ARCH SotA Report 5

Mainstreaming gender in building cultural heritage resilience

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Table of contents

1. Introduction 7
  1.1. Background and aims of this report 7
  1.2. Relation to other state-of-the-art reports and ARCH deliverables 7
  1.3. Structure of this report 8
2. Methodology 8
3. Key concepts 9
  3.1. Unpacking gender 10
    3.1.1. Gender as a justice concern 10
    3.1.2. A framework for understanding justice 12
    3.1.3. Achieving gender equality in practice 13
4. Gender mainstreaming 13
  4.1. Gender in sustainable urban planning 14
    4.1.1. Gender differences in use of space 14
    4.1.2. Urban planning for an inclusive city 15
    4.1.3. Current obstacles and needs for further work 17
    4.1.4. Policies and solutions 18
  4.2. Gender and cultural heritage 19
    4.2.1. Background 19
    4.2.2. Whose heritage is it? 20
    4.2.3. Current obstacles and needs for further work 22
    4.2.4. Policies and solutions 23
  4.3. Gender in disaster risk management and climate adaptation 23
    4.3.1. Background 23
    4.3.2. Disaster preparedness 25
    4.3.3. Emergency response and post-disaster recovery 27
    4.3.4. Service provision 29
    4.3.5. Current obstacles and needs for further work 31
    4.3.6. Policies and solutions 31
5. Relevance of gender mainstreaming for the ARCH project 32
6. Conclusion 33
7. List of Abbreviations 36
8. List of Figures 37
9. List of Boxes 37

10. Glossary..38
11. References...42
1. Annex A – Key resources 1

Executive Summary

This state-of-the-art report investigates the relevance of gender issues for the research project ARCH, focusing on the resilience of historic areas to hazards, including climate-related hazards. This thematic area can be broken down into multiple intersecting fields, i.e. cultural heritage protection and use, disaster risk management and climate adaptation. The primary aim of this report is to provide the ARCH research team with a better understanding of the relevance of gender mainstreaming in general, and the specific gender issues relevant to their field of work.

Our discussion situates gender mainstreaming in the context of social justice, using the dimensions recognition, distribution and procedure as an analytical framework. We find that, although justice in general and gender mainstreaming in particular is considered within key high level frameworks that govern cultural heritage management, disaster risk management and climate adaptation, it has often not been explicitly defined or made operational. Further, gender blindness persists at an operational level. Our discussion points towards possible measures that may better support consideration of gender in research and practice, with respect to building cultural heritage resilience.

Gender Statement

This report has been developed with regard to the guidance provided in the ARCH Project Handbook (D1.2, Part 7) with respect to gender aspects in publications and research. It includes definitions of concepts relevant to gender mainstreaming, recommendations that are applicable to the ARCH research focus, and a list of suggested resources to support gender mainstreaming within approaches and methodologies relevant to the project focus. It is recommended that this document be reviewed by the entire research team, with a view to improving gender mainstreaming in all work packages.

1. Introduction

This state-of-the-art report has been prepared for the European Commission-funded research project ARCH: Advancing Resilience of historic areas against Climate-related and other Hazards. The ARCH project will develop decision support tools and methodologies with a view to improving the resilience of cultural heritage to hazards, including those resulting from a changing climate. The research team includes local government staff from the ‘pilot’ cities of Bratislava, Camerino, Hamburg, and Valencia, and will focus in particular on the needs and capacities of these locations, however results will also be extrapolated for use of other local governments elsewhere in Europe.

1.1. Background and aims of this report

This report investigates the relevance of gender issues for the research project ARCH, focusing on the resilience of historic areas to hazards. This thematic area (essentially the intersection of multiple fields: among them, cultural heritage management, disaster risk reduction and climate adaptation) is explored here in the context of governance at the municipal level, given that the project is specifically targeting action at this level, and that practitioners working within local government are members of the research team. The primary aim of this report is to provide the ARCH research team with a better understanding of the gender issues relevant to their field of work, with a view to refining their strategies and methodologies to better address these issues[1]. Within the fields of cultural heritage management, disaster risk reduction and climate adaptation, it is apparent that gender, and more broadly, a perspective that foregrounds issues of social justice, remains under-explored and lacking in mainstream acceptance. In light of this, a further aim of this report is to communicate to the research team the value of considering gender at all, and to introduce key terms from the literature on gender to an audience likely less familiar with them. On a related note, our discussion points towards possible measures that may better support consideration of gender in research and practice, as well as highlighting needs for further research, which it is hoped may also be of value to researchers and local government staff outside the ARCH research team.

1.2. Relation to other state-of-the-art reports and ARCH deliverables

This report is one of a series of six designed to provide the research team with a sound basis upon which to develop and refine their approaches, with the other five addressing:

- Historic areas, conservation practices and relevant regulations/policies
- Disaster risk management, emergency protocols and post-disaster response
- Building back better

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[1] Given that this is an applied research project (with an interest in uptake of research results in practice, as well as supporting team members working in local government to progress their own local policies, plans and strategies), the scope of this investigation similarly bridges research and practice. We consider the issues at hand not only in terms of how they are discussed in existing literature, but also in regard to how local government decision-makers and practitioners can better incorporate a gender-responsive perspective into their practical work.

- Decision support frameworks and technologies
- Existing standards and regulatory frameworks

Gender is a cross-cutting issue that cannot be isolated to a specific strand of research or project deliverable, meaning this report and its findings are of relevance to all research team members and their tasks. Every ARCH work package leader has already written a gender statement describing how they plan to address gender issues for their planned work overall, and will need to write one for every future deliverable to explain how gender issues have been addressed in practice. The overall gender statements have been prepared based on guidance included in the ARCH Project Handbook (D1.2). It is recommended that the overall gender statements be revisited after reading this report in order to incorporate additional relevant concepts and strategies.

1.3. Structure of this report

This introductory section (Chapter 1) is followed by an explanation of the methodology used in Chapter 2. Chapter 3 introduces key concepts underpinning gender issues in relation to the resilience of historic areas, including the central concept of gender mainstreaming. Chapter 4 explores gender mainstreaming with respect to the project's key thematic areas, broken down along the lines of urban planning, cultural heritage[2], and disaster risk management. For each of these sub-themes, shortcomings and obstacles in the field are identified, gaps in the literature noted where further work is needed, and possible solutions are put forward. Chapter 5 reflects on the value of gender mainstreaming for the ARCH project team. In conclusion, Chapter 6 summarises the key issues, their implications for building the resilience of historic areas (with respect to policy-making and research), and their significance for the ARCH project.

2. Methodology

The content of this report is based on an extensive literature review conducted over approximately two months. The literature review was guided by the following objectives:

- To identify and explore concepts and key definitions underpinning consideration of gender issues in general, such as gender equality, gender awareness and gender mainstreaming.

- To identify and explore key gender issues in connection with the ARCH project themes of cultural heritage management, disaster risk management and climate adaptation, including existing obstacles to gender mainstreaming in these fields, as well as possible solutions for researchers and local government practitioners.

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[2] Literature covering the specific topic of gender mainstreaming in conservation and regulation of historic areas was found to be limited, hence we explore this topic with reference to the broader – but nonetheless closely related – fields of urban planning and cultural heritage management, each of which has a significant body of literature.

- To identify gaps, limitations and needs for further work in the available literature.

In order to achieve the above aims, both academic literature and grey literature from government agencies, community groups and non-governmental organisations, was consulted. The literature review was conducted in two steps. First, existing literature on gender and cultural heritage, urban planning, resilience, and disaster risk management (including risk and vulnerability assessment, emergency response and recovery/reconstruction) were sought through internet-based research using engines such as Google Scholar and Science Direct. The search used combinations of the following keywords: “gender”, “disaster”, “risk”, “cultural heritage”, “culture”, “urban planning”, “women”, “emergency response”, “gender-sensitive” , “cities”, “building” + ”back” + ”better” and “post-disaster recovery”. For each keyword search, the first 20 entries were considered.

Secondly, documents were scanned and selected for further analysis according to:

- The language of publication. Only documents written in English and Spanish were taken into account due to the authors’ language skills.
- Geographical scope. Documents selected were either European-focused studies or offered content that could be easily extrapolated or applied to the European context, that is with a global perspective[3].
- Date of publication. We prioritised documents published within the last decade. Some older sources were however included where they can be considered seminal texts, e.g. the first appearance of a key term.

The sources resulting from the internet-based research were supplemented with additional sources either cited therein, recommended by colleagues knowledgeable on the topic, or located in online repositories hosted by key agencies working in the fields under investigation. All consulted literature (a total of over 80 documents) was gathered in a matrix and classified according topic, specific sub-themes, type of document, and geographical scope.

3. Key concepts

This section lays out key concepts and definitions arising from the literature review that are central to our discussion, as well as specifically highlighting their relevance to the ARCH project. Since several of the key concepts discussed in this report are addressed in other reports in the series (e.g. cultural heritage, disaster risk reduction, resilience), we focus here on defining those with direct relevance to gender issues.

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[3] Considerable literature addressing the Global South was discarded for its lack of applicability, however some such sources are relevant, e.g. for their usefulness in framing the concept of gender mainstreaming, which first emerged in the field of international development and hence is more established there than in a European context.

3.1. Unpacking gender

Before exploring the thematic areas of relevance to the ARCH project, some discussion of key concepts in relation to gender issues in general, and in particular the relevance of gender mainstreaming, is warranted here.

3.1.1. Gender as a justice concern

The purpose of considering gender issues at all in a research project (or indeed any other sphere of work or life) is primarily one of justice and equal rights, recognising that people of different genders have historically not received equal treatment, and that this discrepancy persists today. Gender equality refers to:

> *…equal rights, responsibilities and opportunities of women and men and girls and boys. Equality does not mean that women and men will become the same but that women's and men's rights, responsibilities and opportunities will not depend on whether they are born male or female. Gender equality implies that the interests, needs and priorities of both women and men are taken into consideration, recognizing the diversity of different groups of women and men [1].*

Gender equality is an aspiration also enshrined in the Sustainable Development Goals (SDGs), specifically SDG 5: 'Achieve gender equality and empower all women and girls' [2]. While the term 'equality' is often used interchangeably with 'equity', the preferred terminology within the United Nations has been gender equality since 1995. This is because gender equity 'denotes an element of interpretation of social justice, usually based on tradition, custom, religion or culture, which is most often to the detriment to women' [3]. It is also worth noting that gender is not the same as sex: the latter being biologically determined, while the former concerns identity, socialisation and the corresponding behavioural expectations that accompany this. According to the World Health Organisation (WHO), 'gender refers to the roles, behaviours, activities, attributes and opportunities that any society considers appropriate for girls and boys, and women and men' [4]. While gender interacts with the 'binary' categories of biological sex[4], it is not equivalent to these. More recently, understandings of gender have been expanding to include sexual orientation, encompassing lesbian, gay, bisexual, transsexual, and intersex identities (commonly delineated as LGBTI[5]). It is important to be aware of this expanded field, however the review conducted for this report found that much of the literature continues to focus on differences between men and women, which has affected the scope of discussion possible here.

Gender is of course not the only factor relevant to social justice, and a gender perspective makes little sense unless part of a broader consideration of the needs and capacities of disadvantaged social groups – whether in terms of age, income, ethnicity or employment status. More broadly, a justice perspective is also important in relation to the concept of resilience in theory and practice. Fainstein posits that resilience is an extremely broad and inherently ambiguous concept which can serve to obscure existing inequalities or create new ones, or simply reinforce an unjust status quo, depending on how it is defined and corresponding measures enacted [5]. In this regard, she notes that C.S. Holling's model of 'evolutionary resilience' (developed in the 1970s) is notable for its rejection of resilience as a return to some pre-existing equilibrium, rather defining it as a form of system transformation. The Intergovernmental Panel on Climate Change (IPCC)'s latest contribution on the subject continues in the same vein, defining (social and ecological) resilience as:

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[4] In the context of gender, binary 'refer to the norms derived from the simplistic idea of a dichotomy of two mutually exclusive and biologically defined sexes to whom different roles and behaviour are traditionally ascribed' [74].

> *The capacity of a social ecological system to cope with a hazardous event or disturbance, responding or reorganizing in ways that maintain its essential function, identity, and structure, while also maintaining the capacity for adaptation, learning, and transformation* [6]

However, so far the IPCC has failed to explicitly link resilience and justice in a definition. Fainstein points out that the logic of the evolutionary model falls short in its implementation: typically generating complex maps of systems and interrelations while failing to identify entry points for human agency and insufficiently addressing power relations which are central to the existence of inequalities – instead obscuring 'who gets what'. To illustrate the consequences of failing to address questions of power distribution, Fainstein cites the example of reconstruction in New Orleans following Hurricane Katrina, where a combination of private market forces and participation resulted in rebuilding 'pretty much as it was for those with resources, while many of those lacking financial or social capital were unable to return or rebuild - although they were not prohibited from doing so.' [5]

The glossary developed by the UK-based Climate Just platform also cities the IPCC definition, but adds:

> *Building resilience needs to account for: the degree to which the community comes into contact with a hazard capable of causing harm; the amount of inherent susceptibility to harm in that community; and the extent to which people in the community are able to make adjustments in order to avoid negative consequences* [7].

Importantly, this definition makes explicit that impacts are experienced by *people*, which is somewhat obscured by the IPCC's reference to an abstract 'system'. However, a weakness of this formulation is that it refers to a homogeneous 'community' without acknowledging different needs, capacities and levels of power within it. This absence is addressed elsewhere in the Climate Just glossary, where the (closely-related) concept of adaptation is defined with respect to justice, as follows:

> *Socially just adaptation: a set of policies and actions responding to current climate variability and anticipating the future climate change and its impacts designed to ensure that neither the impact of climate change nor the policies and actions themselves exacerbate existing or create new inequalities across different groups in the urban society* [8].

Recent work by the European Environment Agency has also taken up this definition in examining social vulnerability to climate change across Europe [9]. We propose a robust definition of resilience for the ARCH project, making room for a justice perspective that would help to accommodate gender mainstreaming as a relevant objective, as follows:

*The capacity of a social ecological system to cope with a hazardous event or disturbance, responding or reorganizing in ways that maintain its essential function, identity, and structure, while also maintaining the capacity for adaptation, learning, and transformation. Building resilience needs to account for: the degree to which the community comes into contact with a hazard capable of causing harm; the amount of inherent susceptibility to harm in that community; and the extent to which people in the community are able to make adjustments in order to avoid negative consequences****, recognising existing imbalances in power distribution in that community and ensuring that neither the impact of the hazard, nor the policies and actions themselves exacerbate existing or create new inequalities across different groups.***

3.1.2. A framework for understanding justice

Social justice is a relatively abstract concept, and in order to make it useful for analysis needs to be broken down into constitutive parts. Examining justice in relation to access to ecosystem services, McDermott et al. divided justice into three dimensions: distributional, procedural and contextual [10]. **Distribution** concerns who gets what – who has access to benefits and who bears the burden of costs. **Procedural** refers to decision-making – who has the right to participate in the decisions that result in the distribution of benefits and costs. **Contextual** justice is about the conditions that affect people's access to both benefits and costs, as well as their ability to participate in decision-making – essentially bridging the first two dimensions. It includes the barriers that impede this access – which may be physical, socio-economic, institutional, or perception-based [11]. Other scholars have pointed to another dimension, **recognition**, which concerns whose needs and interests are perceived as valid in the first place [12]. Breaking justice down in this way can help us understand how this rather abstract concept translates into practical matters. Another important dimension is Crenshaw's '**intersectionality'**, which posits that disadvantage can rarely be attributed to a single cause, but needs to be understood in the context of the various socially constructed categories to which an individual is assigned [13].

> *'...intersectionality holds that knowing a woman lives in a sexist society is insufficient information to describe her experience; instead, it is also necessary to know her race, sexual orientation and class, as well as her society's attitude toward each of these memberships. It is only through analysing how these complex concepts intertwine and interlink that we are able to understand the gendered experiences of both men and women in different contexts.'* [14]

The concept of intersectionality is important in acknowledging gender aspects of justice concerns. Although a person's gender may be just one factor of a constellation of sources of disadvantage, it is a factor that often serves to exacerbate the level of disadvantage. The intersectionality of gender with factors such as age, class and ethnicity, has been recognised by the United Nations Research Institute for Social Development (UNRISD), which has led the field of gender and development for some years, and was a focus of the Gender and Development Programme (2000-2009), as a contribution to implementing the 2030 Agenda for Sustainable Development [15]. Ryder has highlighted the potential of intersectionality to bridge the (to date largely separate) research communities of disaster vulnerability and environmental justice [16]. However, in general the dimensions of contextual justice and intersectionality have been explored in the literature to a lesser extent. We find these two dimensions to be useful for framing our discussion, however less so as analytical tools. Hence, for the purpose of our later analysis, a three-dimensional framework, taking into account the aspects of gender-based justice that concern 1) recognition, 2) distribution and 3) procedure, will be adopted.

3.1.3. Achieving gender equality in practice

A fundamental starting point for integrating justice concerns (with a view to improving gender equality) into the design of any project or programme is to recognise difference among the people whose needs are to be addressed. Here, the 'recognition' element of justice introduced above is significant, because only once gendered differences are recognised (and made visible, overcoming 'gender blindness'[6]) can they begin to be addressed. As pointed out in guidance materials for UN-Habitat's City Resilience Profiling Programme:

> *'projects assumed to follow neutral approaches usually fail to address specific needs of gender groups and the constraints they face. The result is that concerns may be overlooked and inequalities can be increased.'* [17]

Making gendered needs visible is inherent to a comprehensive process of 'gender mainstreaming', a phenomenon that originated in development policy adopted by the UN in 1995 and was later taken up by the European Union (EU) and member states [18]. Gender mainstreaming can be understood as:

> *'the process of assessing the implications for women and men of any planned action, including legislation, policies or programmes, in any area and at all levels. It is a strategy for explicitly making the concerns and experiences of women, as well as of men, an integral part of design, implementation, monitoring and evaluation in all political, economic and societal spheres, so that women and men benefit equally, and inequality is not perpetuated'* [19].

While gender mainstreaming is a process, rather than a tangible outcome, its success may be demonstrated by a range of indicators. Gender diversity, i.e. a balanced representation of genders in an organisation is sometimes incorrectly pointed to as evidence of gender equality, when in fact it is just one possible indicator of a wider process of gender mainstreaming.

4. Gender mainstreaming

In this section we examine the concept of gender mainstreaming with respect to sustainable urban planning, cultural heritage, disaster risk management and climate adaptation.

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[6] According to the European Institute for Gender Equality, 'gender blindness is the failure to recognise that the roles and responsibilities of men/boys and women/girls are given to them in specific social, cultural, economic and political contexts and backgrounds. Projects, programmes, policies and attitudes which are gender blind do not take into account these different roles and diverse needs, maintain the status quo and will not help transform the unequal structure of gender relations' [78].

4.1. Gender in sustainable urban planning

Urban planning has a major impact on people’s lives, since it essentially defines many aspects of access to facilities and services, workplaces, housing, public open spaces and cultural institutions; including their locations, physical characteristics of the space around them, and the nature of the journey to reach them. Furthermore, it sets a physical structure and a configuration of spaces that influences the relationships between people who use these spaces. Since people have different kinds of needs and capacities, not everyone uses the same space in the same way. Urban planners therefore have a responsibility to analyse and understand these different needs and capacities, to ensure that the design of public spaces and infrastructures will respond to them effectively, and that everybody will be able to benefit and enjoy the city on an equal basis. In this sense, urban planning and associated regulations have the capacity to foster social cohesion and inclusion or, on the contrary, to maintain or even exacerbate exclusion or inequalities between different groups.

4.1.1. Gender differences in use of space

With respect to gender differences, an established body of literature (with key texts published since the early 80s)[7], has drawn attention to the ways the cities we live in have been shaped and designed according to the values of a patriarchal society, disregarding differences between men and women as derived from their assigned gender roles[8]. Due to the sexual division of labour[9], women have historically been assigned reproductive tasks and generally relegated to the domestic realm, while men have been in charge of ‘productive tasks’ and more visible in public space [20], [21]. This means in practice that women, because of their historical roles as caregivers, are the ones who usually take care of dependants (children, seniors, and people with disabilities); who accompany them; go shopping for daily needs; and take care of household maintenance, organisation, and administrative errands [22]. This often entails complex, polygonal routes[10] in the city that, depending on the location of the facilities where certain activities take place and the distance between them, may involve expenditure of considerable time. In turn, this may affect the possibilities of women to access jobs that are located far from those facilities or may require reduction of paid working time to adapt to the demands of caring. As a result, women's economic independence may be affected. For these reasons, studies have shown that land-use zoning, mono-functional areas, separation of places of employment from residential areas, lack of dependant-care facilities (either close to the residential areas or to the employment places) and inefficient transport systems disproportionally affect women [23] (see also Box 1 below).

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[7] See, for instance [20], [79].

[8] Although gender is not just about men and women, differences between the needs, capacities and treatment of men and women are historically significant and remain a contemporary issue warranting further work. It is important to note that there is an emerging body of literature on more complex conceptions of gender, including LGBTI communities, however the majority of the literature available to the authors at the time of writing focuses on male and female, hence this is also a focus of the discussion here.

[9] Gender (or sexual) division of labour refers to the way each society divides work among men and women, boys and girls, according to socially-established gender roles or what is considered suitable and valuable for each sex. Within the division of labour, there are several types of roles: productive, reproductive, community managing, community politics, and the so-called ‘triple role’, which typically belongs to women and covers reproductive, productive and community work [3].

[10] For more information, see: http://genderedinnovations.stanford.edu/case-studies/transportation.html#transport-challenge

4.1.2. Urban planning for an inclusive city

Related research into gender sensitive urban planning has investigated security in public space. Although violence against women and girls (including sexual violence and harassment) often takes place in domestic settings, it may also occur in public spaces [24], or women and girls may adopt self-protection strategies to avoid a perceived threat. In some cases, this might mean restricting their own movements, limiting their social lives, giving up leisure activities, or even resigning from a job or participation in political life. Such fear ultimately prevents enjoyment of the right to the city and its benefits. Corresponding strategies to enhance urban safety (both real and perceived) include ensuring adequate lighting, urban signage, promoting visual permeability (i.e. sightlines through spaces) and avoiding blind facades or large building setbacks[11]. Given that the ARCH project focuses on European historic city centres, where medieval urban layouts with narrow streets and blind alleys could potentially be perceived as unsafe, it is relevant to consider perceptions of safety among diverse gender groups which may affect their access to cultural heritage places.

Box 1: Forbidden city map. Bilbao, Spain.

A tool for social participation and inclusion of women in urban planning processes [25].

From 2009 to 2011, the Council of Women for Equality in Bilbao conducted a participatory process involving diverse women from the eight districts of Bilbao to identify public spaces where they felt unsafe. The objective of this activity was to place value on women's perception of their urban environment and to promote their participation in municipal decision-making processes related to urban planning, in order to design a safer and more inclusive city for all. The initiative resulted in a detailed diagnosis of hotspots in each district and corresponding proposals to improve them (many of them relating to public lighting, cleaning, gardening and maintenance) which were submitted to the Works and Services Department of the municipality. The proposals were in turn included in an action plan that the Department has been implementing ever since, in close dialogue with the Council of Women for Equality. As of November 2019, nearly 100% of the actions had been completed and an update of the forbidden city map is under discussion [26], since new hotspots may have arisen since the study was initiated.

More information at:
https://www.bilbao.eus/cs/Satellite?c=Page&cid=3000082641&language=es&pageid=3000082641&pagename=Bilbaonet%2FPage%2FBIO_contenidoFinal

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[11] These are mainly urban design recommendations for safer cities. For a more comprehensive set of measures, including legislation and regulation initiatives, public transport policies, education and awareness-raising campaigns, and partnerships across sectors, see [24].

Overall, mainstreaming gender in urban planning means to acknowledge the aforementioned status quo and act accordingly: promoting the participation of different gender groups during planning and decision-making processes, assessing their diverse needs, perceptions and interests, and fostering safe spaces that support them in different and varied everyday contexts. As some of the studies consulted suggest, these needs could be addressed, for instance, through a polycentric urban structure and a 'city of short distances'[12], supporting an efficient mix of spaces that allow leisure, caregiving, shopping and service use, paid work and family duties, where dependants could easily move through the neighbourhood and deal with everyday tasks on their own. If a city's existing fabric does not already support these diverse needs, then redevelopment of key areas may be an option. This presents a challenge for neighbourhoods and sites of heritage value, as they are typically subject to specific strategic planning and regulatory conditions, (e.g. planning restrictions on change of use or built form, management plan requirements imposed locally, nationally or by bodies such as UNESCO), limiting both physical and land use changes.

In terms of high level frameworks, the importance of gender mainstreaming in urban planning has increasingly been acknowledged in the last years. For example, the *European Charter for Equality of Women and Men in Local Life*, drafted by the Council of European Municipalities and Regions in 2006 and endorsed by 1700 signatories in 35 countries[13], calls upon the responsible bodies to integrate a gender perspective into all activities of local and regional governments in order to advance equality of women and men. One of the main sections of the Charter is dedicated to planning and sustainable development, including articles on urban and local planning, and mobility and transport:

> *Article 25 – Urban and Local Planning*
>
> *The Signatory recognises the importance of its spatial, transport, economic development and land use policies and plans in creating the conditions within which the right to equality of women and men in local life may be more fully achieved.*
>
> *The Signatory commits itself to ensure that, in drawing up, adopting and implementing such policies and plans, (…) the specific needs of women and men, in relation for example to employment, access to services and cultural life, education and family responsibilities, based on relevant local and other data, including the signatory's own gender assessments, are properly taken into account* [27].

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[12] Dense and compact city including housing, supply with goods and services, education and work, cultural events, sports and sufficient green areas and open spaces, where distances among them can be covered on foot or easily by public transport.

[13] As of November 2017, according to information from the Observatory for the European Charter for Equality of Women and Men in Local Life. Available at: http://www.charter-equality.eu/the-charter/le-texte-de-la-charte-en.html

The Charter is not a binding document, but signatories are encouraged to prioritise actions and implement them progressively. In this regard, for example, cities like Vienna, Umeå or Castellón[14] have already comprehensively integrated a gender perspective into their urban master plans, while many others like Córdoba or the region Île de France have taken steps towards implementing fairer public transport systems[15].

For the purposes of this report, it is significant that, while the literature consulted and the case studies analysed bring up many actions and strategies to mainstream gender at the general city level[16], analysis of or detailed information about specific measures to be applied in heritage areas remains scarce. There has also been limited exploration of the ways in which cultural heritage protection status and its related regulation may prevent or restrict measures to improve gender equality in urban space, or on how women and men are affected differently by some of the unintended consequences of cultural heritage recognition (e.g. World Heritage status), among them tourism booms, gentrification, increases in housing costs and subsequent displacement of residents, etc. This leaves space for further research.

4.1.3. Current obstacles and needs for further work

The following are some of the obstacles identified with regard to mainstreaming gender in the sustainable urban planning of historic areas:

- Lack of disaggregated data according to gender, age, ethnic background, ability, etc. of the differential access to and use of historic areas, and associated lack of analysis[17].
- Lack of assessment of dependant-care infrastructure[18] availability around cultural heritage assets.
- Absence of disaggregated data and qualitative information on levels of representation and participation of different gender groups in formal and informal decision-making processes and structures regarding urban planning and management of historic areas.
- Lack of specific operational recommendations on applying gender mainstreaming measures in heritage/protected areas.

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[14] See, for instance, Castellon’s master plan, available at: https://s3-eu-west-1.amazonaws.com/urbanismo/INFORME+DE+IMPACTO+DE+GE%CC%81NERO.pdf

[15] For more information, see good practice cases on the Council of European Municipalities and Regions (CEMR) website: http://www.charter-equality.eu/exemple-de-bonnes-pratiques/equality-in-the-urban-planning-administration.html?ref_id=166

[16] See, for instance, guidelines from the city of Vienna to mainstream gender in urban planning and urban development [70], structured around gender mainstreaming as 1) a comprehensive planning strategy, 2) in master plans, concepts and visions of urban design, 3) in land use and development planning, 4) in public space planning, and 5) in housing construction and public service buildings.

[17] Cultural statistics are not systematically disaggregated by sex: gender statistics on culture are often collected only in certain cultural fields or through research initiatives and/or for individual projects.

[18] Facilities for the care of people with a certain degree of dependence, e.g. children, the elderly or people with disabilities.

Needs for further research include:

- Comprehensive and comparative analysis of gender sensitive urban planning policies and initiatives implemented in European cities, assessing enablers of the process, impacts, factors of success, transferability and key lessons.
- Studies on how to adapt general gender sensitive plans and measures to historic areas, e.g. to better understand gender differences in mobility patterns not only at the city level but specifically in historic areas.
- Analysis of negative impacts of cultural heritage protection status (e.g. gentrification) from a gender perspective, and proposed strategies to address them.
- Research on the specific interests, perceptions and needs of different gender groups when accessing, using, living and or working in (or in close proximity to) historic areas.
- Comprehensive analysis of gender-sensitive safety measures in historic areas.

4.1.4. Policies and solutions

The following recommendations to improve gender mainstreaming in heritage areas are intended for policymakers within local government, as well as researchers and consultants supporting them:

- Establish mechanisms that allow for the voices and associated concerns of different gender groups to inform and take part in policy-making.
- Implement specific measures for the different needs of people in the design and maintenance of public space, applying a gender analysis[19] in every project [28].
- Promote gender parity at technical and executive levels in urban planning departments.
- Evaluate the impact of policy implementation on different population groups, disaggregating data by characteristics including gender.
- Build core gender capacities of staff through the establishment of gender units within municipalities, and provision of regular institutional training.
- Define indicators and monitoring plans at the local level to verify the outcomes of gender mainstreaming in the built environment.
- Gather disaggregated data on the socio-economic characteristics of the population in city centres (since vulnerability is multi-dimensional, it is important to understand who lives in or near and uses historic areas).
- Allow flexibility in the definition of new uses for cultural heritage buildings. Tap into the opportunity of adaptive reuse processes to prioritise uses that facilitate daily life activities over private interests or tourist needs. In a city centre with a high number of cultural heritage buildings, the selection of uses does have an impact in women lives.
- Make sure that public facilities are easily accessible by public transport.

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[19] See definition of gender analysis in the Glossary, and guidance on how to conduct one at https://eige.europa.eu/gender-mainstreaming/methods-tools/gender-analysis

- Aim for mixed use neighbourhoods, including open, public cultural heritage sites accessible by foot.
- Ensure dependant-care facilities are provided in or close to heritage sites.
- Promote the conservation and rehabilitation of cultural heritage buildings outside the city centre, to make cultural heritage accessible also to people with limited access to the city centre.
- Foster the interim reuse of abandoned/underused heritage buildings by women or vulnerable groups, as a measure of conservation.

Box 2: Gender mainstreaming in urban planning. Vienna, Austria.

Vienna is considered a frontrunner city in mainstreaming gender in urban planning. Its two guides ‘Gender Mainstreaming Made Easy’ and ‘Gender Mainstreaming in Urban Planning and Development’ are useful for urban planners across Europe and beyond.

The city opened its Women’s Office in 1992 and developed one of the first gender-sensitive neighbourhoods in Europe in 1997, the famous Frauen-Werk-Stadt. Two more phases of the project were built in 2004 and 2009. This residential complex aims to allow people to carry out all their daily life activities without commuting. It was designed from the point of view of women to include public spaces and facilities (e.g. childcare) that support reproductive work, and diverse housing types adaptable to different family models [29]. Ever since, Vienna has been integrating gender into all the city’s strategies. The city employs gender experts internally and multipliers all over the city. As the report *Gender Equal Cities* indicates:

> *…all public space designed and built by the city is done so with gender in mind. The outcome is an urban landscape that benefits everyone: parks are lit effectively to provide safety and access; social housing is architecturally designed with flexibility for different family situations; pavements are wider for parents and the elderly; street crossings are longer and pedestrians are prioritised* [19].

4.2. Gender and cultural heritage

4.2.1. Background

There is not a single way of defining what constitutes cultural heritage, since it exists in a diverse sociocultural context, where people have different perceptions of history and culture that may generate diverse (and even opposing) interests. Put another way, cultural heritage can include and reflect the diverse identities of a territory or a place, but this depends very much on who and what is valued, and how power is distributed. In a diverse community, it may be that certain subjects are left out of the dominant heritage narrative, for instance indigenous societies or afro-descendants [30]. The same has happened historically to women: cultural heritage generated by women and what women consider cultural heritage have been invisible and disregarded in many places for many years [31]. It was only as recently as the sixties and seventies that feminist movements started to point out how rarely women are depicted in so-called “authorised" heritage assets. After initially highlighting the rarity of women in art history and artistic production, the focus has evolved during the last decades into exposing the lack of female representation in cultural practices[20], exhibitions, history books, school curricula, collections, street names or statues in public spaces [32]. Our literature review shows that governments have made concerted efforts since to address the promotion of gender equality within museums, targeting more equal representation in collections and exhibitions [33], however there is still work to be done.

4.2.2. Whose heritage is it?

As Laurajane Smith observes, heritage is not gender neutral: 'it is gendered in the way it is defined, understood and talked about, and, in turn, in the way it reproduces and legitimizes gender identities and the social values that underpin them' [34] . She points out that traditionally, gender has been overlooked in heritage debates, implying a passive 'masculinisation' of heritage where it is typically women who are excluded not only from representation, but also the discussion [34]. Others note that the process of ascribing heritage value ('heritagisation'[21]) itself legitimises some identities while excluding others [35]. This means it is relevant to consider not just who has access to places of heritage significance, but also who is responsible for creating and presiding over 'official' heritage in the first place[22]. In this regard, Jiménez-Esquinas questions who decides what is valuable, what we need to conserve and to what we should dedicate our resources and our labour, and advocates for the presence of women in decision-making processes that define heritage policies and what they serve to protect [32]. Many contributors to the debate on the gendered nature of heritage agree that policymakers, managers of cultural institutions and academics should be open to revising and re-signifying cultural heritage to include neglected gender identities, with a view to reducing discrimination [32], recognising that authorised heritage discourses risk may 'reproduce, at the local, national and international level, gender-blind selection and interpretation criteria of cultural heritage' [36].

Re-characterising existing heritage places and creating 'new' ones from a gender perspective is likely to be a time-consuming process beyond the scope of ARCH, a three year research project. Yet it is worth reflecting on here in relation to the project's stated objective for collaborative research, specifically the importance of diversity in stakeholders that the city partners plan to engage – for the duration of the project and beyond. Moreover, historic centres in European cities are diverse, today more than ever. In such a heterogeneous context, it is legitimate to pose the question of whether the heritage sites selected for study by the ARCH project in Valencia, Bratislava, Hamburg and Camerino reflect 'particular and partial histories and myths, male-defined landscapes and gendered national identities' [37]. More specifically, given that place attachment is a relevant factor for social cohesion, municipalities rightly have an interest in ensuring that the heritage places they invest in protecting and managing reflect the values and concerns of their diverse local residents, in the interest of a more socially cohesive and resilient community.

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[20] As the Council of Europe´s document *Draft conclusions on the Work Plan for Culture 2019-2022* shows, the disparities in the access of women to creation and production resources, as well as their underrepresentation in leadership and decision-making positions related to culture and cultural heritage is still an issue. Therefore, the institution establishes gender equality as a priority in view of its contribution to cultural diversity [80].

[21] Heritagisation refers to the transformation of objects, places and practices into cultural heritage as values are attached to them, essentially describing heritage as a process [81].

[22] As Jiménez-Esquinas points out, while it is relatively easy to get disaggregated data about of museums and cultural heritage visitors, it is difficult to find information about who manages heritage.

The 2014 UNESCO report *Gender equality, heritage and creativity* [33] highlights the relevance of analysing heritage from a gender perspective. On the one hand, a gender perspective may help to broaden the definition of cultural heritage and, on the other, specific actions linked to the management of cultural heritage (interpretation, transmission, safeguarding or management) can serve to promote gender equality. To put this into practice, the report offers interesting examples of gender sensitive practices, e.g. a gender-responsive labour policy introduced by the management of a World Heritage national park in Brazil.

From a legal perspective, a particularly interesting case for this report is the recently-enacted law to protect the Valencian *Huerta* (orchard), passed on March 2018 by the Spanish National Government [38]. The law aims to protect the orchards not as a ‘frozen, museological tableau’, but rather a living and sustainable space from the economic, social and environmental perspective. The text acknowledges female and male farmers as an intrinsic part of the Huerta heritage, and refers to them as key players in its preservation and conservation. In that regard, and as a measure of conservation, the law foresees an action plan for revitalising the Huerta, which explicitly appeals for the promotion of equality in farm co-ownership, for equal access to management mechanisms of the orchards and participation in production. Furthermore, the text urges promotion of the visibility of female-targeted dissemination activities oriented to raising awareness of the social and environmental values of the Huerta. Given that the Huerta territory will be a focus of the ARCH project’s work with the city of Valencia, it is particularly relevant for the project team to consider the existing gender inequalities inherent in this heritage landscape, and the mandate for addressing them introduced by this new legislation. In that context, a practical example is an oral history project on the role of women farmers in this region, as a way of claiming, registering and transmitting their knowledge and personal experiences, which are undoubtedly part of this heritage landscape [39]. In general, however, the literature consulted for this report has identified limited case studies where gender has been comprehensively mainstreamed in the interpretation, communication, safeguarding or protection of cultural heritage – presenting an opportunity to contribute to this body of knowledge.

Box 3: Women’s History Walks, Nicosia, Cyprus.

In 2016, in response to the invisibility of women in the urban landscape of Nicosia, the NGO Centre for Gender Equality and History (K.I.I.F.) started organising free city tours around places of historic significance for women or related to historic female figures, aiming to transform a space lacking any reference to women into a space of fair recognition.

After extensive research and observation, points of interest were selected (such as a Women's Bazar dating back to the 14th century, or the first girl’s school established in Cyprus) and the first walk, titled ‘Reviving the Invisible History of Women – A Walk in another Nicosia’ organised. The group of volunteers involved in the initiative (including historians, researchers and activists) chose a point of interest and explained the history behind it, establishing a dialogue with participants. These included traditional communities of Cyprus such as Greek Cypriots, Turkish Cypriots, Maronites, Armenians, etc., and new communities such as immigrants and refugees. As a result, and as stated on the Sustainable Cities Platform, women and girls from different cultures and backgrounds are now *‘able to recognise role models in the landscape of their city and understand that, as women, they did have a contribution into the making of their city and local society’*. Furthermore, by drawing on multicultural and multi-communal perspectives of history, the History Walks help ‘*not only building a culture of mutual respect and equality but also a culture of peace and social inclusion’* [40].

More information at:
http://www.sustainablecities.eu/transformative-actions-database

4.2.3. Current obstacles and needs for further work

Many of the challenges for mainstreaming gender in cultural heritage arise from a simple lack of visibility, specifically:

- Lack of data on involvement of women in heritage conservation institutions, practises and policies.
- Lack of information on the presence of women in the realm of heritage management, specifically in bodies where decisions on what is valuable and what institutional measures are needed to preserve and interpret a specific heritage asset are taken.
- Lack of information about and examples of gender sensitive conservation practises, especially regarding tangible heritage.
- Lack of gender-impact assessments for projects on adaptive reuse of cultural heritage.

Needs for further work include:

- Interdisciplinary research on gender equality in heritage and the creative industries is necessary, alongside more targeted actions, at the national and international level, to support gender-responsive policies and strategies in culture [25].

Regarding LGBTI heritage, Fernández-Paradas suggests further research on [35]:

- Protection of LGBTI heritage
- Mapping places of LGBTI memory
- Intangible LGBTI heritage

- Lack of protection and destruction of LGTB heritage
- Further research on gender mainstreaming practises in conservation and preservation of tangible cultural heritage.

4.2.4. Policies and solutions

Public participation in the definition, management and governance of cultural heritage should be promoted in order to facilitate an inclusive legal framework that encompasses views from a diversity population, including diversity of gender. In turn, this can reinforce a broader identification with and attachment to cultural heritage by all community members, fostering broader support for its preservation. To do this, adequate participation mechanisms for the institutional and social engagement of diverse gender groups in conservation and valorisation of cultural heritage plans need to be guaranteed, for example through:

- Incorporating strategies in conservation policies to mainstream gender equality, so that the historically absence of diverse genders in heritage and history can be claimed and amended.
- Increasing the participation of women in cultural life, by promoting a balanced representation of men and women in all cultural areas.
- Increasing the number of landmarks and public spaces named in honour of women whose accomplishments and contributions to the history and the city may have been previously overlooked.
- Considering women's and men's needs and desires with respect to family care as well as the specific needs of the elderly and people with different degrees of functional ability in adaptive reuse of cultural heritage processes.
- Incorporating strategic impact assessments covering environmental, economic, social, and dimensions in adaptive reuse projects, including specific gender indicators and targets.

4.3. Gender in disaster risk management and climate adaptation

4.3.1. Background

Two fields are relevant to our discussion in this section: the first disaster risk management (DRM) and the second climate adaptation. Both in theory and practice, these are two distinct fields, not only with distinct bodies of literature and research communities, but also in a governmental context – often ‘silo-ed’ between separate departments. However, the two fields are linked by a concept central to a discussion of gender mainstreaming and more broadly social justice: that of social vulnerability[23], which can be defined as ‘a state resulting from interaction of socio-economic and environmental characteristics, such as personal sensitivity, economic deprivation or housing conditions, affecting how prone to harm from climate-related events people and communities are' [41] cited in [9][24]. For the purposes of this report, we find it useful to structure the discussion according to the phases of DRM, while also acknowledging the significance to the discussion of climatic trends that may not result in disaster, but nonetheless generate impacts.

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[23] Further, some scholars have posited that the DRM community has historically been more accommodating of a people-centred perspective, arising from the social sciences and focusing on present-day conditions and how people are affected by these, while the climate adaptation community has emerged from the natural sciences and tends to focus on quantitative data, systems thinking and impact projections [9].

In general, the significance of gender in both the impacts of disasters (including climate-related disasters), and responses to them, remains under-explored in academic literature [42] as well as under-represented in political agendas [43]. In addition, much of the literature on gender focuses on developing countries, where the consequences of hazardous environmental events tend to be more extreme. Due to a higher incidence of poverty and more prevalent social inequalities in the developing world, impacts of extreme weather events and other disasters also tend to be acutely felt by vulnerable groups, in many cases women and girls[25].

Still, the importance of gender mainstreaming within DRM is already recognised at an international level within key high-level frameworks, e.g. the UN's Sendai Framework for Disaster Risk Reduction 2015-2030. Within the Sendai Framework (a global agreement to strengthen focused action on disaster management and resilience, adopted in 2015), the need to mainstream gender in disaster risk reduction and emergency response actions (for the sake of equitable resilience) is recognised in several sections. For instance, the relevance of gender is outlined in **Section III** - **Guiding Principle d)** which states:

> *"Disaster risk reduction requires an all-of-society engagement and partnership. It also requires empowerment and inclusive, accessible and non-discriminatory participation, paying special attention to people disproportionately affected by disasters, especially the poorest. A gender, age, disability and cultural perspective should be integrated in all policies and practices, and women and youth leadership should be promoted. In this context, special attention should be paid to the improvement of organized voluntary work of citizens."* [44]

The imperative to adopt gender-equitable and universally-accessible response, recovery, rehabilitation and reconstruction approaches, as well as to develop early warning sentences in a participatory manner, are highlighted in **Section IV-Priorities for Action**, within **Priority 4 "Enhancing disaster preparedness for effective response, and to «Build Back Better» in recovery, rehabilitation and reconstruction**". Lastly, women are identified as key stakeholders in **Section IV - The role of stakeholders, in order to develop gender-sensitive disaster risk reduction policies.** However, the Framework stops short of providing guidance on how to operationalise these principles and priorities.

The process of disaster risk management can be divided into three broad phases: 1) before (improving disaster preparedness, including assessing risk and vulnerability), 2) during (emergency response) and 3) after (post-disaster recovery) – all with a view to reducing both the possibility of a disaster occurring, as well as the adverse impacts in the event that one does occur. The three dimensions of social justice introduced earlier in Part 3 provide an analytical framework to examine the cycle of disaster risk management and link it to gender mainstreaming: namely, recognition (whether gender is included at all in planning for and managing disaster risk), distribution (who experiences the ‘costs’ or impacts of a disaster and to what extent) and procedure (who is involved in decision-making, leadership and implementation of disaster risk management), as will be explored below. Below we look at the distributional dimension in more detail (i.e. gendered impacts) as well as considering all three dimensions in relation to DRM: firstly disaster preparedness, then response and recovery.

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[24] For a discussion of the different concepts of social vulnerability arising from the DRM and climate adaptation communities, see [9].

[25] Much of the literature addressing the Global South concerns socio-economic conditions that differ considerably from those of Europe, however some patterns and approaches may be usefully extrapolated to a European context – where social inequalities also exist, but have often been less explicitly acknowledged.

4.3.2. Disaster preparedness

A key element of disaster preparedness is to undertake a risk and vulnerability assessment (RVA) in order to understand the nature and distribution of risks that may result in negative impacts – whether these result from climatic hazards or other causes. The Intergovernmental Panel on Climate Change (IPCC) updated its concept of risk in its fifth assessment report (IPCC AR5), defining it as a product of interactions between exposure, vulnerability and hazards (see Figure 1)[26]. The IPCC AR5 refers to social and distributive justice in several places, however fails to offer a coherent definition of ‘equity’ or associated concepts in relation to climate impacts [9]. Leaving these terms undefined and open to interpretation, as well as without advice on how to make them operational, is problematic – as it likely means they will not be effectively addressed in practice. In this regard, the work conducted by the Joseph Rowntree Foundation’s Climate Just project is of interest for its efforts to deepen commonly-accepted definitions and frameworks from a justice perspective, for example the framework developed by Lindley et al. (see Figure 1), which positions climate disadvantage (rather than risks and impacts in general) as central to the analysis.

The conceptual framework used to conduct an RVA is an important starting point, as it determines whether difference between social groups is even recognised in the first place, which will directly influence what kind of data is gathered and analysed– and the results upon which decisions are made. These results will also depend on the quality of the indicators selected, and the spatial scale on which the analysis is conducted: i.e. neighbourhood level data will be more revealing of population composition – who is living or working in risky areas – than data aggregated at a borough, city-wide or regional level [9]. The procedural element also demands attention here. Who is involved in conducting the RVA, who is involved in the planning of measures once risks are assessed? [45][46][47]. Not only does the representation of diverse social groups in general support more democratic outcomes that are likely to address a wider range of interests and concerns, but there is also evidence to suggest that gender diversity in decision-making bodies may improve economic resilience, as Young et al. have explored [48].

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[26] For more on this, see ARCH state-of-the-art report 2: Disaster risk management, emergency protocols, and post-disaster response.

According to the IPCC, vulnerability can be understood as a combination of exposure and sensitivity, which interact to determine adaptive capacity[27] (i.e. the social and economic ability to cope with impacts). Considering these concepts in regard to the needs of LGBTI people in emergency response and recovery plans in Australia, Dominey-Howes et al. point out that both vulnerability and capacity are predicated on social marginality and relative levels of access to resources and power:

> *'While vulnerability highlights the external structural conditions that expose different, often marginalised, social groups to hazards, capacity focuses on the knowledge, resources, skills and networks of solidarity…that are mobilised as coping strategies during crisis.'* [49]

The framework pictured at Figure 1 suggests one way to address these structural conditions, where vulnerability is broken down according to sensitivity (e.g. health and age), 'enhanced' exposure (environmental elements e.g. quality of housing, access to green space), and adaptive capacity (e.g. income, language skills, time spent living in the neighbourhood) – the latter in turn split into abilities to prepare, respond and recover (i.e. the three DRM phases) [9].

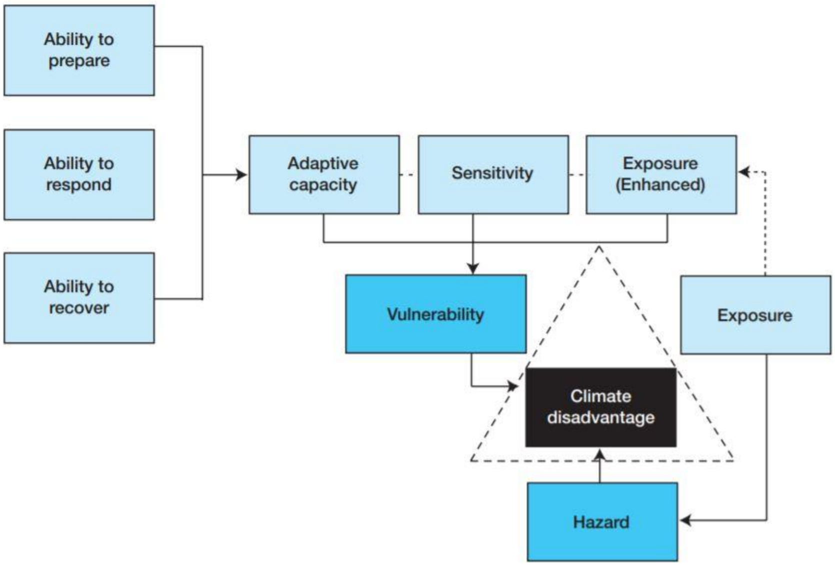

Figure 1: Conceptual framework for assessing socio-spatial vulnerability and climate disadvantage. Source: [41]**.**

A comprehensive RVA using gender-disaggregated data is hence capable of illustrating gender-based differences in vulnerability, which take into account not just sensitivity and exposure (dimensions which often assume a greater vulnerability of women) but also gendered capacities – whether they are physical or material capacities, social or organisational, or even motivational or attitudinal [50]. For example, in relation to post-flood recovery in the UK, Akerkar and Fordham found that women and men mobilised different strategies to cope: the former focused on care, the later focused on control [51]. In this regard, while they might be under-represented in formal disaster response planning and implementation, women are also often ‘first responders’ when disaster strikes, tending to the needs of their families and communities, and coping with adverse effects on the livelihoods of everyone around them [52].

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[27] Note that adaptive capacity is more commonly used by the climate adaptation community, while the DRM community tends to use the concept of coping capacity. A discussion of the differences between the two is beyond the scope of this paper, however can be found in the IVAVIA Guideline (Impact and Vulnerability Analysis of Vital Infrastructures and built-up Areas) produced by the RESIN project and available here http://www.resin-cities.eu/fileadmin/user_upload/Resources/Design_IVAVIA/IVAVIA_Guideline_v3_final__web.compressed.pdf

Box 4: How to develop a gender-sensitive RVA?

The United Nations Development Programme and UN Women have developed the guidance *Gender and disaster risk reduction in Europe and Central Asia: A Workshop Guide for Facilitators*, which includes pointers for undertaking a gender-sensitive RVA, as follows:

- *Analyse the vulnerabilities of women and men, and their capacities for dealing with disasters.*
- *Understand women’s and men’s ability to cope with disasters, in local settings.*
- *Directly inform local and national-level action plans on how to prepare for disasters.*
- *Identify who is most vulnerable and why.*
- *Identify whose capacities need to be developed and what relief services are needed.* [50]

4.3.3. Emergency response and post-disaster recovery

Emergency response deals with the immediate, short term impacts of a disasters, while post-disaster recovery addresses the longer term ones. Disaster impacts on people (as distinct from – though of course related to – impacts on buildings, physical infrastructure or the natural environment) are not evenly distributed. Where social inequalities already exist, these are likely to be made worse by disaster impacts, unless compensatory measures are taken – however a disaster may also provide opportunities to redress existing inequalities [53]. In general terms, impacts on people can be divided into physical damage, material loss, disruption of wellbeing, and (closely related to the latter) psychological and ontological impacts.

Physical damage (injury or death)

Physical damage (to people) concerns personal injury or death. In this regard, at a global level, women, children and elderly are disproportionately affected by disasters, which is due to existing cultural and social norms rather than biological differences [44] [54] [55]. Women and girls tend to have less access to or control over assets, including the resources necessary to cope with hazardous events, such as information, education, health and wealth, and in this sense their vulnerability is in general relatively greater than that of men [42]. They may be at risk of experiencing violence or sexual assault in the time of instability following a disaster, or they may perceive such a risk and avoid places of service provision, such as emergency shelters, as a result.

A number of studies at the international level have found that women are more likely than men to die after a large scale disaster [42] [55] [56]. At a global level, and specifically in developing countries, women’s higher vulnerability to environmental hazards has been linked to the pre-existing gender inequalities, which are magnified when a disaster occurs [54] [57]. These inequalities reflect disparities of economic and political power between women and men, which may manifest in aspects such as baseline health state [56] or access to resources (including education) leaving women in a weak position to deal with additional stresses. The global situation is however not necessarily transposable to women's mortality rates in Europe, where gender disparities are not usually so extreme. In fact, studies in Portugal, Switzerland and Italy have indicated a reversal of the trend, i.e. a higher incidence of male fatalities in case of extreme floods and landslides [57][58] which may reflect gender-connected responsibilities and lifestyles or a gendered predisposition to take risk. For instance, in the study examining flooding in Italy by Salvati et al., many fatalities occurred along roads and were motor-vehicle related, with a majority (65%) of victims men [57]. Similar results were obtained in Greece [59] and the USA [60]. Apart from the fact that mortality is just one of several possible impacts arising from a disaster, these apparent inconsistencies at European and global level highlight the complexity of the interplay between gender and disaster impacts, and the need for further research to understand this. In addition, Young et al. examining the related field of risk and decision-making, suggest that inconsistent findings may arise since the majority of literature on gender and risk considers biological sex rather than gendered (masculine or feminine) attributes [48].

Material loss

Disasters interrupt business, destroy productive resources and infrastructure, and make the lives of workers harder both during and after the crisis period [61]. In some contexts, it may be relevant to assess material losses linked to lives and livelihoods at the scale of the household or business (as they relate to paid and unpaid work), in addition to damage at larger scales, e.g. to housing and infrastructure.

Well-being disruption

According to Enarson, women's well-being is affected by disasters in four main ways. First of all, their economic security may decrease if productive assets are damaged or destroyed and in the case of becoming sole earners, their household entitlements may decline and/or small-businesses be impacted. Gender stereotypes may limit their work opportunities as well. Secondly, the situation may add to the burden of an existing caregiving role. Thirdly, women's working conditions in the household and paid job could also deteriorate (for example, if child-care services are disrupted). Lastly, in some situations women may take more time to recover from major economic losses than men, being less mobile than male workers and sometimes excluded from government-led financial recovery assistance programmes [61].

Psychological and ontological damage

Disasters can alter the psychological and ontological state of their victims, leading to feelings of displacement, loss and instability. Haney and Gray-Scholz conducted a study to determine the role of gender in experiences of post-disaster ontological security in Canada [62]. The findings indicate that women are more likely to experience disrupted ontological security after a disaster, especially linked to the loss of familiar landmarks or routines, as a result of having stronger emotional and social ties than men to their residential neighbourhood. Since places of cultural heritage significance are often associated with high levels of place attachment, it is relevant to take into account how damage to or loss of a historic site may psychologically impact members of a local community, and how in turn such impacts may be experienced differently among different gender groups.

4.3.4. Service provision

Gender mainstreaming is relevant to the relief services and support provided during disaster response and recovery efforts, both in terms of access to these services and participation in their provision. Gender-based stereotypes abound in this field, with men seen as active ‘heroes’ and women as (passive) carers, or themselves needing care[28]. High level recognition of the role of women as ‘first responders’ in disaster response and recovery (e.g. in the 1979 Convention on the Elimination of all Forms of Discrimination against Women) has done little to change this [63]. In a study on the subject nearly 20 years later, Scanlon found that the emerging picture was one of male-dominated emergency organisations taking action in a society in which women were depicted as unable to cope in the wake of disaster, needing to be supported or managed by men, or left to carry out traditional female roles such as childcare. Men, prompted to join emergency agencies, left the family at home to take on rescue duties and were charged with making decisions about evacuation and relief – often based on inaccurate perceptions of victims’ needs. Today, women remain under-represented as practitioners in the field, making up a minority in rescue teams on the ground and leadership roles, even in regions such as Scandanavia, where significant progress has been made in gender mainstreaming [64].

While in some cases, lack of information, education or engagement with preparedness activities may mean that women do not know how and when to act in case of a disaster [65] other studies suggest that when women are involved in emergency response, casualties are dramatically reduced [66], suggesting that improving gender diversity in DRM – and addressing the barriers to lack of female representation – is a desirable goal. Hemachandra et al. identified ten factors hindering women’s participation in decision-making processes related to disaster risk governance, divided into four main categories (socio-cultural factors, socio-economic factors, individual characteristics, and legal and institutional factors) which are depicted below in Figure 2 [67].

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[28] It is important not to forget that gender goes beyond simple binarism (see Glossary) and so far, much of the work addressing gender in disaster response has been limited to binary genders, leaving aside the role of non-binary or non-conforming groups (i.e.LGBTI) in the picture [44].

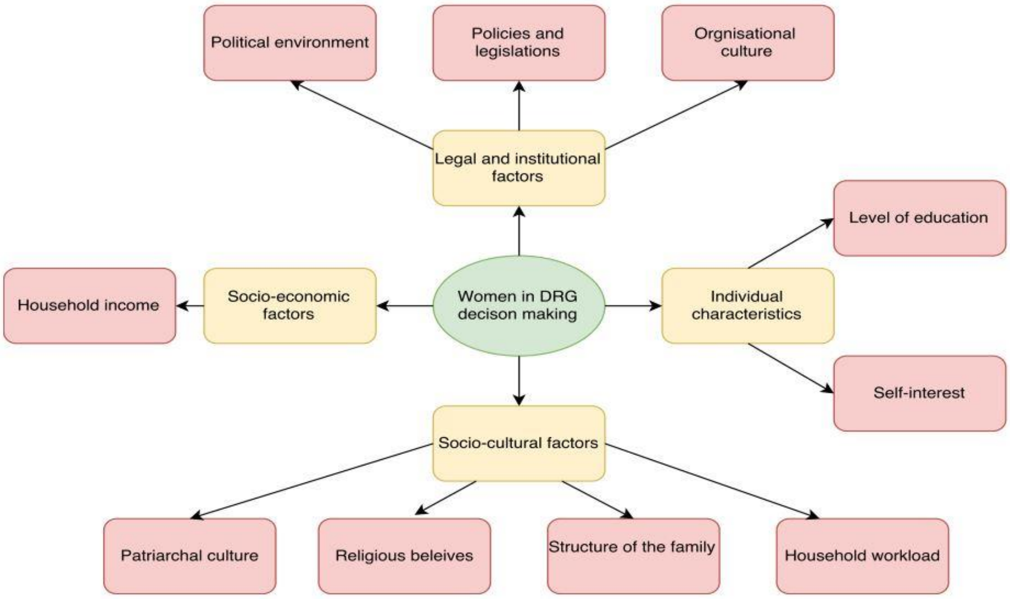
Political environment
Policies and legislations
Orgnisational culture
Legal and institutional factors
Level of education
Household income
Socio-economic factors
Women in DRG decison making
Individual characteristics
Self-interest
Socio-cultural factors
Patriarchal culture
Religious beleives
Structure of the family
Household workload

Figure 2: Factors affecting the role of women in DRM decision-making. Source: [67]**.**

Gender-blindness in service provision may lead to ineffective or inefficient delivery of aid. Examining emergency response and recovery plans during and after bushfires and flooding in Australia, Dominey et al. found that lesbian, gay, bisexual, trans and intersex (LGBTI) people risk exclusion (even if inadvertent) in regard to both participation in service provision and access to services, due to a 'blindness to difference' in policies and practices that vaguely endorses inclusion without defining this concept or making it operational. As they point out:

> *'Equal treatment does not equate with identical treatment, but should instead seek equity, which recognises that not every social group has the same access to social, political and material means, and attempts to redistribute rights and resources in order to provide a "level playing field".' [11]*

This oversight can also affect men, who are frequently reluctant to seek help or may lack sources of informal support through social networks, consequently at risk of failing to receive adequate care – e.g. as evidenced by the over-representation of elderly men in deaths related to heatwaves in the US [68].

Without measures to better assess and deploy gender-specific needs and capacities, emergency response will fail to be as effective and coordinated as needed, limiting the roles of women and men in ways that can reduce the capacity of both for recovery and self-care. In sum, gender-sensitive service provision and gender diversity within planning, decision-making and implementation of response and recovery efforts are likely to result in more effective and efficient processes – in the interest of a more resilient community. Scanlon's observation over two decades remains relevant today:

> *'A shared understanding of the dynamics of gender discrimination at the decision-making level will have benefits for community resilience. Such understanding would include social and structural issues and the complex psychological, financial, and physical challenges that communities and individuals face in disasters.*

> *Leaders at every level of emergency management have influence and therefore, the potential to address aspects of gender equity. In order to shift organisational culture towards a more inclusive and representative model, positive action and decision-making by community leaders and senior management staff is key.'* [69]

4.3.5. Current obstacles and needs for further work

In summary, obstacles to mainstreaming gender in DRM include:

- Lack of awareness that impacts are gendered.
- Lack of quantitative and qualitative data to measure gendered impacts, needs and capacities, and corresponding need to improve the statistical infrastructure to collect and analyse this data beyond project-level [50]. For more on this in relation to RVA, see Box 3 above.
- Gender-blindness in DRM programmes. Key stakeholders in post-disaster reconstruction are not always aware of gendered vulnerabilities and these are typically not monitored in the reconstruction process.
- Lack of capacity within government and other organisations tasked with DRM to undertake gender analysis.
- Persistence of gender stereotypes in the field, limiting the capacity for mainstreaming gender in the active participation in response and recovery.

Needs for further research include [43]:

- Studies that test and validate indicators corresponding to exposure, sensitivity, capacity, vulnerability and risk disaggregated by sex, age, socio-economic status etc.
- Longitudinal studies both across the DRM cycle and sometime after the event to better understand disaster dynamics, long-term impacts and how they are experienced by different genders;
- More research is necessary not just on the experiences and needs of women, but those of other genders including LGBTI in disaster situations [11].

4.3.6. Policies and solutions

- Concepts such as 'vulnerability', 'resilience' and 'community' should be carefully defined in developing disaster risk policies and supporting tools, as a key step towards recognition of their complexity. An adequate definition would explicitly recognise the relevance of power structures that affect the uneven distribution of the costs of disasters and benefits of actions to address them.
- Gender experts should be consulted by adaptation and disaster risk management teams at all levels of government [43].
- The RVA process should allow for disaggregating data according to sex and other factors, making visible those who are marginalized and particularly at-risk, not just

women, but also ethnic minorities, those with chronic disabilities or health problems, etc., as well as identifying women and other social groups who support and care for at-risk individuals.

- The whole DRM cycle should make provision for participation, such that vulnerable groups are represented and empowered to take part (including women and LGBTI people, and organisations representing them).
- Gender mainstreaming in DRM programmes should be monitored and evaluated for success.

Morchain et al. offer additional specific recommendations for designing and conducting gender transformative VAs (RVAs) as follows [47]:

> *Choose a VA methodology with a landscape-wide contextual understanding of vulnerability and the root causes behind it.*
>
> *Include women's organisations, women's groups or leaders within mixed organisations when conducting VAs.*
>
> *Create a non-threatening environment for women to express their views.*
>
> *Be aware of limitations and time constraints.*
>
> *Improve women's access to information and knowledge prior to meetings.*
>
> *Keep men informed and encourage their involvement in women-focused activities.*
>
> *Build the capacity of women to take on specific roles and responsibilities in the VA process.*
>
> *Move beyond gender-disaggregated data. Given that inequality stems from the intersection of different social identities (i.e. gender, status, ethnicity, class, age), it is important to investigate their interaction in order to gain a comprehensive understanding of the underlying causes of women's vulnerability.*

5. Relevance of gender mainstreaming for the ARCH project

A gender perspective offers added value to the ARCH project for reasons that are essentially not much different to those for conducting gender mainstreaming in any other sphere of work. Other benefits are more specific to the project's research focus, specifically on resilience-building at the intersection of cultural heritage management and disaster risk reduction. The key benefits arising from our review are outlined below.

Considering gender supports quality assurance

In the context of urban development policymaking and planning, understanding the different needs and capacities of individuals is a critical step towards making an informed decision. A gender-blind approach fails to acknowledge these differences and is likely to result in decision-making based on inaccurate information. This is of particular relevance to the ARCH project, given that the research team will develop models, methods, tools and datasets to support decision-making.

Resources can be better targeted when population needs are differentiated

Similarly, understanding the needs of different population groups, based on characteristics including gender, can help ensure that resources are targeted more efficiently and effectively to meet these needs [19] [70]. This is a salient point for decision-makers and technical staff working within local government who are increasingly facing resource and capacity constraints – and a key target group for the ARCH project.

An inclusive research design can help make results more relevant, useful and usable

ARCH is an applied research project with an overt interest in research outputs (including tools and methods) being taken up and utilised in practice. An awareness of (and efforts to actively address) the different needs, capacities and perceptions of end users (of all genders) can support the relevance, usefulness and applicability of these outputs to the target group. Further, the team has committed to conduct its research through a process of 'co-creation', based on principles of equality and inclusiveness. These principles cannot be effectively made operational without also committing to gender mainstreaming.

An equitable, cohesive society is a more resilient one

Addressing inequalities in living conditions, access to resources, and participation in decision-making is essential to building social cohesion and reducing social exclusion and conflict. Since socially cohesive communities are more likely to respond better in the event of a disaster or climate hazard (for example, in terms of access to social capital), justice (and as part of that, gender equality) is a valid objective in efforts to build resilience [9] (as discussed earlier at Part 3.1.1).

Further, sites of cultural heritage significance are also important contributors to social cohesion [71], [72], serving to reflect and shape community identity, as well as fostering feelings of attachment and security – all of which can contribute to coping capacity in terms of longer-term recovery from a disaster or extreme weather event [51]. These sites are themselves loaded with values and assumptions that reflect predominant social norms. Recognising the 'gendered' nature of cultural heritage sites (see Part 4.2) can be a factor in supporting a shared community identity that is inclusive, contemporary, and acknowledges a range of perspectives.

6. Conclusion

We set out to explore the relevance of gender in the thematic areas central to the ARCH research project: cultural heritage management, disaster risk management and climate adaptation. Key concepts and definitions have emerged as part of this review, as discussed earlier in Part 3, with a full list in the Glossary. Among the most important of these are the relationship of social justice to these three thematic areas, and the concept of 'gender mainstreaming'. With regard to the ARCH project, gender mainstreaming can be understood as the process of making visible and explicit the concerns of all genders in the research design, implementation, monitoring and evaluation, as well as in the local planning and policy implementation that will be pursued in parallel by the ARCH city partners. This report itself makes a contribution to that process, by sensitising the research team to the relevance of gender in their work areas. The concept of social justice (and its connection to resilience) provides an essential framing for this process, because gender mainstreaming serves the purpose of achieving greater equality between genders. This needs to be understood in the context of improving social justice in general, and as part of a broader recognition that power and access to resources are not evenly distributed to all individuals – with efforts needed to redress this imbalance. Three dimensions of social justice were identified as useful for our analysis of gender mainstreaming, namely recognition, distribution and procedural justice. While our analysis did not explicitly address the contextual and intersectional dimensions of justice, these are nonetheless relevant and could inform future research, including as part of the ARCH project. As Ryder points out, intersecting causes of disadvantage (among them gender) are particularly crucial to understanding experiences of disaster vulnerability, suggesting a need to disaggregate data by multidimensional indicators (e.g. gender, age, race, income) which few studies have managed to date [16]. As a minimum, the three-dimensional analytical framework used for this paper is recommended for use by the ARCH research team for their future work, however efforts to further explore gender's intersections with other elements are encouraged.

Gender mainstreaming by definition is not confined to any single discipline or thematic field, and likewise the literature reviewed highlights challenges relevant to all thematic areas of the ARCH project. With regard to '**recognition'**, it is clear that visibility is key when it comes to gender. This means embarking on research armed with conceptual frameworks and definitions that foreground social justice concerns (among them gender equality), and the differentiated needs and capacities of individuals, particularly those who are marginalised. Concepts however are evidently not in themselves enough, as much of the literature pointed to a lack of guidance in how to make these operational. Some guidance does exist on how to incorporate a gender perspective into specific processes of relevance to the ARCH team, e.g. urban planning, technological development and DRM, and selected resources are listed in an Annex to this document. The research team could also consider making its experience available to future researchers and funding bodies in the form of recommendations or key lessons learnt. Another aspect of visibility is data, with data disaggregated by sex (as well as other characteristics such as age, ethnicity, income level, etc.) being an essential basis[29] on which to make policy decisions that address differentiated needs and capacities. Since research partners will gather data from the four pilot cities, disaggregation should be built into data requests. A more sophisticated disaggregation would consider gender rather than sex, pointing to the need for new instruments and indicators.

Concerning '**distribution'**, for our purposes this primarily concerns the distribution of the costs (i.e. impacts) of climate change and disasters, as well as the benefits of measures taken to address these – and how these are unevenly experienced across communities.

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[29] In fact, sex-disaggregated data should be seen only as a starting point, since disaggregation by gender, which would require more complex indicators and instruments, would enable a more sophisticated analysis of gender-specific elements.

Here, it is important firstly that methodologies developed by the ARCH project to assess risk and vulnerability enable and encourage the collection of disaggregated data at a spatial scale small enough to make explicit differences among populations (e.g. neighbourhood level), and secondly, that approaches planned to reduce disaster risk build in mechanisms to consider how different population groups will benefit. For specific approaches such as ‘adaptation pathways’ it would, for example, be recommended to include consideration of gendered vulnerabilities (including coping/adaptive capacity) into the criteria used to assess and select a particular pathway. In regard to the management of cultural heritage sites, mainstreaming gender could involve collection of disaggregated data on visitors and users, and/or surveys to better understand their needs, as well as developing awareness-raising campaigns that include imagery representative of a range of gender identities and use inclusive language. Redevelopment, refurbishment or adaptive re-use of heritage sites also offer opportunities to address gender inequalities, and planning and design guidelines should be consulted in such cases (e.g. the guide developed by the City of Berlin – see Annex).

The ‘**procedural’** element of justice is an important one in the context of a project that intends to ‘co-create’ tools and solutions to support decision-making, which are intended for use by people beyond the life of the project. This suggests as a minimum that working groups (whether within the research team, or more broadly with stakeholders in each partner city) should be gender diverse, and ideally include periodic input from a gender officer or advisor, where the partner organisations employ such a person – or from an external organisations that represents the interests of women and the LGBTI community. More specifically, people of all genders should have the opportunity to have their voices heard at internal and public meetings and events, which can be partly achieved through effective moderation.

Given that gender mainstreaming in general has been limited to date in most fields, there is equally a lack of evaluation on the outcomes and benefits it has delivered in practice. In addition, there are few studies that investigate gender mainstreaming at the specific thematic intersection that ARCH seeks to explore. On both fronts, it would likely be a valuable and novel contribution to this knowledge gap if the ARCH project succeeds in integrating a gender perspective into its research design and implementation. It would also likely be an important contribution to the practice of ‘co-creation’ in research, as a means of actively addressing the structural imbalances in power that typically persist in diverse research/practice teams.

7. List of Abbreviations

Abbreviation	Meaning
DRM	Disaster risk management
EU	European Union
ICOMOS	International Council on Monuments and Sites
IPCC	Intergovernmental Panel on Climate Change
LGBTI	Lesbian, gay, bisexual, trans and intersex people
RVA	Risk and vulnerability assessment
SDGs	Sustainable Development Goals
UNESCO	United Nations Educational, Scientific and Cultural Organization
WHO	World Health Organisation

8. List of Figures

Figure 1: Conceptual framework for assessing socio-spatial vulnerability and climate disadvantage. 26
Figure 2: Factors affecting the role of women in DRM decision-making. 30

9. List of Boxes

Box 1: Forbidden city map. Bilbao, Spain.. 15
Box 2: Gender mainstreaming in urban planning. Vienna, Austria. 19
Box 3: Women’s History Walks, Nicosia, Cyprus. 22
Box 4: How to develop a gender-sensitive RVA?.. 27

10. Glossary

Cultural heritage: is the legacy of physical artefacts and intangible attributes of a group or society that are inherited from past generations, maintained in the present and bestowed for the benefit of future generations [71].

The term cultural heritage encompasses several main categories of heritage:

- Tangible cultural heritage:
    - movable cultural heritage (paintings, sculptures, coins, manuscripts)
    - immovable cultural heritage (monuments, archaeological sites, and so on)
    - underwater cultural heritage (shipwrecks, underwater ruins and cities)
- Intangible cultural heritage: oral traditions, performing arts, rituals
- Natural heritage: natural sites with cultural aspects such as cultural landscapes, physical, biological or geological formations
- Heritage in the event of armed conflict

Dependant-care infrastructure: Facilities for the care of people with certain degree of dependence, e.g. children, elderly or people with disabilities.

Gender: Gender refers not to our biological sex as male or female, but to our socialisation as either woman or man. Our gender often impacts our behaviour and thus the ways we move around, interact and exist in the city. It is associated with the behavioural expectations established around what it means to be masculine or feminine [19].

Gender refers to the roles, behaviours, activities, attributes and opportunities that any society considers appropriate for girls and boys, and women and men [4].

Gender analysis: The European Commission defines gender analysis as ‘the study of differences in the conditions, needs, participation rates, access to resources and development, control of assets, decision-making powers, etc., between women and men in their assigned gender roles’ [73].

Gender analysis provides the necessary data and information to integrate a gender perspective into policies, programmes and projects. As a starting point for gender mainstreaming, gender analysis identifies the differences between and among women and men in terms of their relative position in society and the distribution of resources, opportunities, constraints and power in a given context. In this way, conducting a gender analysis allows for the development of interventions that address gender inequalities and meet the different needs of women and men [1].

Gender binary (binarism): model referring to the norms derived from the simplistic idea of a dichotomy of two mutually exclusive and biologically defined sexes to whom different roles and behaviour are traditionally ascribed [74].

Gender-blindness: Gender blindness is the failure to recognise that the roles and responsibilities of men/boys and women/girls are given to them in specific social, cultural, economic and political contexts and backgrounds. Projects, programmes, policies and attitudes which are gender blind do not take into account these different roles and diverse needs, maintain the status quo and will not help transform the unequal structure of gender relations [75].

Gender (or sexual) division of labour: The division of labour refers to the way each society divides work among men and women, boys and girls, according to socially-established gender roles or what is considered suitable and valuable for each sex. Within the division of labour, there are several types of roles:

- Productive roles: Activities carried out by men and women in order to produce goods and services either for sale, exchange, or to meet the subsistence needs of the family.
- Reproductive roles: Activities needed to ensure the reproduction of society's labour force. This includes housework like cleaning, cooking, childbearing, rearing, and caring for family members. These tasks are done mostly by women.
- Community managing role: Activities undertaken primarily by women at the community level, as an extension of their reproductive role, to ensure the provision and maintenance of scarce resources of collective consumption such as water, health care and education. This is voluntary unpaid work performed during "free" time.
- Community politics role: Activities undertaken primarily by men at the community level, often within the framework of national politics. This officially recognized leadership role may be paid directly or result in increased power or status.
- Triple role: This refers to the fact that women tend to work longer and more fragmented days than men, as they are usually involved in three different roles: reproductive, productive and community work. [1]

Gender equality: refers to the goal when all human beings, men and women, are free to develop their personal abilities and make choices without the limitations set by stereotypes, rigid gender roles, discrimination and prejudices, when women and men fully enjoy their human rights. It means that the different behaviours, aspirations and needs of women and men are considered, valued and favoured equally [75]. It concerns the equal rights, responsibilities and opportunities of women and men and girls and boys. Equality does not mean that women and men will become the same but that women's and men's rights, responsibilities and opportunities will not depend on whether they are born male or female. Gender equality implies that the interests, needs and priorities of both women and men are taken into consideration, recognizing the diversity of different groups of women and men [1].

Gender equity is the process of being fair to men and women, boys and girls. It refers to differential treatment that is fair and positively addresses a bias or disadvantage that is due to gender roles or norms or differences between the sexes… [taking] into account the different needs of the men and women, cultural barriers and (past) discrimination of the specific group [75].

Gender mainstreaming: Mainstreaming a gender perspective is the process of assessing the implications for women and men of any planned action, including legislation, policies or programmes, in any area and at all levels. It is a strategy for explicitly making the concerns and experiences of women, as well as of men, an integral part of design, implementation, monitoring and evaluation in all political, economic and societal spheres, so that women and men benefit equally, and inequality is not perpetuated [19].

Gender responsive: refers to policies and approaches that entail identifying needed interventions to address gender gaps in sector and government policies, plans and budgets; considering gender norms, roles and relations for women and men and how they affect access to and control over resources; and considering women’s and men’s specific needs, although these nuances are not always clear cut. Changes are planned or made that respond to the inequities in the lives of men or women within a given social setting and aim to remedy these inequities [19].

Gender sensitive: refers to policies and approaches that take into account gender perspectives and assess gender impacts and incorporate them into strategies; policies and approaches consider gender norms, roles and relations but does not address inequality generated by unequal norms, roles or relations. While it indicates gender awareness, no remedial action is developed [19].

Heritage Urban Landscape approach: The Historic Urban Landscape is a sustainable analytical approach for the assessment, conservation and management of urban areas, understood as a historic layering of cultural and natural values, extending beyond the notion of ‘historic centre’ or ‘ensemble’ to include the broader urban context and its geographical setting. This wider context includes the site’s topography, geomorphology and natural features; its built environment, both historic and contemporary; its infrastructures above and below ground; its open spaces and gardens; its land use patterns and spatial organization; its visual relationships with its overall setting; and all other elements of the urban structure. It also includes the social and cultural practices and values, human activities as well as economic processes, the unique characteristics of any one place and the intangible dimensions of heritage as related to diversity and identity, all of which establish the basic role of the city as an agent for communal growth and development” [76].

Heritagisation: refers to the transformation of objects, places and practices into cultural heritage as values are attached to them, essentially describing heritage as a process [33].

Quality gender data: Data that is reliable, valid and representative, free of gender biases, with good coverage (including country coverage and regular country production), and is comparable across countries in terms of concepts, definitions and measures. Quality data should have the features of complexity (meaning that data from different domains in women’s lives can be cross-referenced and cross-tabulated), and granularity (where the data can be disaggregated into smaller units by race and ethnicity, age and geographic location, as well as sex) [77].

Resilience: The capacity of a social ecological system to cope with a hazardous event or disturbance, responding or reorganizing in ways that maintain its essential function, identity, and structure, while also maintaining the capacity for adaptation, learning, and transformation [6]. Building resilience needs to account for: the degree to which the community comes into contact with a hazard capable of causing harm; the amount of inherent susceptibility to harm in that community; and the extent to which people in the community are able to make adjustments in order to avoid negative consequences, taking into account existing imbalances in power distribution in that community and ensuring that neither the impact of the hazard, nor the policies and actions themselves exacerbate existing or create new inequalities across different groups [7].

Sex-disaggregated data: Data is that collected and tabulated separately for men and women. For example, primary school attendance rates for boys vs. girls [77].

Socially just adaptation: a set of policies and actions responding to current climate variability and anticipating the future climate change and its impacts designed to ensure that neither the impact of climate change nor the policies and actions themselves exacerbate existing or create new inequalities across different groups in the urban society [8].

Vulnerability: the structural conditions, including physical, social, cultural, economic and political systems that render people and communities susceptible to the impacts of hazards, and which make it possible for a hazard to become a disaster [49]**.**

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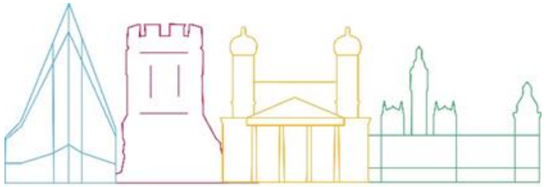
1. Annex A – Key resources

Title / summary of contents	Year	Author	Link
Oxfam's Vulnerability and Risk Assessment (VRA) tool is a guidance package that explicitly aims to jointly identify and analyse root causes of vulnerabilities for distinct social groups and later design programmes and risk reduction initiatives accordingly, ensuring that they are equitable, gender-sensitive and effective. While it originates in a development cooperation context, the guidance on conducting inclusive workshops that seek to identify complex social vulnerabilities, are of broader relevance to researchers seeking to address similar aims.	2016	Daniel Morchain and Frances Kelsey (Oxfam)	https://policy-practice.oxfam.org.uk/our-approach/toolkits-and-guidelines/vulnerability-risk-assessment
Gendered Innovations: Engineering Checklist and Engineering Innovation Processes is intended for researchers, project directors and evaluators, grant writers, and funding organizations addressing the development of technologies and related products, services, infrastructures, or processes. The checklist provides a set of key questions for incorporating sex and gender analyses into engineering—as a basis for developing Gendered Innovations. The guidance on processes offers a framework for incorporating knowledge on sex and gender into the engineering design process. Both are based on the Fraunhofer - project "Discover Gender", which was funded from the German Ministry for Research from 2004-2006.	2011	Stanford University	http://genderedinnovations.stanford.edu/methods/engineering_checklist.html http://genderedinnovations.stanford.edu/methods/innovation.html



Title / summary of contents	Year	Author	Link
Gender mainstreaming made easy This manual contains practical advice and checklists that will make gender mainstreaming within a municipal administration easier. Its aim is to focus municipal employees' attention on the living and working conditions of women and men when planning, budgeting for, implementing and assessing measures.	2011	Förster et al.	https://www.wien.gv.at/menschen/gendermainstreaming/pdf/gender-mainstreaming-made-easy.pdf
Gender Mainstreaming in Urban Development A range of criteria and guidelines for decision-making in gender-sensitive planning at various levels. The first part addresses the similarities and differences between gender mainstreaming and gender planning as employed in the Berlin context. Suggestions regarding the design of planning processes are next, supplemented by criteria for the evaluation of different levels of planning in the urban context. These criteria are intended to stimulate and encourage those involved in the planning process to approach each new project with an eye towards a creative examination of the advantages that gender mainstreaming can provide.	2011	Women's Advisory Committee of the Senate Department for Urban Development in cooperation with Department of General Affairs, Ministry of Urban Development	https://www.stadtentwicklung.berlin.de/soziale_stadt/gender_mainstreaming/download/gender_englisch.pdf
Gender Equality, Heritage and Creativity: This report draws together existing research, policies, case studies and statistics on gender equality and women's empowerment in culture provided by the UN Special Rapporteur in the field of cultural rights, government representatives, international research groups and think-tanks, academia, artists and heritage professionals. It includes recommendations for governments, decision-makers and the international community, within the fields of creativity and heritage.	2014	UNESCO	https://en.unesco.org/news/gender-equality-heritage-and-creativity-now-available-chinese-spanish-english-and-french

Title / summary of contents	Year	Author	Link
Making Disaster Risk Reduction Gender-Sensitive / Policy and Practical Guidelines Policy and practical guidelines for national and local governments to further implement the Hyogo Framework for Action (the predecessor of the Sendai Framework for Disaster Risk Reduction). It includes guidelines on gender-sensitive risk assessment, gender-sensitive early warning systems, and examples of indicators for DRM as a whole.	2009	UNISDR, UNDP and IUCN	https://www.unisdr.org/files/9922_MakingDisasterRiskReductionGenderSe.pdf
Gender and disaster risk reduction in Europe and Central Asia This guide is designed for facilitators and trainers working to incorporate gender perspectives in disaster risk reduction (DRR) programmes and initiatives. It is structured as a series of 4 training modules with guiding questions and worksheets. Although intended for trainers, it may also be useful for self-guided learning on the gendered impacts of disasters, and corresponding indicators. It includes a unit on gender analysis in disaster settings, which may help guide incorporation of a gender perspective in a post-disaster needs assessment. Module 4 deals specifically with indicators and Gender-responsive monitoring in implementing the Sendai Framework for DRR and the SDGs	2018	UNDP, UN WOMEN	https://www.eurasia.undp.org/content/dam/rbec/docs/Gender%20and%20disaster%20risk%20reduction%20in%20Europe%20and%20Central%20Asia%20-%20Workshop%20guide%20(English).pdf