuation**. Men were also at an advantage because they **owned boats**, and were **more engaged in flood protection and rescue activities** and had **more access to information**. Conversely, women were mainly alone or with children at the time of the floods, without previous training or skills regarding emergencies. Most were evacuated by rescue teams or neighbours and were more active in helping flood victims housed in reception centres. As reported by the study, the most **vulnerable groups** during the floods were the **elderly, people with disabilities, single mothers and women who lived alone**.

83 Bačanović 2015.

The pilot study also found that gender-disaggregated data relating to women's participation in emergency management and distribution of assistance during return and reconstruction phase was lacking. The findings were substantiated by a more extensive study that included 2500 interviews conducted among affected residents and female volunteers⁸⁴.

The findings of this research were aimed at **increasing gender-sensitive policies** developed by the Emergency Management Sector. It has also been observed that women are active participants in humanitarian activities after natural disasters and can be a valuable source of information about the needs of the affected communities. In addition, it is even more important that **the media recognise women as active participants** rather than victims in emergency situations. To **strengthen the skills of journalists in reporting during emergencies**, the OSCE Mission to Serbia, in co-operation with the Commissioner for Equality, supported the development of a **Booklet** for media reporting on natural hazards⁸⁵.

Why is this a good practice example?



Disaggregated data was collected to document gender-related differences related to floods.



Gender roles before, during and after a natural disaster became visible.



The findings triggered policy changes in other sectors responsible for emergency management.



A tool for improving gender-sensitive media reporting was developed.

84 Cvetković et al. 2018

85 Janković et al. 2017.

Activities with a local / regional dimension

Examples that focus on the regional / local level

15. Collecting data on the impact of the 2007 wildfires on women – Greece

High school students from Pyrgos, Iliia, Greece, carried out a study to determine the impact on women of the wildfires that broke out in 2007. In August 2007⁸⁶, due to drought, high temperatures and possibly arson, forest fires broke out in Iliia, a prefecture in the Peloponnese. There were 49 human casualties. Damage was recorded in an area spreading across 243,718 acres of olive groves (4.2 million olive trees) and 21,049 acres of vineyards. In addition to other crops, more than 30,000 animals were destroyed. Concerning environmental degradation, 2,230,399 hectares became susceptible to erosion, and 22.3% of the natural protected areas have been burned.

According to the study, **the experience of the disaster and recovery from the event differed between women and men**. At first sight, the **wildfires directly affected the incomes and the employment rates** of the affected population. However, unemployment was higher for women (27.6%) than for men (19.5%). Moreover, a large percentage of women were **permanently displaced** from the affected areas and left without job opportunities. For the affected residents of younger age, the likelihood of **creating new families was slim**. Wedding rates fell, the population shrank, and the trend will most likely continue if no incentives are given to residents to stay in the area. As the cultivation of olives declined, the demand for olive pickers, mostly women engaged in the winter, dropped sharply. The same happened with beekeeping and resin collection. Additionally, due to the reduction in animal herds, women stopped

86 <https://iliafire2gel.wordpress.com/>, last accessed on 03-12-2020.

working in small milk processing and cheese production plants, thus **losing a significant part of their income**. Women who continued to engage in agriculture and animal husbandry were observed to have an even more multifaceted role, as their participation in the difficult and **heavy work in the field doubled, resulting in higher accident rates**.

Why is this a good practice example?



Gender-disaggregated data was collected related to the impact of wild fires on women.



Gender roles point to the fact that women more often depend on seasonal agricultural work and thus suffer more due to the destruction of natural resources.

16. Assessing gender-relevant aspects in strategies and policies – GIACLIM – Austria

The research project GIACLIM⁸⁷ focused on a case study of a 2012 debris flow in St. Lorenzen in Paltental, part of the municipality of Trieben in Styria, Austria. This case study was used to test methods, instruments and approaches that can be used in a gender impact assessment at local and small-scale regional level in Austria.

The research evaluated how the social context, including gender, age and socio-economic status influence individual behaviour to cope with natural hazards. Based on expert interviews, interviews with residents, as well as a collection of spatial characteristics of housing types and land-use planning, the study shows different ways in which women and men, young and old, cope with the events during different phases of risk management. Results show that:

- Prior experience with natural hazards is closely linked to previous employments and volunteering in the emergency sector. It is more likely that men will benefit from this experience and consequently better respond to information which is more easily and informally communicated through these channels.
- Women are more likely to be prepared for evacuation before the event and possible future events.

87 Damyanovic et al.; Weber 2015.

- A “stereotypical” division of labour was recognised by the residents, where men are more to be responsible for physical work, and women do the care work and subsistence work.
- The elderly – in comparison to young families – had less problems investing in reconstruction work, as they could draw on savings.

The results highlight that a gender-sensitive approach leads to a more differentiated and detailed knowledge about risk perception, coping capacities and vulnerability.

Why is this a good practice example?



Gender-disaggregated data and social consequences triggered by a hazard event were collected.



Gendered relations and capacities during natural hazards were documented.

Conclusion and the way forward

Prevailing EU policies claim to include gender-sensitive approaches to DRR. Despite these efforts, the topic has not yet been comprehensively translated into national documents and practice. Although considerable progress has been made in acknowledging the need to foster a gender perspective in disaster risk management, examples compiled in this publication show that further efforts are required at all levels (local, regional, national), throughout the EU.

The collection and exchange of innovative approaches that strengthen community resilience through gender-responsive DRR offers ways forward and raises awareness of this issue among practitioners, researchers, and policymakers.

To ensure a long-term proactive DRR approach that can adapt to climate change-related impacts, a profound understanding of inequalities in society is needed. Integrating gender-sensitive decision-making, participation and disaster risk reduction at national, regional and local levels, is an essential step to move forward towards a sustainable future.

This publication offers a list of ways forward to include gender in DRR (Table 2, not exhaustive):

Table 2: Summary of key topics and key messages

Key topics	Key messages	Examples
Data	<ul style="list-style-type: none">• There is a need for a standardized system of collecting gender-disaggregated data in order to reveal challenges, inequalities and disproportional consequences related to natural hazards.	6 15
Access	<ul style="list-style-type: none">• Access to DRR data should be ensured for all marginalized or vulnerable groups taking into consideration their special needs and particularities (language, level of education, access to technology, physical challenges).	3 7
Increase women's participation	<ul style="list-style-type: none">• DRR strategies should support an all-of-society approach, enable and promote gender-balanced participation in decision-making and DRR activities.• There is a need to strengthen and promote women's participation in decision-making related to DRR.	11
Gender relations	<ul style="list-style-type: none">• Gender relations must be investigated to understand the underlying causes of vulnerability to natural hazards.	12 14 16
Exchange and visibility	<ul style="list-style-type: none">• The establishment of networks and communication among women working in DRR is a prerequisite to increasing the visibility of existing inequalities and challenges. Consequentially it can help to eradicate inequalities.• Share lessons learned and good practices from projects and initiatives with gender-responsive approaches – including examples in the context of climate change adaptation, which offer opportunities to exploit vital synergies for both fields.	1 2

Key topics	Key messages	Examples
Integrate the gender dimension	<ul style="list-style-type: none"> • Both the Sendai Framework and the Sustainable Development Goals strive to achieve Gender Equality and gender mainstreaming. Now is the time to put words into action. • A lack of gender-responsive DRR Policies and Programmes persists at national level in EU member states. • At the policy level, the EU and its member states aim to promote gender equality and gender mainstreaming, yet there is still potential to improve implementation in DRR practice. • To ensure gender equality and gender mainstreaming, EU member states should promote gender-responsive DRR strategies and programmes. • Gender matters throughout all phases of disaster management – before, during or after a disaster. Women, men, girls and boys are often disproportionately and unequally affected by disasters. There is a strong relationship between gender equality and community resilience to the impact of disasters. • Gender should encompass men, women, girls, boys and gender diverse people in a community. It is important to target all marginalized groups, including the disabled and the elderly. 	<p>9 10 13</p>

Key topics	Key messages	Examples
Educate	<ul style="list-style-type: none"> • Awareness of experts, policymakers, media and the public about the link between gender and DRR should be enhanced and strengthened. • Educational and training programmes should be developed targeting women and other marginalized groups with the aim of empowering them in different aspects of DRR (individual, professional or governance level). • Encourage and support young women to study and pursue careers in disciplines related to DRR (e.g. natural sciences, engineering, emergency planning and practice, governance). 	<p>4</p> <p>5</p> <p>8</p>

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