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Integrating gender and social equality into sustainable development research

A guidance note

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Summary

This guidance note supports the integration of gender and social equality (GSE) in qualitative as well as quantitative research, independent of environmental issues, geographical focus and societal levels. It is mainly relevant for achieving GSE-sensitive research – that is, research that integrates GSE where there is not an explicit gender focus. The guidance will help project leaders and researchers to:

- think about how GSE is relevant to their research or, in some cases, to more clearly identify the GSE aspects of ongoing research, and
- integrate GSE concerns into their research, particularly into high-priority initiatives and projects, or identify results that are relevant to GSE and present them.

The guidance introduces the benefits of applying a GSE lens in sustainable development research and presents dimensions that are important for integrating GSE into research. Finally, it provides guidance on how to integrate GSE concerns in the main phases of conducting research. Below is a summary of the main recommendations for doing so:

- Understand that terms like indigenous, non-indigenous, old, young, rich, poor, women, and men do not describe homogeneous groups, i.e. they do not have one-dimensional identities. They have multiple identities that intersect with each other, for example poor, elderly women.
- Distinguish between gender and sex. Gender (i.e. femininity and masculinity) is a social construction, while sex is often referred to as a biological property.
- Do not equate gender with women. Gender relates to social status and analogous power relations between men and women and is therefore as much about men as it is about women.
- Recognise that discursive practices, as well as informal and formal norms and rules, that construct gender and other social identities are context specific.
- Look upon gender, ethnicity, class and other such social identities as embedded in multiple scales of the political economy and in multiples levels and scales of society, not just at the community or household level and scale.
- Strive to include in the research the voices of those groups that are most marginalised. Recognise marginalised groups' agency, include their actions and abilities to shape their own livelihoods and life situations.
- Address power inequalities between researcher and research participants as well as among the participants (as should be done in any research). This is of special importance in the data collection phase but also when interpreting the data and communicating the results.
- Form research teams which reflect diversity in terms of gender, age, educational background, ethnicity as well as other identities relevant to the context.
- Recognise that science is not neutral or value free but full of contextual values and interests.
- Finally, just as for other types of research where topic or method experts are necessary, it may be good to include a GSE resource person or expert (preferably local) in the research team, and to engage relevant partners that are aware of gender and social equality.

A GSE lens helps to unpack the power relations that benefit and provide options and resources for some by harming and restricting options and resources for others.

1. Introduction

This guidance note is one of several outputs of the Stockholm Environment Institute (SEI) Gender and Social Equality (GSE) Programme (see appendix for a brief presentation of the Programme's focus). While an abundance of training manuals and guidance handbooks on gender mainstreaming exist, they are often tools for programming and planning under the directive of gender mainstreaming, and not necessarily research-related. This guidance note should be used as a support for integrating GSE into qualitative as well as quantitative research.[1]

GSE could come into research in two different ways depending on the approach taken. One would be to have GSE issues as the main focus (i.e. "GSE research"). In this case one would collect data or literature on GSE with an explicit focus on how they relate to a certain research topic, such as sustainable lifestyles and consumer behaviour. The second approach would be to look at GSE in parallel with other issues and see whether and how GSE is a part of the data set or documents (i.e. "GSE-sensitive research"). The research could also combine data and literature on a specific topic with other literature and data that explicitly focuses on gender and social equality issues related to that topic.

This guidance note is mainly relevant for GSE-sensitive research, and helps project leaders and researchers to:

- consider in what ways GSE is relevant for their research or, in some cases, to more clearly identify the GSE aspects of on-going research, and
- integrate GSE with their research, particularly into high-priority initiatives and projects, or identify results that are relevant to GSE and can be presented as such.

This section continues by introducing the benefits of applying a GSE lens in sustainable development research, and key concepts and considerations found in the guidance note. The second section, on GSE in environmental contexts, presents dimensions that are important to include when integrating GSE concerns with research. To guide the integration of GSE, the final section is structured according to the main phases of conducting research.

1.1 Why apply a GSE lens?

Sustainable development research needs to consider:

- practices causing environmental, technological, political, and economic changes
- outcomes and impacts from these changes or practices, and
- capacities to respond to them.

A GSE lens helps to unpack the power relations that are "benefiting and providing options and resources for some by harming and restricting options and resources for others" (Weber 2015, p.6) and that cause the above three issues to differ among social groups defined by a combination of, for example, gender, class, ethnicity, and age (Arora-Jonsson 2014). Hence, it is relevant to apply a GSE lens independently of the level of development in the country, region, community, or household that is the focus of the research. Within current research that integrates GSE issues it is not uncommon that the various inequalities are documented, yet without treating the underlying reasons – the structures and processes – that cause the inequalities. The problematisation of the issues therefore often begins with the differences in impacts – for example how climate change or air pollution that affected wheat crops may affect different social groups. At times the division of roles, rights, and resources that cause the differences in impacts are also analysed. But there is a need to go behind these divisions to look at the causal structures and processes that exist at all levels of society, and involve cultural, economic, and political practices at different scales.

Whether the structures and processes are formal or informal they, and the language used to assert the dominant structures and processes (the discursive practices), are not static but are dynamic and

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1   For guidance on how to integrate GSE concerns in model-based research, see Escobar et al. (2017)

constantly transformed through people's interactions. Because rules, norms, and discourses are cultural in nature, they can be changed through social action or transformative efforts. Research can identify practices that produce and reproduce biases, stereotypes, and norms that exclude some groups in society and perpetuate the dominance of others. That knowledge can be used to initiate change.

A central underlying concept in this guidance note is that increasing equality among actors at all levels of society (from household to international) and spheres (such as public, private, academic, and civil society) will empower those who have been discriminated against. In general, sustainable development cannot be achieved without shifting power relations to become more equitable. Unequal power relations lead to unsustainable outcomes, and gender imbalance and unequal voices among groups are part of the problem. Hence, sustainable development research needs to examine social change in addition to searching for technical solutions. This knowledge matters: it informs policy- and decision-making, and makes sectors work more effectively and inclusively, unencumbered by gender norms and unequal power relations that restrict effective, rational planning, benefit-sharing, and implementation by male and female stakeholders.

Key concepts and considerations central to this guidance note are introduced below.

Gender and other social identities are products of power relations

Gender, class, race and ethnicity are social constructions and not biological determined. For example, gender is the social construction of "feminine" and "masculine" identities and behaviour, while sex is the biological differences between women and men. The distinction between social constructions and biology is important since attributing difference in identities and social behaviour to the biology makes the differences unchangeable and inevitable. That is, if they are seen as biological, something people are born with, they cannot be changed. This does not mean that socially constructed differences are less real than biological. They still determine what and how people can act in society, at times even more than biological differences do. These perceived social differences between women and men translate into hierarchies, stratification, unequal social status, unequal distribution of benefits and opportunities, exclusions of specific groups of women or men, and unequal values and importance assigned to feminine and masculine work and activities (Dankelman 2010; Paulson and Gezon 2005; Reeves and Baden 2000).

Social identities are dynamic

Social-ecological relations are embedded in and formed by dynamic cultural, economic, and political structures and processes, which differ according to particular, place-based contexts and change over time. Thus, different social groups have differing roles and responsibilities, and differing access to and control of resources.

Gender is intersectional by nature

Seemingly binary identities, such as women and men or poor and rich, cannot be seen as homogenous. Rather, they are heterogeneous in terms of which gender, ethnicity, class, age, nationality, and a number of other social identities, interact and intersect to create differential positions of privilege and disadvantage (see section 1.2). Economic, cultural, and political contexts, and their specific workings of power, define the intersections of social identities that create inequalities. Hence, gender is part of a broader concept of social (in)equality and power hierarchies.[2] (Bradley 2016; Djoudi et al. 2016; Nightingale 2011). It is often through the recognition of gender inequalities that other social inequalities have come to be recognised.

Gender and social equality are multi-level and multi-scale

Gender and its intersecting identities of ethnicity, class, and other social identities play a role at all levels and scales, from micro (individual and household) to macro (regional, national, and international).

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2   Commonly known as "intersectionality" in the literature, a concept that recognises the role of context and social constructs of gender, and that identities such as women and men are not homogenous (Buckingham-Hatfield 2000; Leach 2007; Nightingale 2006).

Links between and among different societal levels and scales are central to creating and reproducing inequalities within and between societies[3] (Paulson and Gezon 2005).

Gender and social inequality are linked with risks and costs tied to environmental change and use of resources

Inequalities in rights, responsibilities, and resources has led to a pattern of power relations that benefit some while discriminating against others. This is associated with, for example, use and management of sanitation systems, changes in climate, and impacts of pollution as well as capacities to respond. Hence, a more equal society has the potential to reduce poverty, increase capacities of people to implement sustainable practices, and lead to healthier environment.

EXAMPLES OF THE INTERACTION OF GENDER AND OTHER SOCIAL IDENTITIES IN DIFFERENT ENVIRONMENTAL CONTEXTS

Sustainable sanitation: The work of the SEI Initiative on Sustainable Sanitation shows that there are a number of disparities in sanitation access and service levels between and within different groups, including between countries, between rural and urban areas, and between rich and poor. In particular, there are many reasons that improving access to sustainable sanitation is a priority issue for women and girls. For instance, women and girls disproportionately face risks of physical violence and psycho-social stress due to lack of access to safe, nearby sanitation facilities, which can impact work and educational opportunities. Hence, detailed information on gender-based differences in rights, roles, and preferences related to sanitation is needed to help design interventions that respond better to these differences.

Disaster risk: The SEI Initiative on Transforming Development and Disaster Risk (TDDR) understands gender not in binary categories but in terms of how it intersects with class, age, marital status, sexuality, ethnicity, wealth, caste, physical ability, livelihoods, and other social markers. The Initiative examines equality in decision-making in a post-disaster context; how power and equality is refracted through local institutions and livelihoods and how this process defines the resilience of vulnerable local groups or communities; and how the needs and rights of differently abled individuals are considered in interventions. Hence, the TDDR initiative looks at how the interaction of gender with power produces social differences among individuals, groups, or communities and which, in turn, underpin their distinct vulnerabilities to disaster risk.

Consumption and production: There are many dimensions of social equality in consumption and production systems, such as who is producing what and under what conditions; who is consuming and to what extent is there freedom when it comes to choosing what and how to consume; how lifestyles and aspirations are connected to consumption patterns; and how issues of social equality, including gender equality, can be incorporated into efforts to enable more sustainable supply chains across countries and continents.

Behaviour and choice: In 2016–2017 the SEI Initiative on Behaviour and Choice worked on a project that aimed to reduce post-harvest mango losses and increase the income of mango farmers. The initial focus was on strengthening the role of women mango farmers in Kenya. However, the research identified other problems which were more serious than inequality between women and men – a lack of agency for *all* farmers, and the power over farmers held by the private sector. As a result the focus of the analysis switched to equality and access to resources at a broader scale.

Gaps in impact assessments: In a review of corporate impact assessments from 56 concession permit applications on Sami reindeer herding lands, Larsen et al. (2018) found that "reports often entirely missed identifying who would be impacted and emphasis was, in the case information was provided, only on the directly affected Sami community as a collective and reindeer herding defined narrowly as a business activity. This common lack of differentiation of impacts, even to

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3   Scale and level are often used interchangeably and as synonyms (Ahlborg and Nightingale 2012; Gibson et al. 2000; Nightingale 2015). There are, however, good reasons to distinguish between the two. In a GSE context the distinction between scale and level enables analyses of how, for example, national level formal rules affect the scale of access to and control over resources for local-level actors.

winter groups, and missing appreciation of broader Sami land uses and cultural significance, arguably undermines the possibility for robust CEA (Ccumulative Effects Assessments). These gaps are problematic for several reasons, but notably they do not inform permit authorities of how cultural and property rights are affected. At best, statements on cultural impacts were simplistic or ambiguous, evoking notions of the "degradation" of Sami culture prone to perpetuate the colonial objectification and essentializing of the indigenous 'other' (e.g. Smith 2012)." (p. 8)

Coping with drought: Research on drought in a rural community in Nicaragua showed a complex picture of how the interplay among environmental, material, and social factors had led to different coping and adaptive capacities among men and women. Because the culture worked in men's favour, providing them with more resources, they had been able to increase their adaptive capacity, thus reducing their vulnerability. Women, on the other hand, and especially the older female heads of households, had mainly had the capacity to cope with the immediate impacts of the droughts, for example by selling their resources without being able to recover them at a later stage, with an increasing vulnerability as a consequence. Clearly, the groups "women" and "men" were not homogenous. Intersections between gender and characteristics such as age and household structure played an important role. Hence, even if the women in the male-headed households seemed less vulnerable than female heads of households (because they had access to both "male" and "female" resources), they still lacked capacity, because they were not in control of resources that were considered "male" (and sometimes not even over their own resources). As long as male heads of household used their resources for the good of the household, the women had capacity to respond to the drought situation; though they were a lot more dependent on others than the men were for this. Lastly, interpreting what the interviewees said, the younger women and men who had been able to migrate and reduce their exposure to the drought seemed to be less vulnerable than the older men (Segnestam 2014).
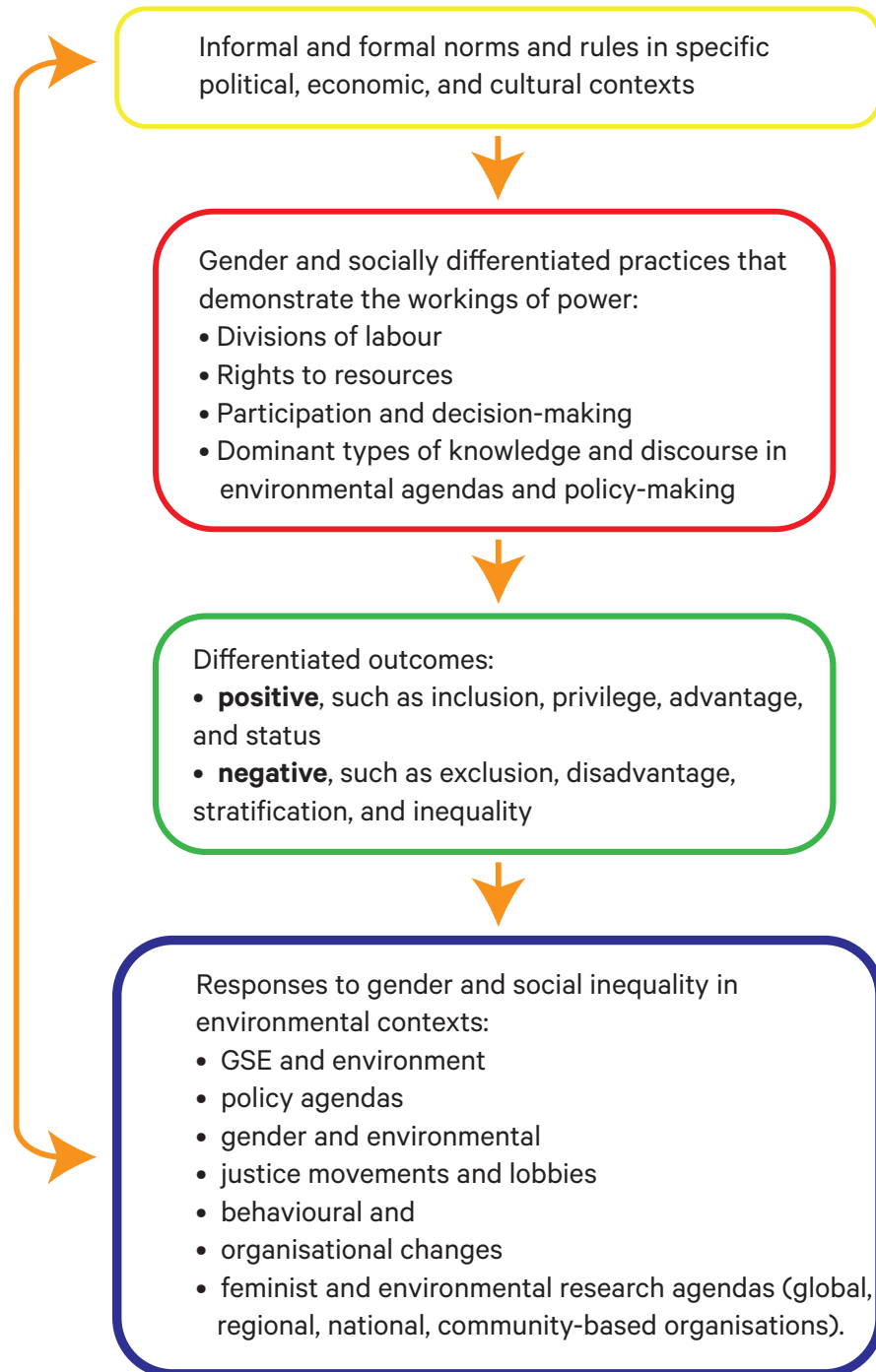
2. Introduction to gender and social equality in sustainable development contexts

Both GSE research and GSE-sensitive research can be found in much of SEI's work, and is not restricted by topic, methods used, or location of the research (see examples throughout this guidance note). Formal and informal rules and norms lead to practices that are gender and socially differentiated and which demonstrate the workings of power. This can have both positive and negative outcomes, as well as lead to different responses to gender and social inequality in environmental contexts (see Figure 1). All of these dimensions are essential for the understanding of hierarchies, power relations, and (in)equality following (feminist) political economy and ecology (see e.g. Browne 2014; Hanson and Buechler 2015; Rocheleau et al. 1996; Tanner and Allouche 2011). They are also likely to be relevant in most research, but each research project needs to individually assess to what extent they are relevant.

Taken together, the different dimensions in Figure 1 can be used to guide an integration of GSE aspects in research projects. Impacts as well as responses are likely to differ as a result of an unequal division of decision-making power. It is the interplay between social structures and processes that deem what is appropriate in a particular society, the division of labour, who has access to and control over what resources, who participates in different decision-making processes, and what knowledges and discourses are dominant. This, in turn, leaves certain social groups with less control over their own situation, and thus with less capacity to implement activities that address inequalities, to reduce impacts of environmental, technological, and economic change, phenomena, or activities, and to respond to these changes. These are factors that need to be considered, not only in research projects based on interviews and other field based qualitative work, but also in document analyses and literature reviews, and in quantitative research. Furthermore, they are relevant independently of the societal level or the level of development in the country, region, community, or household in focus of the project and whether it is researching policy aspects or practices.

Figure 1: GSE in environmental contexts – a framework

Informal and formal norms and rules in specific political, economic, and cultural contexts

Gender and socially differentiated practices that demonstrate the workings of power:
• Divisions of labour
• Rights to resources
• Participation and decision-making
• Dominant types of knowledge and discourse in environmental agendas and policy-making

Differentiated outcomes:
• **positive**, such as inclusion, privilege, advantage, and status
• **negative**, such as exclusion, disadvantage, stratification, and inequality

Responses to gender and social inequality in environmental contexts:
• GSE and environment
• policy agendas
• gender and environmental
• justice movements and lobbies
• behavioural and
• organisational changes
• feminist and environmental research agendas (global, regional, national, community-based organisations).

2.1 Norms and rules causing (in)equality

Both research and practice show that in a given societal and historical context gender is socially constructed by norms and rules that are informal (shared understandings about "dos and don'ts") as well as formal (e.g. laws and property rights.). Moreover, the interactions between different societal levels cause global, regional, or national structures and processes to "shape, enable, and limit the opportunities and constraints" (Thomas-Slayter et al. 1996, p.296), that occur at different levels and scales.

Norms and rules guide human interaction and the behaviour of organisations, groups, and individuals in society, and thus construct gender and other social power hierarchies, discriminating some social groups while privileging others (see Box 1 for examples).

The values, beliefs, and practices of social groups will also play a role in how actors at different levels of society cause, are affected by, and respond to environmental, environmental, technological, and economic change. For example, the stereotypes that are commonly used to describe men (such as confident, independent, and forceful) compared to women (such as nurturing, kind, and responsive) implicate that different tasks are more suitable for men and others for women. Social actions and speech furthermore have material implications. Obviously, this is not unique for genderised structures and processes but is equally relevant in relation to other social identities, such as ethnicity, class, and age and their intersections. Stereotypes related to different social identities are shaped by the dominant groups in society, which have more power and capacity to make themselves heard in different contexts.

EXAMPLES OF HOW STRUCTURES AND PROCESSES INFLUENCE GENDER AND SOCIAL EQUALITY

Gender and climate change: In her analysis of gender and climate change in Nicaragua, Segnestam (2017) found that norms that govern household roles have remained largely unchanged, although some change has occurred with younger generations. The interviewees had a clear perception of the role of tradition in the gendered division of labour: "Look, it is the culture. The grandmother taught it to the daughter, to the granddaughter, that she had to be there and so she was raised. In that way you will control the culture and you will uphold it and you will pass it on" (Jorge, May 14, 2008). Still, just as in the case of Muñoz Boudet et al. (2013), there were signs among the younger generation that the traditional division of labour was beginning to be replaced by other arrangements as some daughters of interviewees had moved to urban areas or abroad. At the same time, the migration of the daughters had strengthened the gender division of labour since the older women were taking care of the children of those who had migrated, further reducing their own capacity to diversify their livelihood.

Just transitions: The SEI Initiative on Fossil Fuels and Climate Change developed the "just transition" concept to focus attention on the needs of those who rely on fossil fuels for their livelihoods and who may be unfairly burdened by a green energy transition. There is a relative lack of analysis of the extent to which proposed just transition policies consider the disparate needs of distinct groups within extraction-dependent communities, even though these groups will inevitably have different levels of status, economic resources, and power. Most notably, because women are under-represented in the fossil fuel extraction industry, they may be overlooked in just transition programmes, raising several questions, such as: might programmes reinforce existing gender inequalities by transferring existing imbalances from one industry to another? (Acha 2015). Do policies such as worker-retraining initiatives favour younger over older workers? Where are the opportunities to modify or expand the just transitions concept to empower groups currently underrepresented in the fossil fuel workforce and society more broadly? (Nelson and Kuriakose 2017; Pearl-Martinez and Stephens 2016). These questions highlight the need to examine just transition policies through the lens of gender and social equality, recognising the intersectional dynamics in communities that depend on fossil-fuel extraction to ensure that the transition is inclusive and truly equitable.

2.2 Division of labour

While the division of labour differs according to context, often women's roles and responsibilities are assumed to be reproductive activities within the private sphere, and men's to be productive activities within the public sphere (Bari 1998, p.126; Enarson and Morrow 1998. See also Box 2). This means that at least part of women's labour is often unpaid and perhaps overlooked in decision-making (e.g. policies on how to allocate climate finance), further limiting their options and choices. Moreover, paid work in the public sphere is commonly structured by gender due to conceptions of gender differences.

The division of labour influences who has control over and access to resources. For example, a person whose main tasks are performed within the household is likely to have less control over and access to money. This may, in turn, affect opportunities to access credit. The division of labour also leads to differences in health outcomes: those who do heavy manual labour, for example, are at risk of specific

kinds of injury or illness. Furthermore, the division of labour, or assumptions about labour, influence people's access to different social networks and decision-making processes, including environmental agendas and policy-making.

Mobility is also a central issue in the context of behaviour and work. People have greater opportunities when they are able to move to other locations, and among and within domestic and public spheres, between societal levels, among decision-making processes, and between livelihoods. Mobility is in some contexts socially differentiated (Parker et al. 2016; Valenzuela and Rangel 2004). For example, a relative lack of education restricts opportunities for elderly people to seek jobs, disabled people may experience restrictions in accessing transport, and women may not be able to choose livelihoods outside of the domestic sphere because of socially perceived responsibilities for the care of children, elderly, and the ill.

EXAMPLES OF CONSEQUENCES OF A DIFFERENTIATED DIVISION OF LABOUR

Water, sanitation and hygiene

To "leave no one behind" is a stated aim of the Sustainable Development Goals. Achieving this aim in the WASH (water, and sanitation and hygiene) sector requires understanding the needs of marginalised individuals and groups, which itself requires understanding users' different experiences of water and sanitation users, even when they live in the same household (Van Houweling et al. 2012). Women and men have different and dynamic gender roles associated with WASH due to social norms and varying access to power and assets. In many countries, for instance, the task of collecting water for household use is largely carried out by women, but they often have less say, both within the household and in communities, in deciding how to prioritise the uses and quality of these resources (Caruso et al. 2015). WASH-related gender roles may also intersect with other social differences (e.g. religious or socio-economic) to generate larger risks for some individuals. The WASH gender gap has negative implications for individuals, and for society as a whole due to unrealised economic productivity, threats to health and wellbeing, and degradation of ecosystems. (Obani and Gupta 2016)

Forestry

Gender issues in forestry are persistent at all levels, e.g. in national and de-centralised governing bodies; in policies on tenure, deforestation, and timber value chains; in communities; and in households affected by patriarchal norms. Women are often disadvantaged within forest product supply chains because they lack access to and control over forest resources as well as access to forestry decision-making processes. This means that men often capture economic opportunities within the supply chain and that women's needs in forestry management are overlooked. Women's and men's roles in forestry have traditionally been quite divided, with women tending to work with household activities such as collecting fuelwood and gathering non-timber-forest-products and men in cash-related activities such as timber production. Forestry is often perceived to be a male domain and women's roles are poorly understood, which results in a lack of supportive policies (see for instance Guarascio et al. 2013). This division has big impacts when sustainability initiatives, such as the Forest Stewardship Council (FSC), are implemented. While FSC-certification brings with it new opportunities for rubber producers, if gender issues in rubber production are not adequately understood there is a risk that it can increase gender gaps in terms of access to resources, economic opportunities, and forestry decision-making. Despite social and gender equality currently being promoted within FSC (FSC International 2016), gender issues within the forest product supply chain continue to be largely overlooked in implementation, for instance in Thailand (Interview with Agri-Forestry Project Manager WWF-Thailand 2017). Furthermore, men are more likely to capture the benefits as they are more often targeted as the main producers. At the same time, demand for FSC-certified rubber wood is rising in Thailand. (FSC_APAC 2017) For these reasons, the SEI Initiative on Producer to Consumer Sustainability has developed a research project that seeks to understand: 1) gender issues and underlying norms and structures in rubber production; 2) benefits and challenges in FSC systems perceived by different rubber grower groups characterised by gender, ethnicity and certified-growers; and 3) structural drivers of inequality within the FSC certification in Thailand.

2.3 Access to and control over resources

Access to and control over resources are frequently unequal, "often mediated by social identity or membership in a community or group, including groupings by age, gender, ethnicity, religion, status, profession, place of birth, common education, or other attributes that constitute social identity" (Ribot and Peluso 2003, pp.170–71) See box 3 for examples.

It is just as necessary to analyse who controls resources as how they are distributed, otherwise decision-making power is disregarded. If one has access to a resource, it is not necessarily the case that one also has the power to decide about its use. In addition to resource access and control being differentiated between and within social groups, they are also (as is the case with structures and processes) specific to time and place.

Different resources are relevant to different actors (e.g. governments, NGOs, households, and individuals) as well as different levels and scales. Unlike more traditional views and definitions of poverty that mainly focus on financial capital, the sustainable livelihoods framework (used in various studies of vulnerability, livelihoods, and rural development (Adger 2003; DFID 2000; Ellis 2000; Knutsson and Ostwald 2006; Scoones 1998)) introduces five categories of capital:[4]

Natural capital – the quality and quantity of such natural resources as land, water, soils, forests, livestock, crops, and biodiversity.

Human capital – people and their skills that can contribute to a reduction in poverty, including the number of employees, level of education and skills, personal health as well as family size and household structure (head(s) and members of the household).

Social capital – assets such as trust and reciprocity that can enable mobilisation of resources. It is created through the participation in organisations and networks, formal as well as informal. Networks are often discussed in terms of bonding – networks within a defined socio-economic group that may be based on family kinship, class, gender, ethnicity, and locality, and bridging – networks with ties that are external to the group (see e.g. Narayan (1999)).[5]

Financial capital – the budgets, incomes, savings, remittances, formal credit, and informal loans that actors have access to.

Physical capital – assets such as infrastructure (e.g. buildings, water systems, roads), machinery, equipment, and other physical possessions, such as bicycles, clothes, TVs, and furniture, which can be transformed into other assets and capitals through sales or exchange.

The access to and control over resources affect the ability to achieve change in one's own situation, in the specific economic, cultural, political, and environmental context, and in the structures and processes constructing inequalities. For example, if you have access to knowledge (human capital) through participation in decision-making processes at various levels and contexts you have a greater ability to influence the prevalent discursive practices and thus to potentially reduce inequalities.

In contrast, if you do not have access to authorities (a lack of bridging social capital) you do not have the capacity to influence decisions, what decision-makers take into account, or what information is used as a basis for the decisions. This is relevant from the household level to the international level (e.g. the situation a poor country may find themselves in in certain international contexts). In the case of policies, assumptions on the access to and control over different resources has an impact on the contents and impacts of the policy. Prevailing gender beliefs thereby frame the decisions and actions of actors at different levels and contexts.

Definitions of access and control

"Access to resources is defined as the opportunity to make use of a resource."

"Control over resources is the power to decide how a resource is used, and who has access to it."

Source: BRACED (2016, p.1)

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4   The capitals are viewed as "bundles of resources that are not directly interchangeable, but are linked and interact in various ways." (Carson and Peterson 2016, p.167)
5   Pierre Bourdieu (2002) discusses how a person's access to social capital depends on the rules and norms of society as well as the inheritance of potential social connections. As such it can produce inequalities. This guidance note argues that the same reasoning is relevant for all of five forms of capital.

EXAMPLES OF DIFFERENTIATED ACCESS TO AND CONTROL OVER RESOURCES

In a diagnostic of gender in Nicaragua's rural economy, María Olimpia Torres C. (2008) identifies gender gaps in the access to and control of productive resources, gaps that were a barrier to productivity and to increasing rural women's incomes. The diagnostic states that the access to productive resources determines the potential to contribute to economic development as well as to participate in and benefit from it. Women's lack of access to three resources stand out in the analysis. First, they have limited access to land, and more than 90% of those reported as decision-makers on the farms are men (p. 14). Second, the lack of access to land affects access to credit (those that have the least access to credit are rural women on the Caribbean coast, which shows why it is important to understand how other factors, such as livelihood and location). Finally, the author identifies the insufficient coverage of technology and technological services that, which, when they do exist, tend to serve the demands and needs of men rather than rural women.

The Arctic Resilience Report 2016 (Carson and Peterson 2016) uses a framework consisting of seven types of capital to examine adaptive capacity in the Arctic context: natural capital, social capital, human capital, infrastructure, financial capital, knowledge assets and cultural capital. The report presents definitions of the different capitals and discusses how access to the them, separately and in interaction with the other capitals, can strengthen the adaptive capacity among Arctic communities. Ethnicity is central to the issues discussed considering the presence and knowledge but also the under-representation of Indigenous Peoples in various contexts. But gender is also highlighted in the context of decision-making, participation, gendered violence, and in relation to the need for gender-disaggregate data. This is corroborated in a follow-up to the Arctic Human Development Report focusing on Arctic social indicators, which highlights the importance of intersecting social identities such as age, gender, and ethnicity identifies the lack of disaggregate data as a major concern.

2.4 Participation and decision-making

In the last decades, development planners have repeatedly called for the participation of excluded groups in decision making, which has been met with increased efforts to engage even in non-traditional fields like environmental governance. According to Agarwal (2001) participation is usually characterised by five types of involvement, as follows:

- *Nominal* participation is membership or presence by default
- *Passive* participation is attending to listen and be informed of decisions without speaking up
- *Consultative* participation is to be asked about a specific matter without influencing power
- *Active* participation is expressing opinions or taking initiatives, and
- *Empowered* participation is having influence over decisions.

Many of these categories overlap and are in reality not clear-cut. They indicate possible degrees of influence.

The literature on participatory processes show that, when not properly implemented, they can reinforce pre-existing gender and social inequalities, by assuming viewpoints of powerful, often more vocal, subgroups as the norm. As such, existing inequalities can become reproduced rather than transformed.

The participation of groups that previously have been excluded may reveal problems in actively engaging them to participate at local as well as higher scales of engagement. Calls for or even requirements to participate may not always be beneficial, and an equal number of, for example, women present in a certain context does not necessarily lead to influence. While the rhetoric around marginalised groups' participation appears effective, the realities of gaining legitimate agency are complex due to significant social and cultural barriers. Without first understanding and then challenging embedded assumptions about gender and other social constructs and power, participatory processes at best fall short, and at worst further embed existing inequalities. Thus, in examining participation and stakeholder involvement, it may be useful to identify and understand the overt and covert gender and social power conditions at play,

for example stratifications, hierarchies, and unequal relations (see examples in Box 4). This is more useful than counting women under the name of 'gender balance or parity' since an equal number of women as men does not necessarily mean that they both have the same voice and power to participate and influence.

EXAMPLES OF PARTICIPATION AND DECISION-MAKING

The SEI Initiative on Behaviour and Choice deliberately focuses on power structures within the community and household and how these impact individual and household behaviour change. Its current work focuses on women's scope for decision-making in the household and in the community. The research is designed to investigate power dynamics, for example, ensuring interview guides include a section on women's financial autonomy and decision-making scope within the families and communities. Methods are combined to address what can be sensitive issues (e.g. women's roles, responsibilities, fears, dreams, and aspirations) using one-on-one interviews in combination with "field workshops", which can involve mini-focus groups centring on a shared experience of activity and behavioural games designed to understand a complex problem in a playful way.

In 2012 SEI ran an initiative in Hökarängen, a suburb of Stockholm, to increase the resource efficiency of the local community. Its objective was to develop, test, and demonstrate ways in which various forms of cooperation between property owners, residents and others can work together to reduce energy and other resource use in a residential area. The project did lead to greater cohesion and sustainable behaviour in the community. In addition, as a result of an increase in energy efficiency, heat consumption in the involved properties was reduced by 32% on average. The final report of the project states that the project points to the importance of common places to meet and platforms that reinforce social interaction in order to be able to affect attitudes and behaviours toward sustainability. The report concludes that common places to meet enable people to learn from and be inspired by each other – "If we are seen and do things together our willingness to do 'right' increases" (p. 94; translation from Swedish). (Axelsson et al. 2015)

In its 2017 Annual Report SEI presents its work on the Sustainable Development Goals (SDGs). It discusses the role of participation in relation to SDG 5 on gender equality in relation to water issues:

"Water scarcity is likely to become an even bigger problem in the coming years, as climate change interacts with the region's already volatile climate. That's why organisations, like our research partner WaterAid, are working with communities and local authorities in the region to devise long-term adaptation plans."

These plans could alleviate much of the pressure on women. But they could also perpetuate existing inequalities and risks, if they do not take into account the different ways men and women experience and cope with water scarcity. In particular, if men and women are to have an equitable future, it is vital that women are given an equal say in the planning process." (SEI 2018, p.30)

2.5 Dominant types of knowledge and discourse

Another dimension to consider is the role of power in the creation of knowledge, and where knowledge later serves to control or organise social affairs as it becomes a discourse, or a "claim to (authoritative) truth". The study of environmental policies, for example, is an arena where knowledge is discursive especially when particular agendas are taken as the norm. In many policy texts, nature is often represented as a natural unruly force "out there" (Taylor 2015). This framing of nature therefore requires its unruliness to be tamed or "fixed", and solutions offered are often technical and managerial, which may mask more human and historical political economic factors that cumulatively cause nature's unruly behaviour. Knowledge or expert communities consolidate to push forward unified agendas. Disasters are therefore framed as "natural" and, as a result, can be "managed", or "mitigated" through technical means, in ways that are de-politicised,

masculinised, and scientised (MacGregor 2010; Tschakert 2012). This is an example of how specific forms of knowledge can attain power and exclude other ways of knowing, other knowers and professionals, including gender professionals. Policy-making, as a knowledge arena, is therefore contested.

Below are examples of SEI research that employs methods related to discourses in two different environmental contexts – climate finance and production systems among smallholders in Indonesia.

EXAMPLES OF KNOWLEDGE AND DISCOURSE RESEARCH

Research on how Sweden's bilateral climate finance considers gender equality is being carried out under the SEI Initiative on Global Finance. It is conducting a critical discourse analysis on a subsample of Sweden's bilateral climate finance to different countries against the backdrop of Sweden's self-proclaimed feminist foreign policy, and it is relevant to funders because there is research showing that climate finance is more efficient when it integrates gender equality concerns. The project looks at the following research questions:

– To what extent does Sweden's bilateral climate finance integrate gender perspectives in their project implementation?
– Of those interventions that do integrate gender aspects, how do they conceptualise and express the gender perspectives and what do they say on evaluating, following up and measuring the outcomes and effects of the finance?
– What implications do the ways in which gender issues are integrated in climate finance have for the target groups of the finance – that is women, men, boys and girls (and other genders)?

To understand perspectives on sustainability and climate risk among smallholders in Indonesia, the SEI Initiative on Producer to Consumer Sustainability focuses on bringing the views of smallholders into discourses around sustainability standards and certification, and climate risk management. Data will be gathered through semi-structured interviews with oil palm smallholders, and analysed to disaggregate the perspectives of women smallholders and explore ways to assess their capacity to assert their views on these issues. The potential to assess the capacity of women smallholders to assert their views in public sphere will also be explored, as well as platforms where women can do so.

3. When and how to integrate GSE into sustainable development research

This section is structured after the main phases of conducting research: defining objectives and research questions, collecting and analysing data, and presenting the results.

To implement GSE-sensitive research it is advisable and sometimes necessary to have an interdisciplinary research team involving someone with experience in GSE research. Both the research team and the participants should reflect the diversity of the context. Taking the example of gender, if more women than men are interested participating in the project it is better to analyse why that occurs than strive for a 50/50 representation of women and men. Such an analysis could, in itself, reveal important GSE aspects.

GSE concerns could come into the analysis in two different ways depending on the approach taken – to have them as the main focus ('GSE research') or to look at them in parallel to other aspects and see whether and how GSE concerns are part of the data set or documents (to achieve 'GSE sensitive research'). The questions and guidelines presented in this section are possible to use as support in both approaches.

3.1 Defining research objectives and questions that integrate GSE concerns

Because research objectives, questions, and hypotheses drive the entire research process, and direct the researcher to particular types of data set, methods of data collection, and sources of data collection, as well as guide the analysis of findings, it is essential to consider GSE issues at the earliest stages of the research process. In order to assess where and how GSE issues are relevant it is helpful to:

1.   Ask who the stakeholders are, who will benefit from the research, and who might be excluded by it. In literature reviews and policy analyses this needs to be assessed based on the content of the documents.
2.   Review previous research and existing literature on the given thematic area of research and consult key informants to explore the following questions:
    a.   What is the current state of knowledge on GSE related to the research theme?
    b.   Is there research or other activities that take GSE into account in the research areas? If there is, what GSE issues have been identified as relevant? What methods are used?
    c.   Do rules and norms, whether they are formal (e.g. national and international laws and regulations) or informal (e.g. traditions, social expectations, and values) discriminate against some social group?
    d.   What does the division of labour look like? Are different social groups performing, or assumed to perform, distinctive tasks and responsibilities? Are they performed in different spheres (domestic/ private or public)?
    e.   Is access to resources equal in terms of the type, quantity, and quality of resources? Is the power to make decisions over the resources equally distributed?
    f.   Is participation in decision-making processes at different levels and scales – from local to international – equal? Are gender and social power conditions (overt as well as covert) examined or are GSE issues mainly included in terms of head counts (e.g. women, elderly and poor)?
    g.   How are different types of discourse and knowledge shaped by power relations and dynamics relevant to the place and time?
    h.   If GSE concerns are shown to be relevant, what implications does this have for the research objectives, questions, and hypotheses? What research questions would lead to more robust research designs and methods?
3.   Ensure that the research proposal explicitly explains how GSE concerns will be integrated.

3.2 Collecting and analysing data

Including different social groups
Methods for collecting data should involve different genders, ethnicities, and ages (see section 1.2 for examples). For example, different social groups should be included when conducting interviews, focus groups, participatory mapping and questionnaires, and results need to be documented for different social groups. Literature and policy reviews should also take GSE into account.

Table 1. Example of selection of interviewees with a combination of different social identities

	Indigenous interviewees		Non-indigenous interviewees	
	Elderly*	Adult**	Elderly	Adult
Women				
Men				

*65- years old
**18-64 years old

Not all social identities will be relevant for all research projects. Neither are there any general rules to identify which social identities that should be included in a specific project. In qualitative research, whether field-based or not, an open, more inductive process can be used, beginning by selecting a number of social identities based on previous research, secondary data, and consultations with key informants. For example,

Table 1 shows social identities, identified through a review of relevant literature, that could be relevant in a project on socially differentiated vulnerability to climate change. If other social identities appear as data collection and analysis progress, the selection of interviewees, focus group participants, and documents can be adjusted. In a survey that is designed using existing theory and existing research, it may be more difficult to be as flexible. To avoid defining the social identities too narrowly in advance, a survey could include a variety of questions and/or indicators that combined can shed light on how different social identities come into play (e.g. questions on gender, age, marital status, level of education, and ownership of various resources). In quantitative research based on secondary data it may be easier to approach the data in a similar way to qualitative research, i.e. to begin collecting and analysing data on a number of social identities, and to adjust the approach if other social identities emerge as relevant.

A similar approach can be taken when selecting participants for implementing qualitative and quantitative research. A choice can be made between selecting a homogenous group of interviewees or respondents (e.g. only women between 35 and 45 that have a university degree in social sciences) or a heterogeneous group of interviewees or respondents (only one or a couple of identities are common while the others differ among participants; e.g. men with a rural livelihood of different ages and different ethnicity). This choice may be especially important for focus groups or workshops because participants will have to relate to each other to a greater extent, so when choosing the composition of a focus group it is important to take power hierarchies into account. Power hierarchies can affect group dynamics in various ways, and increase the risk that some participants will feel uncomfortable expressing their views and perceptions. Often it is better to hold separate focus groups with women and men since women may feel less free to speak their mind in the company of men. This is relevant also in the case of individual interviews. Tomlinson and Baruch (2013, p.3) include a number of questions that are meant as support for "intersectional presentations". These questions are presented below in revised form to help guide the work of identifying social identities in a given project.

- What are the specific identities that overlap or intersect to make people vulnerable to the environmental challenges you are researching?
- Who are the people most affected by the issue you are researching? Are there subgroups and identities within this larger group that have gone unnoticed?
- Who are the people or groups with power and privilege? Have these changed over time? Which groups or identity categories are newly affected?
- Which people, groups and issues have historically been left out of discussions of the research? Why? How would they benefit from recognising their shared or overlapping concerns?

Are there any groups of people in your research area who are undercounted (or not counted), or whose culture and way of life are rejected and negated by the mainstream society? Who are they? What are their multiple identities – gender, ethnicity, race, sexual orientation, religious or faith tradition, national origin, citizenship status, or economic and social status? Have you accounted for them in your research? Have you made space in your project for the possible existence of such groups, even if you are not aware they exist at the outset?

In face-to-face research (e.g. interviews, focus groups and surveys conducted in person) the social identities of researchers should also be considered. In some contexts, less educated interviewees may feel uncomfortable in the company of highly educated researchers. Such situations may be reinforced by the language researchers use, and his or her attitude while interviewing. Similarly, women may feel more comfortable talking to women researchers than men, and men more comfortable speaking to men researchers. Comfort and trust do not only apply to who is present in the interview, but also to where and when the interview takes place. Usually it is more rewarding from a research perspective to conduct an interview in the context that is the focus of the research: if one is interested in sanitation within households, for example, one would most likely get more information by conducting the interview in the home of the interviewee, since it enables observation. On the other hand, people might well be uncomfortable letting foreign strangers into their homes. It is also important – for the research participant as well as for the research – to be respectful of other tasks the interviewees, respondents, and focus group participants are responsible for. If there is stress around not being able to perform their tasks it may affect the research process.

Posing questions to enable GSE sensitive research

Social identities should not only be considered in the composition of research participants, however. It is of equal importance that questions are posed to enable GSE sensitive analyses. This means, for instance, that "who questions" (e.g. "Who acts as early warmers of floods in your community?" and "Who do you think suffers the most in times of flood?" (Shrestha et al. 2016, pp.54 & 56)) in interviews as well as in surveys,should be possible to answer using a combination of different social identities (e.g. in a research project on WASH aspects gender, age (children, adults, elderly), and geographical location could be included). "Why" questions could also be included to capture discriminating rules and norms as well as the links to behaviour, division of labour, and access to and control over resources. An example can be found in a survey questionnaire used by Shrestha et al. (2016, p.57): "According to you, why are there less women as caretakers/ technicians in the flood early warning system? (Dig further into the social, cultural and institutional set up and barriers for women to participate in such careers)."

The following questions (adapted from BRACED 2016, p.3) are examples that can be used to explore social equality concerns in cases where a researcher is face-to-face with an interviewee, focus group participant, or survey respondent. Each question should be revised for applicability in the given context and project. Note that they are kept open in order to be able to capture all possible relevant social identities (as opposed to a closed question such as "Do women and men have the same access to resources?") (BRACED 2016, p.3).

- Who does what?
- If there are differences in tasks, why do you think these differences exist?
- Who has access to what resources?
- Who makes the decisions on how to use the resources? What types of resources are decided on by some and not by others?
- If there are differences in access and decision-making, why do you think these differences exist?
- What are the implications of these differences?
- Are there any negative outcomes for those who cannot make decisions about resources?
- Are there any negative implications for those who have to make all the decisions about resources?
- Who participates in decision-making processes? What types of processes are not equally accessible?
- If there are differences in participation, why do you think these differences exist?
- Can these differences have an impact on the capacity of individuals, families, and communities to prepare for and recover from environmental, technological or economic changes and shocks?
- Do these differences have an impact on participation in decision-making?
- How would your life be different if decision-making power was shared equally among family members?

With some revision, these questions could be used in a macro analysis, for example a comparison between countries of the distribution of support for climate mitigation. In such cases, the questions would mainly be used in the data analysis (e.g. in the analysis of the underlying assumptions behind the distribution of support) and perhaps not as much in the collection of data. Finally, the questions could be revised to include more detail and posed alongside a number of alternative responses in the case of surveys.

Similarly, the questions could be revised to be useful in a document analysis, but would have to be read from the perspective of what the documents "express", such as "What is said about who has access to what resources?". The World Bank (2013, pp.7–10), in a document on how to integrate gender in its Poverty and Social Impact Analysis, includes questions about analyses of policy change. While the questions focus on policy reform, they could also be used in policy analyses by replacing the reform with the analysed policies (e.g. "What are the consequences of occupational segregation for the impacts of policy X?"). Similarly, the focus can be changed from "men" and "women" to other social identities or intersecting social identities. The World Bank questions are as follows:

- What are the consequences of occupational segregation for the impacts of the reform?
- Do women and men have the same skills in the reformed sector, especially if they face more competition in the labor market after the reform?
- Are men or women constrained in any way from taking advantage of the benefits of the reform that accrue through employment, such as constraints from household responsibilities, lack of access to

resources, limited role in decision making, or others?

- Do men and women have different consumption patterns because of differences in their priorities, needs, and available substitutes?
- Does a price change [induced by a policy reform] of a good or service have an impact on household members other than the male head (e.g., female members, children, elderly) in terms of time use, household work, and access to health and education, among others?
- Are vulnerable households, including female-headed households, dependent on access to the goods and services affected by the reform?
- Will the reform change men's and women's access to infrastructure facilities and natural resources and how may these changes affect gender relations?
- Does the reform facilitate or impede women's access, ownership, and control over assets?
- Does constrained control over assets prohibit women from benefiting from the reform?
- Does the reform affect assets that are disproportionately owned and accessed by women?

When analysing collected data, GSE aspects need to be included among the other codes or categories, and sub-categories, that are used (e.g. social identities explicitly included in the policies, explicitly identified in structures and processes that construct social identities, and differences recognised in access to and control over central resources). A discourse analysis of the data could depart either from GSE concerns ("What is the discourse on GSE in relation to topic x?") or from a particular topic ("What is the discourse on topic x?"). Then one can analyse what consequences a discourse has for gender and social equality – how does it affect informal and formal norms and rules, division of labour, access to and control over resources, and participation and decision-making? In this way the discourse analysis examines how people, through speech and practice, construct their social world.

3.3 Presenting the results

This guidance note outlines two ways of integrating GSE concerns with research (see section 1). These two approaches are also relevant for presenting GSE results from research. First, the relations between GSE concerns and a research topic, such as just transitions away from fossil fuels, would be the explicit focus and the GSE aspects would be central presenting the results. Second, a research topic is the main objective of the investigation. In this case, GSE aspects could be presented in parallel to other aspects that have been looked at.

In order to avoid inequality in presenting the results one should ensure that not only the voice of those at 'the top', those who are participating, and those who have the power to speak up is represented. This may entail that the presentation of the results includes those whose voices were 'silent' in the research, i.e. those who for some reasons did not participate or were not allowed to speak up and contribute with their view, their perceptions, and their knowledges.

The different inequalities regarding the GSE aspects (Figure 1) should be reported. To what extent this is done has to be decided upon by the researcher(s) and their collaborators. However, to show that the topics that are researched are not possible to generalise and that findings are more nuanced when a GSE lens is applied as part of the project illustrates how research can be made not only more equitable but also be of better quality and more relevant to policy or other contexts.

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Appendix: The SEI Gender and Social Equality Programme

The Gender and Social Equality (GSE) Programme aims to address gender and social equality knowledge and policy gaps in order to inform and innovate sustainable development policy.

Specifically, the GSE Programme consists of work packages that:

Mainstream gender and social equality issues within SEI's projects, themes, initiatives, and operations to strengthen SEI's internal capacity for GSE-sensitive research for policy wherever possible.

Provide opportunities for new research projects with a GSE lens.

Consolidate findings and insights in order to communicate them to relevant stakeholders, boundary partners, and change agents to enable solutions for empowerment and transformative governance.

The figure below shows the structure of the programme.
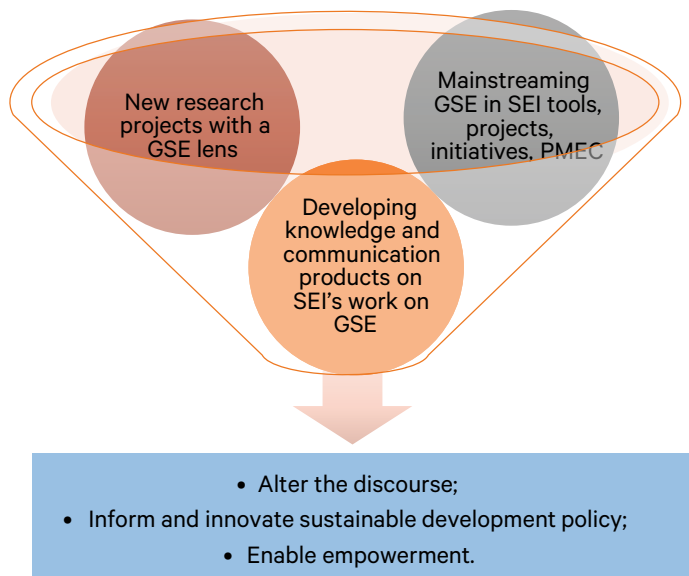
These three functions of the GSE Programme are to be closely integrated. *New research projects* developed with a GSE lens will inform and in turn reflect the approaches and procedures developed for *mainstreaming* GSE in SEI research and methods. *Communications and knowledge-sharing* will be built into all activities, to foster dialogue within SEI and with our boundary partners, and to ensure that our work reaches all concerned and is relevant to policy-makers and other stakeholders. Ultimately, this will help establish a strong and shared discourse at SEI that is gender- and socially inclusive, and advance SEI as an organisation with strong and well-communicated capacity in integrating GSE in its activities.

See www.sei.org/projects-and-tools/projects/gender-social-equality for more information on the GSE Programme.

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