

## **GENDER IN ZEF**

### **A report on gender-sensitive research at ZEF**

Dr. Dennis L. Avilés Irahola  
ZEF Senior Researcher

#### **Content**

- I. Introduction
- II. Gender in research
- III. Gender-related statistics at ZEF
- IV. Advances on gender-sensitive research
  - Previous Work
  - The ZEF Gender Group
  - The ethical clearance and the Security Check
- V. Current gender-inclusive research
- VI. Challenges and work ahead

January 2022

**ACKNOWLEDGMENTS.** *I would like to express my gratitude,*

*To the ZEF Directors, PD. Dr. Eva Youkhana, Prof. Dr. Christian Borgemeister, Prof. Dr. Matin Qaim, and Prof. Dr. Joachim von Braun for supporting the writing of this report all along and for their comments to the final drafts,*

*To Dr. Gunther Manske, former BIGS-DR Academic Coordinator, for his contribution to this report by providing his comments to early drafts and for his valuable ready-to-go statistic tables and figures, To Dr. Silke Tönsjost Academic Coordinator of BIGS-DR, for enriching the report with her comments and experience,*

*To Alma van der Veen and Yesim Pacal at the ZEF Public Relations office, Anja Köhler at the IT support office and Volker Merx at the ZEF library for their constant support,*

*To the ZEF Gender Group members for supporting the accomplishment of the “Gender in ZEF” workshop of May 2021.*

# **GENDER IN ZEF**

## **A report on gender-sensitive research at ZEF**

### **I. Introduction**

This report is a first attempt to systematically analyse the state of the art of gender-sensitive research at ZEF. Far from being an exhaustive study —let alone an evaluation— this is a report based on literature review, questionnaires, interviews, discussions with the ZEF gender group and, above all, on what was learned during the “Gender in ZEF: sharing concepts and insights in development research” workshop (May 27<sup>th</sup> and 28<sup>th</sup> 2021). The workshop had the general objective of promoting gender-sensitive research among ZEF staff by exchanging and systematizing experiences, tools and methodological approaches on the integration of gender dimensions in research projects and doctoral theses. The two days’ workshop constituted a space for senior and junior researchers from the three ZEF departments to present and discuss concepts and methods around gender in the research cycle and to reflect on the gaps and needs to advance towards a more committed and rigorous criteria of gender equality in research.

The aim of the report is to contribute to the ZEF’s goal for 2021 to 2030: the transformation of ZEF into a center for advanced transdisciplinary research on global sustainability development. The ZEF Strategy 2021–2030 highlights the importance of identifying and anticipating inequality and dependencies, as well as designing approaches to eliminate social and political exclusion, lack of equitable opportunity and various forms of discrimination, including gender discrimination, in low income and emerging economy countries. ZEF plans to draw on its considerable experience gained over the last 10 to 15 years in innovative research methodologies, and impact orientation in several areas, including gender. This necessitates, among others, engagement with critical debates on development, postcolonial approaches, and gender and intersectionality concerns.

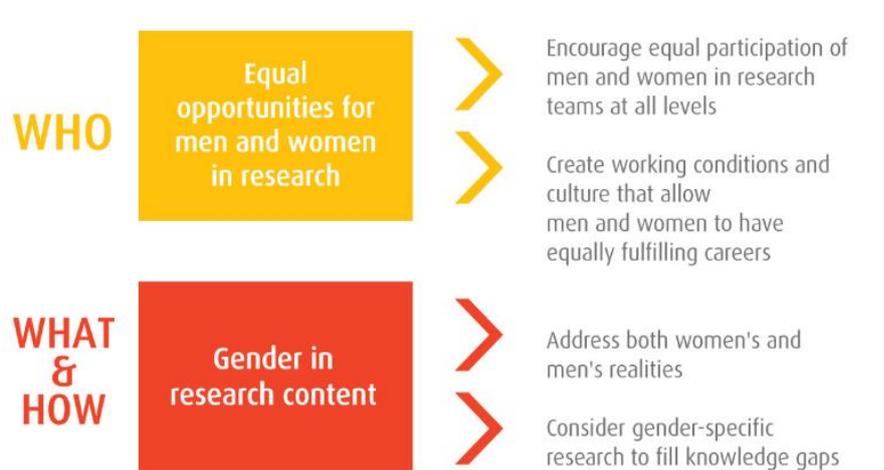
In this report, gender “refers to the attitudes, feelings and behaviors that a given culture associates with a person’s biological sex” (APA 2012). This association refers to a gender assignation of ‘male’ or ‘female’ to individuals, according to ideal standards of femininity or masculinity. These ideals respond to what is known as ‘gender-normative’, because it conforms with cultural expectations of binary genders. The report doesn’t dive into gender identities, which goes beyond the binary assignation of genders. Gender identities refer to “one’s sense of oneself as male, female, or transgender” (APA 2006). When one’s gender identity and biological sex are not congruent, the individual may identify as transsexual or as another transgender category (cf. Gainor 2000).” Neither ZEF nor the University of Bonn as a whole collects data on a greater gender diversity other than the categories “male-female”. Another example is the application system in DAAD, whose application form registers only “male” or “female” categories. Therefore, this report considers only the socially constructed concept of gender in its binary concept and it differentiates it from the concept of sex which specifically “refers to a person’s biological status and is typically categorized as male, female or intersex. There are a number of indicators of biological sex, including sex chromosomes, gonads, internal reproductive organs and external genitalia” (APA, 2012). Although statistical figures and graphs are commonly based on one person’s sex, as is the case in this report, they are relevant to make gender inequalities visible (UNDP 2014).

The following section, Section II, highlights the problematisation and implications of gender inequality in research. Section III illustrates gender-related statistics on the distribution of male and female researchers, applicants and students and the distributions of publications and drop-outs of students at ZEF. Section IV shows the most relevant programs and publications in terms of gender inclusion at ZEF between 2015 and 2021, the work of the ZEF gender group and ZEF procedures strengthening gender focus in research. Section V reflects on-going gender-inclusive research (as of May 2021) and section VI finalizes this report by providing some conclusions and summarizing recommendations emerged from Senior and Junior researchers through different channels.

## II. Gender in Research

The widespread and increasing acknowledgement of gender persistent inequalities in research and science has recently produced a large number of academic studies and analyses. A great share of them focusses on women’s underrepresentation in research -particularly within science, technology, engineering, and mathematics (STEM)-, while others focus on the integration of gender analysis in research processes. This distinction responds to the need of a different kind, and quite longstanding, approach to i) gender in the workplace and ii) gender in organizations’ outputs. These two spaces are not rigid or unrelated partitions; moreover, a strategy for gender equality in a research organisation includes both fostering equality in scientific careers and decision making and promoting gender-sensitive research (e.g. EIGE, 2016b). However, the distinction of two realms (women’s participation in research and gender dimensions of the research topic) allows for the diagnosis and identification of different mechanisms to bring about change.

*Figure 1: Gender in Research*



Source: European Union, 2011.

### Gender stereotypes and women’s underrepresentation in academia

The gender unequal representation in formal academic and research organisations is explained by several authors by pervasive gender stereotypes that facilitates discriminatory practices against women, either explicit and open or, most often, subtle and hidden (Casad, B. et al., 2021; EIGE, 2016). According to the European Institute for Gender Equality (EIGE,

2017), gender stereotypes refer to a cultural and socially constructed set of beliefs about what it means to be female or male; therefore, a gender stereotype occurs when a person is expected to enact a series of norms or behaviours based on their sex. The repercussions of deep-rooted gender stereotypes in academia range from gender segregation in the labour market to a challenging and unwelcoming working environment (EIGE, 2016a & 2017). Women enjoy lower support networks, are less likely to obtain research grants and are underrepresented among leading positions in research organisations. Across European countries a common trend is a lower proportion of female applicants in practically all funding systems and most disciplines (EIGE, 2016a).

Particularly in Europe and the USA, several studies and implementation of equality policies confirmed that “it is not simply a matter of waiting for female tertiary graduates to make their way through the system. Gaps and barriers persist throughout the scientific research system.” (UNESCO, 2015, pg. 98). Some of these barriers that reduce the proportion of women at each stage of a scientific career were identified as: the male dominant culture of the graduate-level environment; the maternal wall/glass ceiling; performance evaluation criteria; the lack of recognition; lack of support for leadership bids; and unconscious gender bias (ibid).

From an intersectional gender perspective, categories such as income levels and disabilities cross paths with gender inequalities marking new and simultaneous forms of discrimination in academia around the world (de los Reyes, 2017; EIGE, 2019 UN Women, 2018). Latin American researchers discuss the category of ethnicity and colonial legacies in academic spaces as additional factors for research centres being not only masculine, but also exclusionary by ethnicity (see for example, Lanz Vargas, K.; Espinoza B. & Goetschel, y Suárez, 2014). Other authors, particularly in African and Asian settings, focus on the importance of culture and religion in shaping not only underrepresentation of women in academy but also hostile environments for women in high-level education (Tang, 2019; Banerjee, S. & Ghosh, N. 2018; Rwafa, U., 2016).

Table 1 shows examples of the minority representation of women in academia around the world. They reveal, at least, very complex factors coming together to explain women’s underrepresentation, rather than on only factor such as the country’s income level. However, as mentioned above and confirmed by the UNESCO in 2015, gaps and barriers persist throughout the scientific research system and at the transition from master’s to PhD level, as women climb the rungs of the career ladder, a number of women are ‘lost’ to science (see Figure 2).

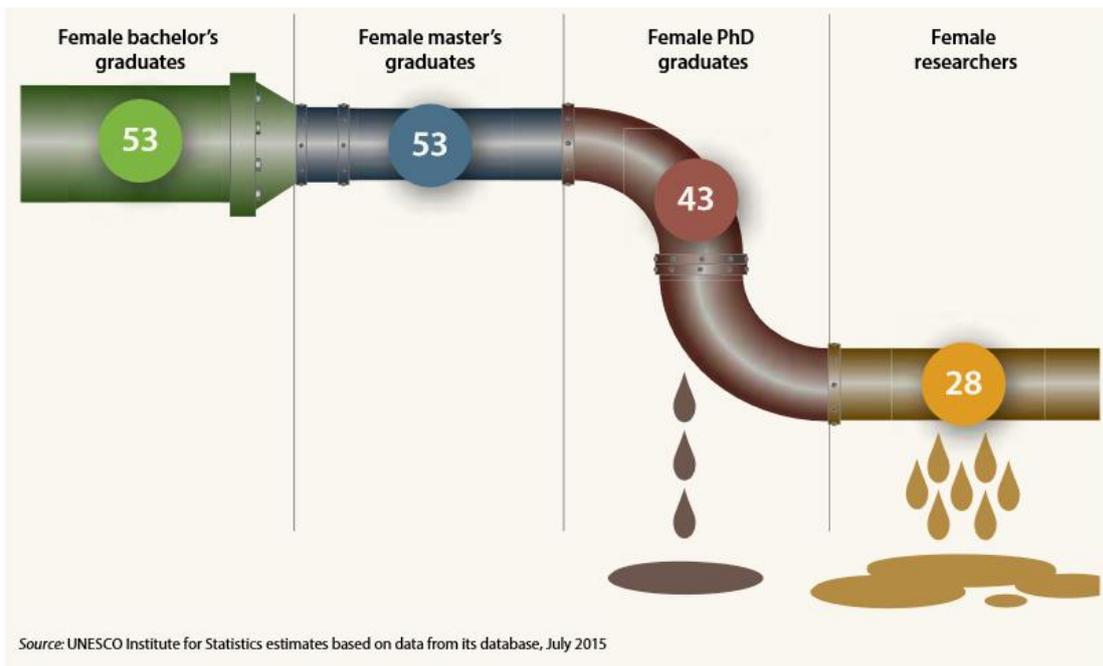
*Table 1: Academic staff (%female)*

Country	Most recent year	Most recent value	Region	Most recent year	Most recent value
Afghanistan	2018	13	Arab World	2019	39
Albania	2019	57	Euro area	2019	41
Argentina	2009	49	East Asia & Pacific	2013	40
Bangladesh	2019	27	Latin America & Caribbean	2019	42
Belgium	2018	48	Middle East & North Africa	2019	37
Botswana	2019	43	South Asia	2019	41
Brazil	2018	46	World	2019	43
Burkina Faso	2019	9			
Colombia	2018	38			
Cuba	2018	59			
Germany	2018	40			
Ghana	2019	23			
Kazakhstan	2019	66			
Kenya	2017	33			
Lebanon	2014	48			
Namibia	2017	44			
Norway	2018	46			
Peru	2017	33	By income	Most recent year	Most recent value
Russian Federation	2018	62	High	2019	42
Turkey	2018	44	Low&middle	2019	44
United States	2017	50	Low	2016	19
			Lower middle	2019	42
			Middle	2019	45
			Upper middle	2019	46

Extracted from: UNESCO Institute for Statistics ([uis.unesco.org](https://uis.unesco.org)). Data as of September 2020. <https://data.worldbank.org/indicator/SE.TER.TCHR.FE.ZS>

In a historical comparison of gender inequality in scientific career across countries and disciplines Huang et al. (2019) highlights the effect of publishing career lengths and dropout rates on male-female differences in productivity and impact. In a more general context, a data from Oxfam, cited by Shreeves & Prpic (2020) shows that “42 % of women of working age are inactive because of their responsibility for caregiving, compared to just 6 % of men, worldwide. There is also evidence that women's earnings are negatively affected when they have children, in comparison to fathers and mothers without dependent children, leading to a 'motherhood pay gap' that increases in line with the number of children, or periods of leave. Jobs in research and innovation, which are driving the transformation towards the 'knowledge economy', continue to be male-dominated”. There is evidence that academic system losing women to different factors, particularly to responsibilities on unpaid care, has cumulative impacts that tend to perpetuate the cycle of lower retention and advancement of female academics (Huang et al. 2019; Tang, 2019).

*Figure 2: The leaky pipeline: share of women in higher education and research, 2013 (%)*



Source: UNESCO Science Report. Towards 2030. (2015).

At the University of Bonn, the Equal Opportunities office (<https://www.gleichstellung.uni-bonn.de/de/chancengleichheit>) supports gender equality measures and, most specifically, it supports “early-career female scientists and the increase in the proportion of female professors, the development and implementation of targeted measures to reconcile research, studies, work and family life as well as increasing the number of female students in STEM subjects form focal points of the work at the University of Bonn.”<sup>1</sup> Recently, the University also opened an Equal Opportunities and Diversity Unit to support and advise the Rectorate in the “development of concepts and strategies to promote equal opportunities and diversity, supports and networks organizational units, academics and staff of the University of Bonn in the planning and implementation of activities in the field of equal opportunities, identifies good practice measures, ensures their transfer and contributes to the establishment of an organizational culture characterized by mutual appreciation and recognition.”<sup>2</sup> Both of the above mentioned offices concentrate their efforts on a more equal and diverse opportunities in the work place and organizational culture within the Uni-Bonn. Therefore, the efforts put in this report do not intend to delve into the field of gender equality at the work place but, instead, it focuses on the current state of gender-sensitive research at ZEF.

However, the opportunities and diversity at the work place go hand in hand with the outputs delivered by a research organization; therefore, the framework provided above as well as the information on ZEF composition of staff, students and other associate researchers (Section III) is relevant to situate ZEF in numbers and, moreover, to understand potential limitations in understanding specific challenges faced by female researchers in development research.

<sup>1</sup> [https://www.gleichstellung.uni-bonn.de/en/equal-opportunity?set\\_language=en](https://www.gleichstellung.uni-bonn.de/en/equal-opportunity?set_language=en)

<sup>2</sup> <https://www.chancengerechtigkeit.uni-bonn.de/en>

## Gender-sensitive development research

Many decades have passed since Esther Boserup published her ground-breaking book “Women’ role in Economic Development” (1971), influencing the declaration of the UN Decade for Women (1976–1985). Through her work, she showed that “women have always been an important component in the practice of agriculture beyond the corporate–commercial farming systems of the world, but their consideration was missing in economic theory and development practice of the time” (Turner & Fischer-Kowalski, 2010, 21964). In this way, she did not only set the foundations of the Women in Development (WID) perspective, but also the bases for strong analytical standards for engaging the multiple realities of gender studies (idem). Later on, critics to WID coming from the Women and Development (WAD) and Gender and Development (GAD) perspectives would transfer the focus of analysis to the considerations of social structures and men-women power relations in society, respectively. In time, the inclusion of women and gender in the research agenda evolved from analysing women’s productive roles in specific cultural contexts and how to include them in a modernising development project (WID), to the understanding of women’s exploitation in the world economic system (WAD) to the examination of social constructions of gender identities and roles and their implications to development goals (GAD).

These decades-long and overlapping processes were marked by an interweaved and close — and often conflictive relationship—, between the development global agenda and women’s, gender and feminist studies and movements. The implications for research priorities were manifold. The three most relevant international players since the end of the second world war —the World Bank, International Monetary Fund and the United Nations- centered their focus on socio-economic justice and public accountability in the 1970s; reduction of the national policy space and the implementation of structural adjustment programmes in many countries with cuts of social expenditures during the 1980s; and the advancement of the neoliberal economic paradigm and environmental crisis during the 1990s (Sen, 2018). Meanwhile, women and feminist movements around the world pointed out the negative effects of global and national economic policies on women and on gender relations at international scenarios in Rio (1992), Vienna (1993), Cairo (1994), Beijing (1995) and Copenhagen (1995), among others. Researchers contributed to both sides of the spectrum, for example, by supporting economic paradigms that ignored care<sup>3</sup> work performed by women and the overweight of poverty on women (feminisation of poverty), and, on the other side to the visibilization of gender, ethnic and other inequalities within the financial globalization of the time and the influence of religion and other conservative forces (ibid). The body of studies and statistical data collection initiated during the UN Decade for Women, fed women’s protests and proposals and, at the beginning of the 1990s, female academics were already part of women’s and feminist movements who influenced development and research agendas in every major international conference.

A point of inflexion in research, policy and practice was the Beijing declaration and platform for action emerged from the Fourth World Conference on Women (1995). Not only the declaration acknowledged that equality, development and peace for all women everywhere is in the

---

<sup>3</sup> Care refers to the provision of personal, face-to-face services to meet the physical and emotional needs that allow a person to function at a socially acceptable level of capability, comfort and safety.<sup>2</sup> Caregiving is complemented by the daily domestic tasks of cooking, cleaning and laundering that provide its necessary preconditions. (UN Women n/d).

interest of all humanity, it also made explicit that women are diverse as are their roles and circumstances, both claims long made by women's' movements from the global South. Additionally, it reaffirmed the participants' commitment to equal rights and inherent human dignity of women and men, confirming the need to work with and for both genders. The consequent determinations and platform for action included 12 "critical areas of concern", covering poverty, health, education and training, armed conflict, economy, power and decision-making, human rights, institutional mechanisms, media, the environment and the girl child. Systematic collection and analysis of gender-disaggregated data was essential to implement actions and to generate evidence-based policies at national and global level. Data and studies on the 12 areas multiplied allowing, in 2020, for a comprehensive review of the implementation of the platform for action. The resulting report, 25 years after Beijing:

"A review of the UN system's support for the implementation of the Platform for Action from 2014-2019 (25 years after Beijing), provides a comprehensive analysis of responses to the survey from 46 UN entities as well as contributions from five additional entities"<sup>4</sup>. (IANWGE, 2020).

The Beijing + 25 reported patchy advances in achieving gender equality both globally and regionally, informing of too little or slow progress in many key areas, such as political representation, pay gap, and peace and security (GIWPS, 2020). This result goes hand in hand with backlashes reported against gender equality globally since the turn of the century (Sen, 2018; Prpic. M. et al., 2019; Juhász, B., Pap, Enikő, & European Parliament, 2018).

The Beijing Platform for Action was also the first document formally citing the concepts of "gender mainstreaming" and the "mainstreaming of a gender perspective" or gender dimensions<sup>5</sup>. Gender mainstreaming was adopted as a strategic approach for achieving gender equality and women's empowerment at all levels of development. It includes the assessment of the implications for women and men of any planned action, including legislation, policies or programmes, in all areas and at all levels. It is also a strategy for making women's as well as men's concerns and experiences an integral dimension of the design, implementation, monitoring and evaluation of policies and programmes in all political, economic and societal spheres (ECOSOC, 1997).

In spite of enormous and widespread gender disparities, the Millennium Development Goals (MDG) set only one target under its Goal 3 Promote Gender Equality and Empower Women: "To eliminate gender disparity in primary and secondary education preferably by 2005, and in all levels of education no later than 2015." In the UN Sustainable Development Goals (SDG) agreed on 2015, gender equality is included in different goals through specific targets and it stands alone in Goal 5. Twenty-four of the SDG targets address gender issues in an explicit manner. This stems in part from the (sometimes difficult) lessons learned over decades from developmental programs, which lead to the recognition that sustainable development cannot be achieved without gender equality. Women's movements, feminist contributions and academic research, have all contributed to a greater awareness and understanding of the role of gender inequalities in keeping individuals and societies subordinated and impoverished. The 2030 agenda, however has been criticised for keeping its focus on economic growth, which is

---

<sup>4</sup> DCO, DPPA, IOM, UNFCCC and UNIDIR

<sup>5</sup> The concept of "gender mainstreaming" was first proposed during the Third World Conference on Women (Nairobi, Kenya, 1985).

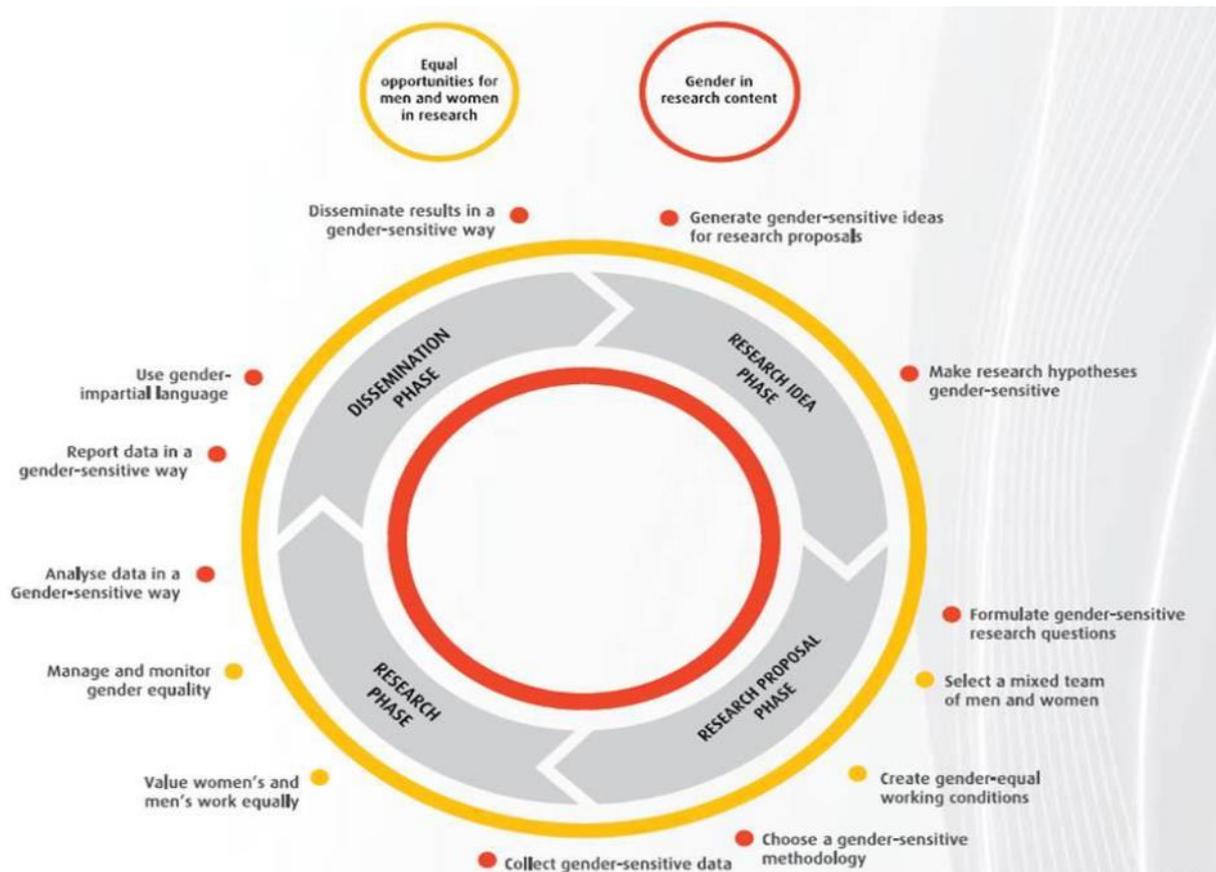
currently ignores unpaid female care work and the externalisation of natural resources exploitation, as well as for felling short in unveiling how women and men experience differently, for example, deprivation and risk due to lack of opportunities and vulnerability.

In academia “Gender awareness has become integral to disciplinary fields as diverse as history, literature, science, sociology and economics, as well as emerging as a field of studies, which goes much further than the mainstreaming of gender.” (Woodward & Woodward, 2015, 2). In development research, gender-based power asymmetries explain multiple global and local development poor outcomes, from migration processes, the distribution of aid, climate change adaptation and poverty reduction, to name a few. However, through its critique of the ideals of objectivity, rationality, neutrality and universality, the feminist epistemology and the social sciences have shown that the production of knowledge is not a given, objective, observer-observed relation, but a more complex process shaped by culture and unequal power relations (Blazquez Graf, 2010; Mergaert & Lombardo, 2014; Sprague, 2016). Sprague (2016) affirms that research is organized and conducted through relationships between researchers and the researched, among researchers, and between researchers and other members of society and that researchers are often relatively powerful vis-à-vis those they study. Citing Wolf (1996), the same author mentions that feminists identified three ways in which researchers have power: over the process of research and how their relationship is constructed in it; over how the findings are interpreted and represented to others and; finally, researchers often have more social power than those who they study, because of their relatively privileged positions in social structures of inequality. This power is exercised, for example in the researchers’ decisions about what to study, how to study it, how to make sense of what they find, and what to do with their findings, creating “limits on what is available for others to propagate” (idem, 65).

In this line, research that follow ideals of objectivity, rationality, neutrality and universality came under criticisms, particularly quantitative methods. They rely on “facts”, ignoring the relationships pointed above that, in the end, determine what it is measured, under which assumptions and the (im)possibility to know reality without subjective interpretations. In development research, this implies that male and female researchers look at the world from their own ‘social location’, unaware of the way their own belief systems affect their research design, implementation and communication. Worth mentioning is that, from decolonial theories and feminist academics, this awareness goes hand in hand with a critical view to the way knowledge is constructed and to the premise that there is only one valid epistemic tradition from which to achieve a universal truth (Curiel, O. 2007; Grosfoquel, 2011; Torrado & Fischetti, 2017). That implies research that values local knowledge(s) in a non-hierarchical conversation and the understanding of historical constructions of subordinated positions.

In sum, being aware that “Gender is a primary marker of social and economic stratification and, as a result, of exclusion” (UNDP, 2010), calls for strategic planned research. This will not only avoid the deepening of gender inequalities through the reinforcement of gender stereotypes and hierarchies, but will result on more relevant results and the potential to bring about change. Gender-sensitive research always considers, explicitly or not, the social division by gender and analyses the implications of gender hierarchies. Furthermore, and also as a key contribution from feminist scholars, it recognises that gender, in interaction with many other categories such as race, ethnicity, class, age and sexual preference, is a central organiser of social life.

Figure 3: The gender-sensitive research cycle



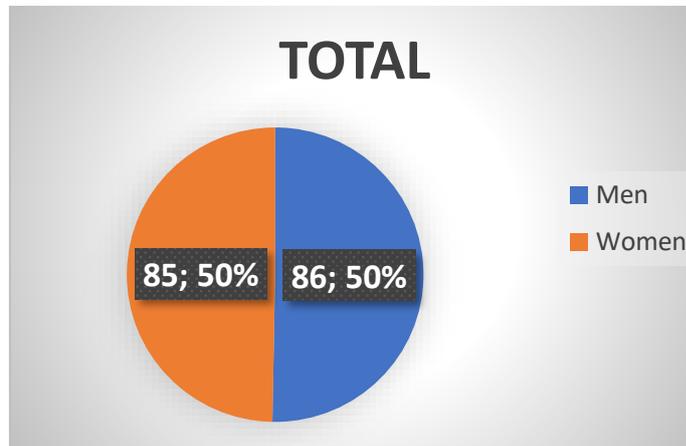
Source: European Union, 2011.

As showed in the figure above, “(G)ender sensitive research is not research on women or on gender relationships; it is research that takes into account gender as a significant variable in environmental and development studies” (Leduc, 2009, 1). By now, there is a large body of studies and methodologies on how to conduct gender-sensitive research produced in research centres and development agencies alike. The main premise is that women are contributors to development processes and development itself impacts, and is impacted by, women and men in different ways (INSTRAW, n/d). As outlined by Leduc (2009) engendering research does not change the scope of the research; but rather, it provides new perspectives, raises new questions, and uses new analysis tools to create a more complete picture of the problem. The need to invest in gender-sensitive research in areas such as health, agriculture, food systems, and the impact of climate change, among others is widespread to fill the critical evidence gaps and to inform policies for sustainable transformation of socio-economic systems (LEAD-CGIAR, 2021; Israel & Sachs, 2013).

### III. GENDER-RELATED STATISTICS AT ZEF

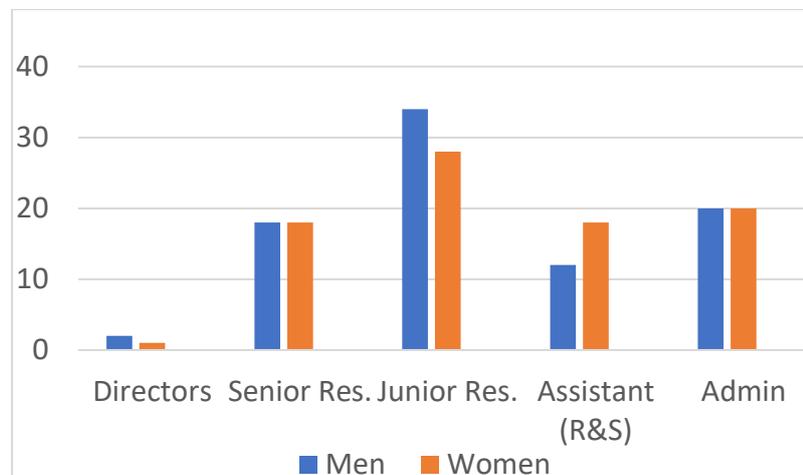
This chapter provides an overview of the share of women and men in different ZEF's academic groups.

*Figure 4: ZEF - distribution of staff by sex (2021)*



Source: Own elaboration based on ZEF web page, accessed 14th of May, 2021

*Figure 5: Position of staff at ZEF by sex*



Source: Own elaboration based on ZEF web page, accessed 14<sup>th</sup> May, 2021

Figures 4 and 5 show a relative gender-parity in all positions at ZEF. However, Figure 6 shows an important gap among Senior Fellows as male ones outnumber females in a relation of almost four-to-one. A combination of factors can be related to this gap. First, the visibility and availability of female senior scientists is lower as their male counterparts, as women accounted for less than a third (29,3%) of those employed in research and development across the world in 2016 (UNESCO, 2019). This percentage is even lower in areas of science, technology, engineering and mathematics (STEM). Second, as the EIGE (2019b) reports, professional relations and partnerships established predominately among male scientists in academia are wider and stronger. Finally, unconscious biases play a role in the assessment and evaluation

of people in academia as well as in other social structures (idem). “Senior Fellows are internationally renowned and experienced scientists who are interested and involved in ZEF’s research and development agenda” (ZEF WebPage); therefore, ZEF will need to support women at this academic level and benefit itself from women’s voices and talents in a more proactive manner. That is, applying a principle of affirmative action in the search for future Senior Fellows.

Figure 6: ZEF Senior Fellows by sex

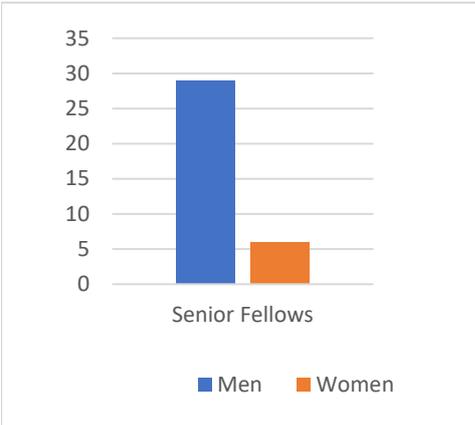
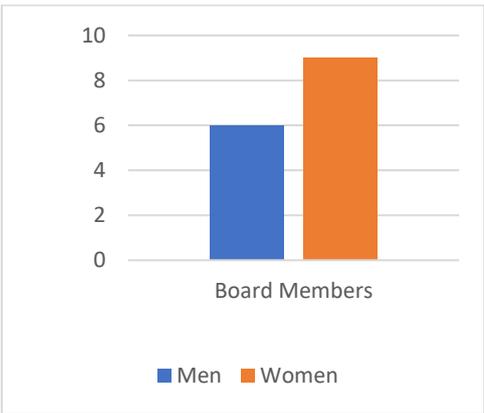


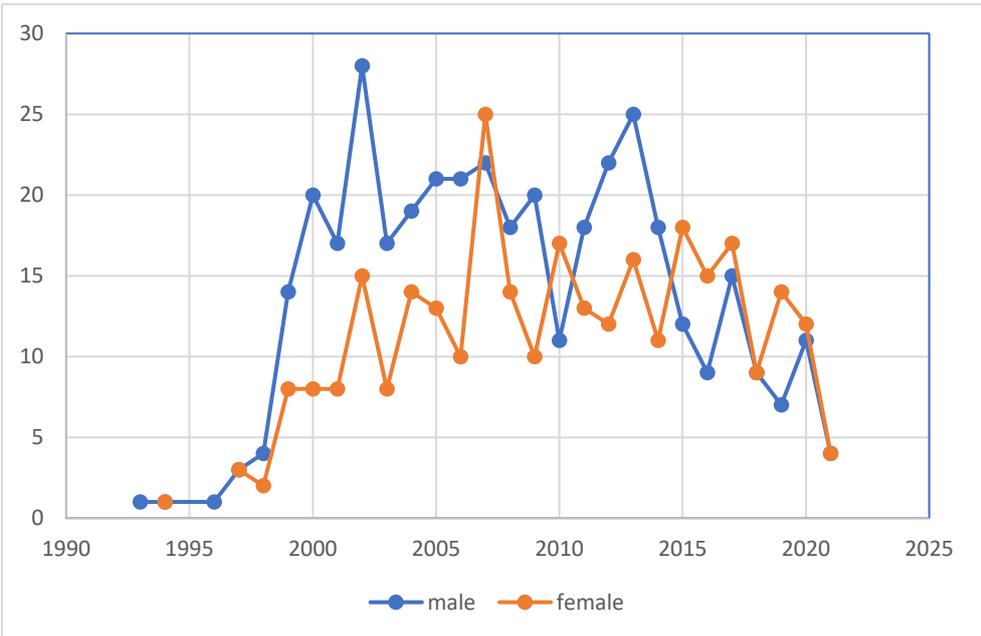
Figure 7: ZEF Board members by sex



Source: Own elaboration based on ZEF web page, accessed 14<sup>th</sup> May, 2021

Having a diverse Board of Directors is not only a question of equity but also brings new ideas and effectivity to an organization; therefore, measures to include women in boards is increasing around the world (Choudhury, 2014, *Institutional Shareholder Services, Inc, 2017*). It was not possible to find figures for gender diversity in academic boards, as studies tend to concentrate on those related to business and economy, where men are overrepresented in every region globally. In the case of ZEF, Figure 7 reveals that women comprise the 60 per cent of the Board, a number that is even more remarkable because the 15 members also represent diversity of origin: Africa, Asia, America, and Europe.

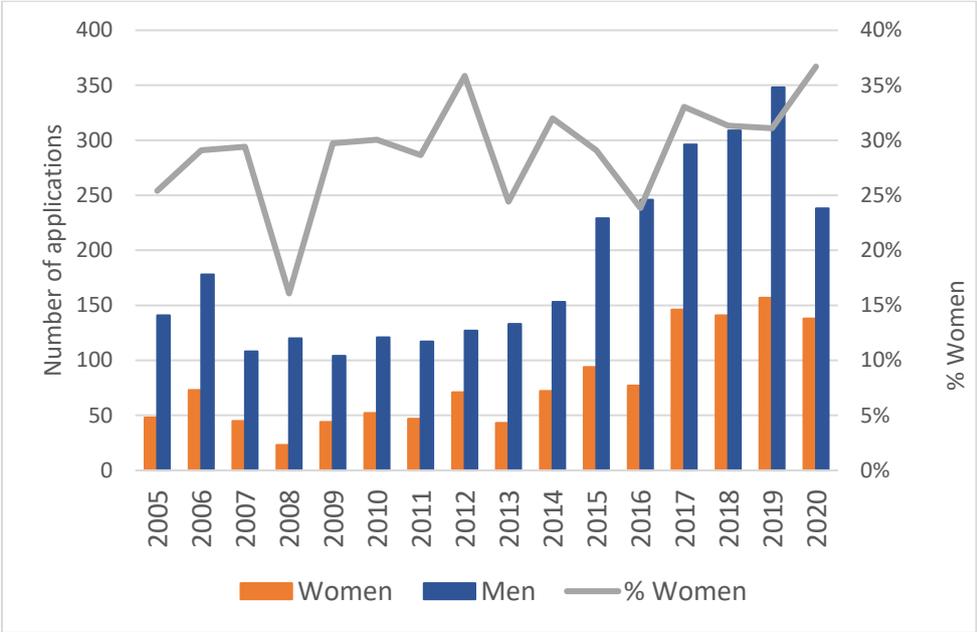
Figure 8: Ratio male (n=388) to female (n=297) applicants by intake and year



Source: Dr. Gunther Manske, ex- Academic Coordinator of the BIGS-DR programme

Figures 8 and 9 show that the higher number of male applicants for a DAAD scholarship reflects on the higher number of male students taken into the programme. Every year, male applicants outnumber female applicants, even doubling the number of the latter; however, in six of the 16 years considered between 2005-2020, more female applicants were admitted.

*Figure 9: Number of applications for a DAAD scholarship at BIGS-DR by gender and year*



Source: Dr. Gunther Manske, ex- Academic Coordinator of the BIGS-DR programme

Publications by sex

General trends in academia go hand-in-hand with the results showed in Table 2 and Figure 8, as exemplified by the recent study carried in the framework of the LANd Use SYnergies and CONflicts within the framework of the 2030 Agenda (LANUSYNCON) at ZEF (see Box 1). More specifically, the considerably lower number of female authors at ZEF relate to interviews held with the outgoing and incoming Academic Coordinators of the Bonn International Graduate School for Development Research (BIGS-DR), Dr. Gunther Manske and Dr.Silke Tönsjost, respectively (Interview of 31<sup>st</sup> of August, 2021). Both Coordinators pointed to cultural factors determining strict division of gender roles where female students are the main or only responsible for reproductive work; therefore, have less time for their studies. While it is not always the case, it is common that male partners do not cooperate with domestic tasks or even with the search for children’s daily care, independently of their culture or nationality. Furthermore, another LANUSYNCON study carried out among ZEF former and current students, corroborates that gender-defined roles work against the time available of female researcher, affecting their performance (see Box 2).

Table 2: ZEF publications differentiated by female and male authors

<b>For all publications (from 1999 till September, 2021)</b>	
<b>Number of female or male first authors from ZEF in the paper</b>	
Female	1488
Male	4189
Total	5677
<b>Number of female or male first authors in publications under gender category*</b>	
Female	66
Male	41
Total	107
<b>Number of female or male first authors from ZEFa, ZEFb or ZEFc in the paper, under gender category*.</b>	
ZEFa	27
ZEFb	42
ZEFc	38
Total	107

Source: Dr. Gunther Manske, ex- Academic Coordinator of the BIGS-DR programme

\* Gender category are those that contain the words "women" or "woman" or "gender" in the title, (classified by Dr. Manske, ex-coordinator of the BIGS-DR)

Figure 10: Scientific and non-scientific publications authored or co-authored by ZEF Researchers



Source: Own elaboration based on ZEF web page, accessed 14th of May, 2021

<p><b>Box 1:</b> “A long way to go: Gender and diversity in Land use science.” Hannah Kamau, Uyen Tran, Lisa Biber-Freudenberger</p>	<p><b>Box 2:</b> “A dichotomy of domestic and academic pathways: challenges of motherhood in an international doctoral program on land science” Sara Velander, Fernanda Silva Martinelli, Dewi Idam Sari, Fatima Ali, Lisa Biber-Freudenberger</p>
<p>Female scientists and researchers with diverse cultural backgrounds, especially of the Global South, are underrepresented in scientific systems. This is also the case for land use science and even for research teams researching in Global South countries. To assess trends in gender parity, ethnic diversity and intersectionality in this field, we conducted a meta-analysis based on systematic literature review that included 316,390 peer-reviewed journal articles. We found that 27% of all authors between 2000-2021 represented women. Ethnicity representation was biased towards White researchers (62%) followed by Asian (30%), Hispanic (6%) and Black (2%) researchers. Intersection of inequalities further underrepresented Black and Hispanic women when author positions were considered, giving Black women only 0.6% chance of becoming first authors in land use science in comparison to 19.3% chance of White female authors. Supportive actions to empower women are needed to reduce intersectional inequalities and to achieve the Sustainable Development Goals.</p>	<p>Dichotomies emerge among early-career land scientists when balancing their career goals with family obligations, exhibiting differences in gender and regions. Through on-line surveys, the authors examined the interconnection between family obligations and doctoral performance through a gender lens on an international sample of doctoral students. The analysis of the findings indicated that more women than men in the doctoral program were responsible for family obligations, with mothers experiencing a prolonged duration of completing their doctorates and a lower publication rate. Majority of the respondents, primarily women from the Global North, decided not to be parents due to anticipated challenges with maintaining a work-life balance exacerbated by traditional gender roles, limited financial support for childcare, and high demands of academia. The constraints of early-career land scientists, particularly mothers from the Global South living apart from relatives, need to be addressed for institutes to strengthen international gender equality in land science.</p>

Source: LANUSYNCON team

The percentage of female drop-outs at ZEF, as compared to male ones (61% more) shown on Table 3, relates to Figure 2 about the global “leaky pipeline” phenomenon. Although it is not possible to elaborate conclusive affirmations on gender-differentiated reasons to drop out, it is evident that the “no dissertation” and the total sum of reasons point to structural disadvantages against female researchers.

Table 3. Reasons for drop out differentiated by female and male students (BIGS-DR 1999-2021)

Drop-out reason	Female	Male
Failed course exams	4	9
Failed research	4	3
No dissertation	15	9
Personal reasons	5	1
Illness	4	1
Job	6	3
Baby & family	1	
Others	3	
Total	42	26

Drop-out rate: 8,5% (68 out of 797)

Source: Dr. Gunther Manske, ex- Academic Coordinator of the BIGS-DR programme

The interview held at the end of August with Dr. Manske and Dr. Tönsjost also revealed that many female students at ZEF continue facing cultural challenges related to their academic studies after they have finished them. In many cultural settings, marriage is a central aspect of women's life and societal prestige; however, women who finished their Ph.D. usually have reached an age in which are not privileged candidates to marry, in spite of their high education. This leads to many female researchers, and a few men also, to face the dilemma of following an academic degree or to conform with society's expectations of marriage and parenthood. A few studies on the experiences of postgraduate female students in different cultural settings support this observation and point to socio-cultural, patriarchal beliefs and financial constraints as impediments to women's successful participation and completion of postgraduate degrees (e.g. Alabi et al., 2019; Khan, 2020). Besides the constraints faced by female researchers during and after their doctoral studies, there are also evidences of specific safety problems in the field, followed by feelings of insecurity for their own integrity (Dr. Manske's communication). This theme will not be explored here, but has been a topic of discussion in the ZEF Gender Group where personal testimonies supported Dr. Manske's observations. Published literature on gender-based violence faced by female researchers in the field is scarce but it is growing, and strategies applied by universities and research organizations to provide students support before they leave are multiplying. In words of Dr. Tönsjost, "the power of female students to say 'this is enough, or too much of it, this is my space' it is not always there" (interview, August 30<sup>th</sup> 2021) This is an aspect of development research that needs more discussion and a systematic approximation within the ZEF's community.

#### **IV. Advances on Gender-Sensitive Research at ZEF**

This section aims at providing an overview of ZEF's mechanisms to include gender considerations within its doctoral programme (before International Doctoral Programme and now BIGs-DR) and the most relevant programs and publications that stood out for their gender-sensitive approach, by 2021. It also presents the work of the ZEF Gender Group that initiated its activities at the beginning of 2020. The section provides the framework for the next chapter, which focuses on the core of the report: current work on gender in research content.

Doing justice to ZEF's work on gender-related in the past is no easy task, because it is spread over time and across several projects led by ZEF, ZEF's partners and, no doubt, across many doctoral theses. Added to this, it is the difficulty of determining, on the one hand, whether the inclusion of the word "gender" or "woman" in the research work really implied a rigorous analysis from a gender perspective. On the other hand, it is possible that several previous studies may have included a gender perspective in some steps of the research cycle, without making it explicit in the title or in the conclusions.

Among the research project recorded on the ZEF web page, stands out the "NutriHAF-Africa - Diversifying agriculture for balanced nutrition through fruits and vegetables in multi-storey cropping systems." The project applied a gender-sensitive participatory action research in increasing knowledge about appropriate fruits and vegetables and in improving knowledge on food behavior and adoption constraints to improve the nutritional situation of the local population in East and South Africa. The project sought to ensure that the needs and preferences of poor male and female smallholders were considered and thus increase the adoption potential. The methodology developed included:

- A mainly qualitatively, gender-disaggregated analysis of the farming system, livelihoods, food growing and consumption behavior of farmers and consumers in the nearest market place;
- A quantitative sex-disaggregated survey with male and female household members;
- On-farm or community trials integrating fruits and vegetables in multi-storey cropping systems;
- Desk studies to assess agricultural requirements of high-priority species;
- Policy dialogue at local and regional level through targeted information and round-table forums;
- Gender-sensitive participatory extension methods;
- Best practice workshops for smallholder farmers and extension services aiming to increase food quality and reduce food waste;
- Promotion of and training in fruit and vegetable processing

The three-year project concluded in 2018 and some of its results are reflected on the publications by Nischalke and Beuchelt (see Table 5); however, no time or resources were allocated for a final report exclusively on the gender aspects of the project.

Some ZEF publications also stand out for their specific focus on gender-sensitive research. One of them is “Adding a gender lens in quantitative development research on food and non-food biomass production: A guide for sex-disaggregated data collection” (Beuchelt & Nischalke, 2018). It provides solid background and tools to collect sex-disaggregated data and add a gender lens into socio-economic research in the agricultural sector. Other publications from Senior Researchers.

Table 4 summarizes research projects and publications with a gender component between 2015 and 2021. **The table was elaborated based on webpage search and interviews with current ZEF researchers, so it is possible that a few publications are missing.**

Table 4: Projects and publications with (different) focus on gender or women in development research by ZEF researchers (2015-2021)

Project	Gender Focus
NutriHAF-Africa - Diversifying agriculture for balanced nutrition through fruits and vegetables in multi-storey cropping systems.	The methodology includes gender-disaggregated analysis and extension methods
FSS-Implementation of food security criteria within biomass sustainability standards	Its catalogue “consists of 35 criteria categorised under 17 themes ranging from topics like the respect of national food security strategies to gender equity.” <sup>6</sup>
Land Use Research - LANUSYNCON Project	Systematic assessment of the interlinkages of SDGs in the context of land use, including SDG 5: Achieve gender equality and empower all women and girls.

<sup>6</sup> [https://www.zef.de/fileadmin/webfiles/downloads/projects/FSS/2019\\_rural2019\\_04-S32-34.pdf](https://www.zef.de/fileadmin/webfiles/downloads/projects/FSS/2019_rural2019_04-S32-34.pdf)

<b>Publications, Theses &amp; Blogs by ZEF researchers*</b>	<b>Gender Focus</b>
<b>2021</b>	
Kamau, H., Tran, U., Biber-Freundenberger, L. A long way to go: gender and diversity in land use science. <i>Journal of Land Use Science</i> . DOI: 10.1080/1747423X.2021.2015001	A meta-analysis of underrepresentation of different groups of women in land use science literature.
Velander, S., Martinelli, F.S., Sari, I.D. & Ali, F. & Biber-Freundenberger, L. A dichotomy of domestic and academic pathways: challenges of motherhood in an international doctoral program on land science. <i>Journal of Land Use Science</i> . <a href="https://doi.org/10.1080/1747423X.2021.2015002">https://doi.org/10.1080/1747423X.2021.2015002</a>	An analysis of the dichotomies among early-career land scientists when balancing their career goals with family obligations, exhibiting differences in gender and regions.
Saleemi, S. 2021. Children in left-behind migrant households: education and gender equality. (ZEF Discussion Paper 307)	An estimation of the effect of men's migration on the share of households' expenditure on education spent on girls. The paper tests the hypothesis that in the absence of men, women reduce gender inequality on the education of girls and boys.
Hussain, M. Opportunities and Barriers for the inclusion of women in Politics: A Case Study of Young Women Activists and Politicians of Pakistan. Doctoral Thesis.	Analysis of the challenges and opportunities pertaining to women's political participation beyond elections in Pakistan by focusing how female members of the Pakistan Tehreek Insaf (PTI) party navigate the political sphere.
<b>2020</b>	
Saleemi, S. Empowerment of girls and women in rural Pakistan: Migration, decision-making, and consciousness. Doctoral thesis at Faculty of Agriculture, University of Bonn.	Analysis of the effects of men's migration on the empowerment of women and girls in the left-behind households in rural Pakistan. Women's roles in household decisions and time spent in work, as well as girls' education are explored.
Avilés Irahola D.L. 2020. The concept of "Buen Vivir" from a decolonial feminist perspective. <i>Radical Ecological Democracy</i> . <a href="https://www.radicalecologicaldemocracy.org/decolonial-feminism-and-buen-vivir/">https://www.radicalecologicaldemocracy.org/decolonial-feminism-and-buen-vivir/</a>	A critic to the concept of "Buen Vivir" for its political and patriarchal instrumentalization.
Munajed, D. A. 2020. An Intersectional Analysis of Syrian Women's Participation in Civil Society in the Post-2011 Context. <i>Middle East - Topics &amp; Arguments</i> , Vol. 14, July 2020, pp. 103-16, <a href="https://doi.org/10.17192/meta.2020.14.8252">doi:10.17192/meta.2020.14.8252</a>	Using an intersectional framework, it argues that gender, socioeconomic status and ethnic/national identity are key intersecting social markers influencing the ability of Syrian women to participate in civil society organizations in Lebanon and Turkey.
<b>2019</b>	
Beuchelt, T. & Nischalke, S. Adding a gender lens in quantitative development research on food and non-food biomass production: A guide for sex-disaggregated data collection.	Guide to collect sex-disaggregated data and add a gender lens to socio-economic research in the agricultural sector.
Saleemi, S. and C. Kofol. Choice without Consciousness: Women's Participation in Household Decisions and Gender Equality in Children's Education. (ZEF Discussion Paper 290)	Estimation of the impact of women's role in household decisions and their awareness of gender inequality on girls' education.
BLOG: "Gender inequalities show and deepen in times of pandemic". Avilés, D., Beuchelt, D., Schmitt, C., Nischalke, S., Youkhana, E. & Geiger, F. Available at: <a href="https://www.zef.de/2129/blog-gender.html">https://www.zef.de/2129/blog-gender.html</a>	Differentiated effects of the Covid-19 pandemic on key areas of men's and women's lives.
BLOG: Sorority has been excluded from sexist vocabularies. Rosales Salgado, M. Available at: <a href="https://blog.zef.de/">https://blog.zef.de/</a>	It explores the meaning of sorority through numerous conversations with both, women and men, at ZEF.

2018	
Nischalke, S., Abebe, M., Wondimagegnhu, A.B., Beuchelt, T. Gender challenges in horticultural research in Ethiopia and Madagascar.	It explores gender challenges of horticultural projects using two case studies from Ethiopia and Madagascar, with focus on women's workload
2017	
Nischalke, S., Abebe, Wondimagegnhu, Kriesemer & Beuchelt. Forgotten forests? Food potential of ancient coffee forests and agroforestry systems in south-western Ethiopian mountains, seen through a gender lens.	Sustainable use of forest resources contribution to the achievement of different SDGs, through a gender lens.
Nischalke, S.&Bisht, S. Challenges to women as food and risk managers in the context of floods: A case study from Tinsukia, Assam.	It examines how the opportunities as well as challenges differ for women and men in times of environmental and socio-economic change. It further argues that to help women farmers is imperative to improve their access to a range of entitlements.
Marther Wanjiru Ngigi. Managing risk under climate change in Kenya. Multiple shocks, poverty, gender, and potential for group-based approaches. Doctoral Thesis.	Through applying an intra-household survey involving 156 couples in rural Kenya, this study examines how husband and wife within the same household perceive climate risks, undertake adaptation strategies, access productive resources and participate in group-based approaches.
2016	
Beuchelt, T. Gender, Social Equity and Innovations in Smallholder Farming Systems: Pitfalls and Pathways.	It presents cases of gender and social equity trade-offs related to the promotion and diffusion of improved technologies for agricultural development.
2015	
Mohr, A., Beuchelt, T., Schneider, R. & Virchow, D. A rights-based food security principle for biomass sustainability standards and certification systems.	It developed the rights-based food security principle, proposing 45 criteria classified in 17 themes to ensure that certified biomass production and trade do not adversely affect the Human Right to adequate Food (RtaF). The fifth pillar of the conceptual framework includes equity dimension, like women's rights and gender equity.
Gella, A., & Tadele, G. Gender and farming in Ethiopia: an exploration of discourses and implications for policy and research. <i>Ethiopian Journal of the Social Sciences and Humanities</i> , 11(2), 1-28	It discusses the symbolic construction of 'the farmer' as an essentially masculine subject and reflects on the reasons behind its persistence.
Muntaha Rakib. Gender- Differentiated Asset Dynamics in Bangladesh: Individual Adaptation and the Potential for Group Based Approaches in the Context of Climate Change. Doctoral thesis.	This dissertation examines the changes in intra household asset ownership induced by external events. The immediate coping mechanisms and long-term adaptation strategies and its impact on livelihood outcomes are also investigated.
Forthcoming	
Saleemi, S. Women's participation in household decisions and gender equality in children's education: evidence from rural households in Pakistan, <i>World Development Perspectives</i>	Estimation of the impact of women's role in household decisions and their awareness of gender inequality on girls' education. It focuses on the share of households' education expenditures on girls' education.

- During their time at ZEF

## Courses on gender and gender-sensitive research at ZEF

Besides the projects and publications mentioned above, ZEF staff gave courses on gender in research as part of the ZEF interdisciplinary courses in 2017, 2020 and 2021 (D. Avilés Irahola, E. Youkhana, and T. Beuchelt); these courses will continue in the following years. At ZEFa, the disciplinary course on “Development and critical research from a gender perspective” is included since the year 2019 (D. Avilés Irahola). The Doctoral Studies Support Program. Environmental Peace and Development in Colombia (DSSP) included already three versions of the same course (2019, 2020 and 2021) as part of its teaching-collaboration program in Colombia. Additionally, the course "Culture, Gender and Development" at the Institute of Political Sciences and Sociology (IPWS- Uni-Bonn) is offered since 2013 by ZEFa Senior Researcher W. Laube. An adapted course of this title at the University for Development Studies/re-named University of Integrated Business and Development Studies (UBIDS) in Ghana is taught every year since 2013.

## The ZEF gender group

The ZEF gender group (ZEF GG) is an initiative of female senior researchers with experience on equal opportunities within diversity and inclusion in research. They identified the need to provide some structure to scattered efforts towards gender-sensitive research and the systematic analysis of intersectional forms of inequalities, particularly those based on gender differences. Previous initiatives included inter- and disciplinary courses on gender and development, dispersed efforts on gender-sensitive research, and publications on gender dimensions of specific projects.

The ZEF GG initiated its activities in early 2020 with the aim to strengthen gender-sensitive research at ZEF and to promote interdisciplinary collaboration on gender issues among ZEF researchers. The interest in the group grew rapidly and currently more than 25 Senior and Junior Researchers from the three Departments are part of it, under the acknowledgment that academia has an important role to play in the transformative process of achieving a world where everyone has equal access to rights and resources regardless of gender (gender equality). The members also recognize that more research on the complexities of gender relationships is needed, as well as strong empirical evidences on how to eliminate gender inequalities and change social norms.

The group focuses on:

- supporting senior and junior researchers in integrating gender perspectives in their research projects,
- addressing gender differences as researchers,
- developing gender studies curricula and material for inter- and transdisciplinary courses, and sharing publications and ideas on gender-sensitive research.

Aspects such as diversity or gender equality within ZEF in terms of working opportunities and equal rights are not the focus of the group, because this is an area in which the “Equal Opportunity” office of the Uni-Bonn has experience and expertise. The topic is closely linked to gender-sensitive research and, as such, often discussed in the group’s meetings; however,

no advice is given on this topic. The group has been in contact with the “Equal Opportunity” office, but the pandemic stopped joint planned activities, such as a training on self-defense.

As shown in Figure 11, the objectives of the group align with and support the conceptualization of gender within the ZEF strategy 2021- 2030.

*Figure 11: The two dimensions of gender in research and the conceptualization of “Gender” in the ZEF strategy 2021 - 2030*

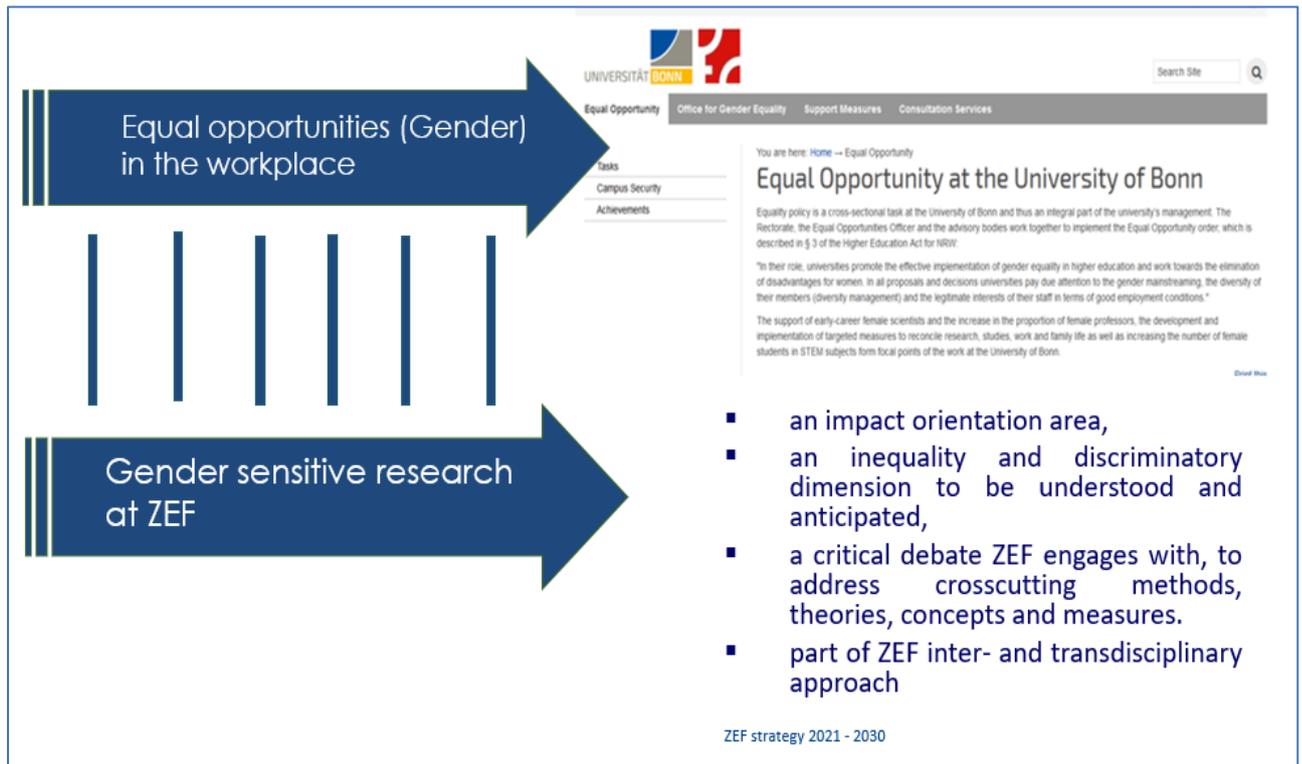
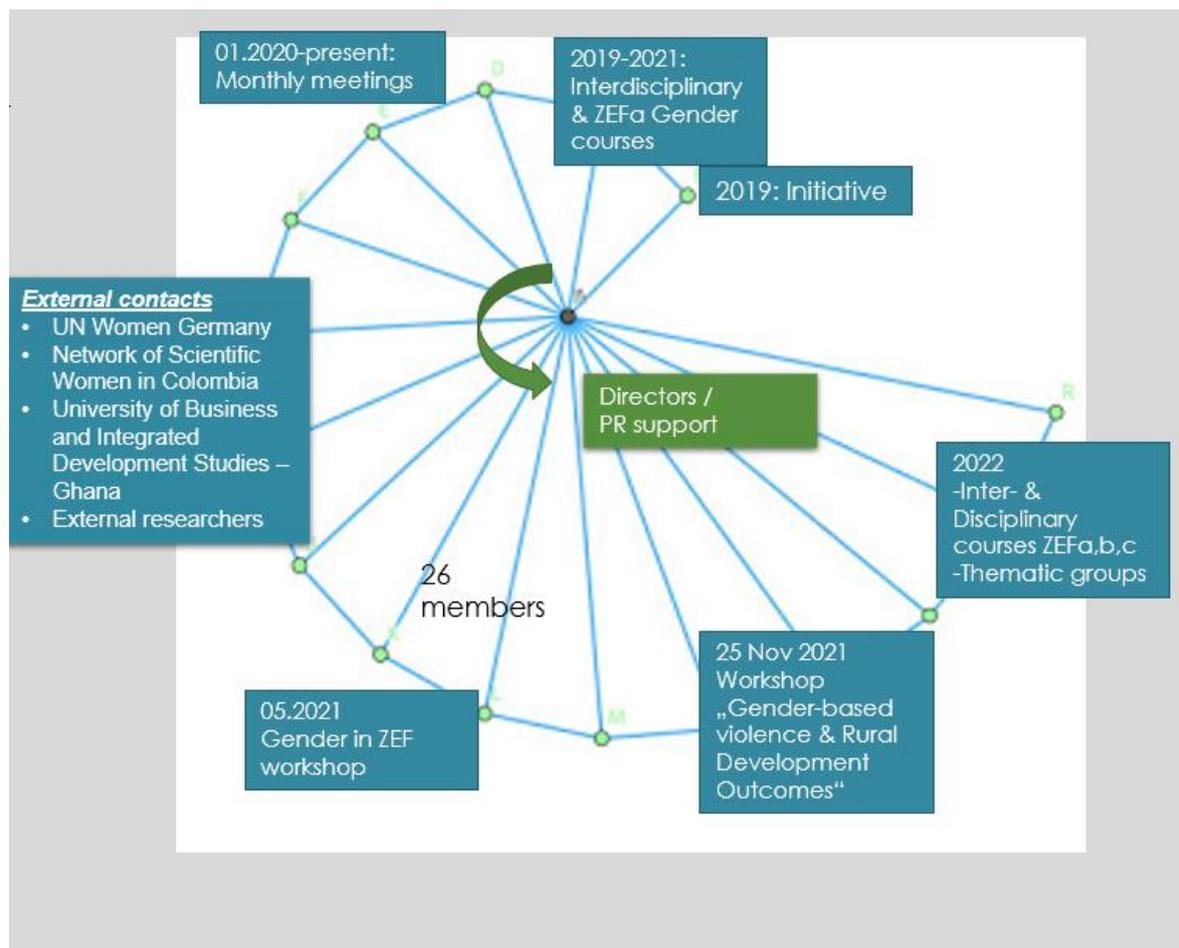


Figure 12 illustrates how the ZEF GG has diversified its activities from its monthly meetings focused on discussions around doctoral projects and academic articles, to the elaboration of syllabus on gender courses, networking with external researchers and organisations, and two workshops in 2021. These workshops were the internal workshop “Gender in ZEF” (May 27<sup>th</sup> and 28<sup>th</sup>, 2021) and the public event “Gender-based Violence and Rural Development Outcomes” (November 2021), the later on the occasion of the UN International Day for the Elimination of Violence against Women”. Additionally, several researchers and activists working on feminist theories and transformative research have been invited and presented in the monthly meetings as well as in the ZEF colloquium series.

With the support of the former and current BIGS-DR Coordinators and the three ZEF Departments’ Directors, the ZEF GG members are coordinating the Interdisciplinary and Disciplinary courses on Gender since 2020. This year, for example, besides the Interdisciplinary course given by three members of the group, disciplinary courses are planned in consultation among Seniors from each of the three departments.

*Figure 12: The ZEF Gender Group: Evolution of activities*



Additionally, this year, the group plans to organize itself in thematic groups of discussion for a more active participation of the junior researchers, who make up the majority of members. The themes selected this year are: Gender & Environment, Gender & Violence, and Gender & Work/Migration.

#### The ethical clearance and the Security Check

The Ethical clearance and the Health and Security Check at ZEF aim at ensuring that research is conducted in a responsible, ethically and accountable way. They also encourage students to foresee and reflect on the possible effects of their research methods on themselves and on others in the field. Therefore; the consideration of personal views and awareness on gender and of gender-based inequalities are central to fill in both forms in a realistic manner.

There is no feedback on to what extend the expectations and presumptions reflected in these two forms are met at the end of the study and, although most students know their research area and related cultural settings, a correct behavior and ethical correctness does not imply that the researcher is aware of the effect of the study on closing or widening gender inequalities.

Over time, more gender-sensitive questions were added to the Ethical Clearance form<sup>7</sup>, but it remains that a lack of understanding or awareness on discriminatory practices based on gender differences could make it difficult to answer them in a comprehensive manner. Moreover, it is not only the Ph.D. candidate, but the supervisors, tutors, and members of the review committee, who could ensure that the gender dimensions in the research and its innovations is integrated and that stereotypes and discriminatory practices are not reinforced.

### **Box 3: The Health and Security Check and the Ethical Clearance forms**

The health and security check aims at identifying potential hazards to the researchers and actions and responsible to reduce such risks. The form includes boxes on “security problems” and “Codes of cultural behavior in the research country/region”, from which students must be aware before leaving to the field. Additionally, a check box “I am aware that different codes of cultural/religious behavior exist in the research country/region. I will respect them to the best of my knowledge and ability”, is required.

The ethical clearance is a form submitted by doctoral students, in consultation with their advisors and tutors, and approved by the Research Ethics Committee before students may leave to the field. The content of the application form aims at ensuring that research projects will be conducted in a responsible and ethical manner, from their conception to the share and publication of data but, particularly, during data collection.

## **V. CURRENT GENDER-INCLUSIVE RESEARCH**

The disperse information on gender-sensitive research at ZEF, led to the ZEF GG to organized the internal workshop “**Gender in ZEF: Sharing concepts and insights in development research**” on May 27<sup>th</sup> and 28<sup>th</sup> of 2021. The workshop had the objective of promoting gender-sensitive research among ZEF staff by exchanging and systematizing experiences, tools and methodological approaches on the integration of gender dimensions in research projects and doctoral theses. Most participants responded to a preparatory questionnaire and also proposed ways forward to strengthen this cross-cutting issue at ZEF. This section reflects the results of the workshop.

### Concepts of “Gender”

Based on the responses given by six Junior and one Senior Researchers, it is possible to affirm that the concept of “gender” is understood as a social construct that goes beyond the notions

---

<sup>7</sup> Examples of questions regarding gender and other categories to look at inequalities in the study area included in the Ethical Clearance are: 4.6: Comment on any cultural, religious, social or gender-based characteristics of the participants which have affected the design of the project or which may affect its conduct; 4.8: Will the research involve discussion of sensitive topics (e.g. ethnicity, political behavior, gender-based violence, income and wealth, protected species, scarce resources) or involve interviews with elite individuals/groups? Be aware about the intercultural context. Some questions may be culturally inappropriate or insensitive. Please outline the measures undertaken to ensure ethical correctness; and 4.9: What are the potential risks or costs to participants involved in the research (e.g. physical, psychological or disclosure dangers)? Please explain the strategy you will employ to reduce these risks.

of biological differences and a category that gives order to many aspects of life. Some relevant observations on the concept included:

*I establish “gender” as a primary category of life, identifying and describing it beyond the normative notions of biological differences and rather as a social category which consequently involves social and historical change.*

*(It is) understood beyond biological sex differences between men and women and incorporates social and economic factors as well as institutions that affect them. Gender is not only women.*

*(It is relevant to establish) how it intersects with other social categories, such as race, class, religion, sexuality, economic status, among others, which correspond to a diversity of systems of oppression (racism, classism, ageism, heterosexism, ableism, etc.).*

*(G)ender is strictly enforced and reproduced, and transgressions sanctioned. Gender follows sex, so male (human bodies with the male anatomical features) are men/boys and its associated meanings and females are girls/women and its associated meanings. While gender/sex exists is predominantly binary, a third sex/gender is also recognized.*

### Importance and integration of gender dimensions

The presenters elaborated on the importance of the gender dimensions of their specific topics; however, a few of them focused on women’s situations without analysis the power relations with male subjects or within male dominated societies, which is a characteristic of gender analysis. The following are remarkable relations made between gender and health and gender and education.

Health: *“Some of the pathways through which gender is translated into health risks include; 1) differential susceptibility and exposures to injuries, diseases and disabilities, 2) differences in health behaviors and health care access. The overall vulnerability, exposure and health seeking behaviors of different gender categories is affected by both gender norms and roles (Gupta et al., 2019; Manandhar et al., 2018; Shannon et al., 2019)” (Injete).*

Education: *“This research has attempted to assess one process that may reduce this inequality, women’s role in household decisions. Women’s participation in household decisions, particularly that in the allocation of budgets on children’s schooling itself may be a subversion of gender and an allocation of higher resources for girls’ education through this decision making of women as well.” (Saleemi)*

### Obstacles

Several obstacles to design, implement and analyse research projects in a gender-sensitive manner were mentioned before and during the workshop. Most of them include:

- Establishing a theoretical framework that incorporates a wide range of gender factors (social, economic and environmental),
- Limitation of data availability and lack of data at individual level (it is rather available at household level),
- How to incorporate both the qualitative and quantitative components of gender,
- In some cultural settings, only social networks allow access to high levels of the governments, networks that are male dominated,

- In some cultural settings, it is not socially acceptable to conduct group discussions among women and men, together,
- The pandemic made it more difficult to establish close or even in-person contact with respondents. *“This not only limited the possibility of an ethnographic glance but also limited the possibility of accessing other members that identified themselves as women or other non-binary people”*,
- The imaginary of women as victims and not as actors with agency,
- Some male subjects do not see gender as an issue or as a basis for discrimination, which makes it difficult to approach the topic with them,
- In some settings, women are not allowed to move by themselves asking questions to male subjects.

Some of the above-mentioned issues were discussed within the ZEFGG and are still to be addressed in a comprehensive manner, including training on gender and feminist methods of research and strategies for ethnographic research in difficult (violent or conservative) settings.

#### Team composition in the field

A remarkable result of the comments to the questionnaire was the favourable effect of mixed teams in the field. That is, when at least one male and one female researcher travel and work together, they are better received by the communities or individual interviewees. The role of gatekeepers was also mentioned as relevant to access political powerful groups.

#### Perception on needs to improve gender-sensitive research for the researcher and for the population

This question relates to the obstacles researcher encountered and concentrate on the design and fieldwork phases. During the design phase, some voices underlined the need to better understand the concept of gender, its dimensions and possible methodological approaches in research. This was the case for qualitative and for quantitative methods, particularly data analysis methods to quantify gender empirically. During the field work, some students considered that a beforehand planning for mixed group of researchers would help to capturing male’s and female’s trust and perceptions.

The need to replicate some methods in different settings to confirm observations was also mentioned, as gender analysis is highly localized and cultural-dependent.

Table 5 accounts for the projects presented during the workshop, which constitute almost all gender-related current research (as of May 2021).

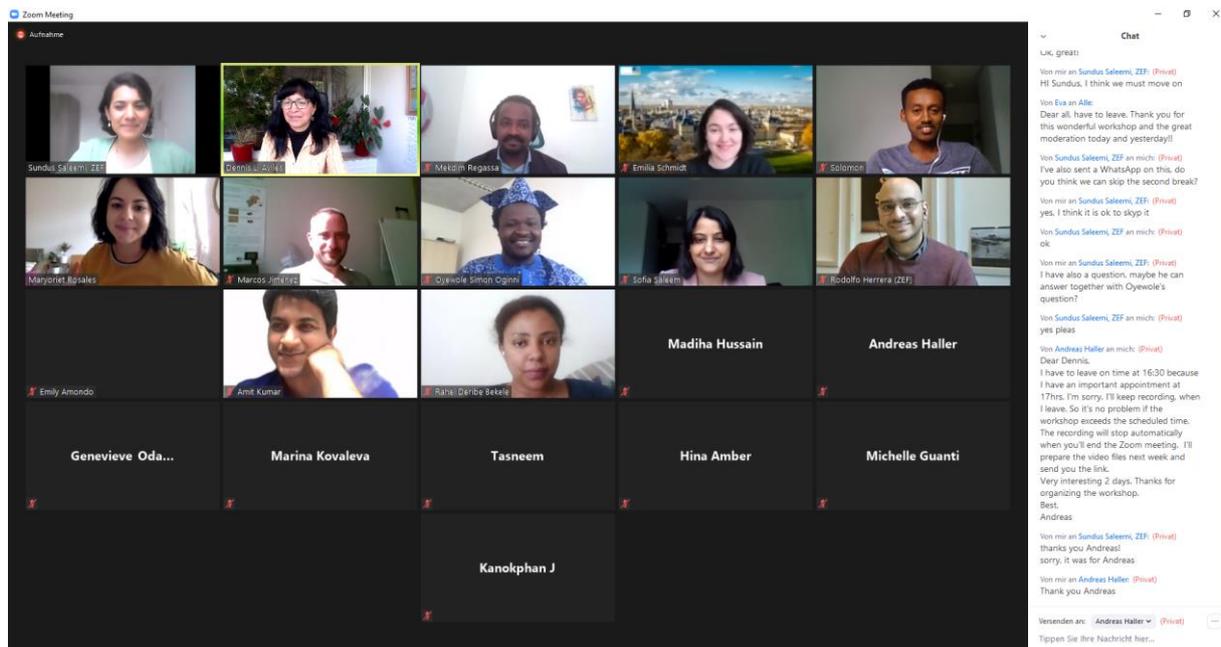
Table 5: General description of projects presented during the workshop “Gender in ZEF” (May 2021)\*

Researcher and Theme	Description
<b>PROJECTS PRESENTED BY JUNIOR RESEARCHERS</b>	
Mekdim Dereje Ragassa <i>Difference in the effect of mothers and fathers on the educational and occupational attainment of their children.</i>	This study uses a nationally representative longitudinal data on children and their parents to investigate the extent of equality of educational and occupational opportunity in Ethiopia. The analysis reveals strong spatial, intertemporal and gendered pattern in these opportunities.
Emily Injete. <i>Gender gap in health outcomes among the working age individuals: Does weather effects play a role?</i>	It assesses the effect of weather variabilities and health care services on men and women health outcomes and establishes the gender health gap, it quantifies the contributions of weather variabilities and health care variables in explaining the gender health gap. The main methodological tool is the disaggregated data from secondary sources: A national representative data in the four regions consisting of a pooled sample of 11,711 women and 11,035 men.
Hina Amber. <i>Participation by Necessity: Female Labor Force Cohort Analysis in Pakistan</i>	It investigates the contribution of demographic changes to the change in aggregate female labor force participation. It also analyzes the dynamics of female labor force by decomposing total change into age, period and cohort effects. The study uses decomposition methods to realize its objectives. The study also decomposes female labor force participation rate by location, marital status and education
Madiha Hussain. <i>Challenges and opportunities for the inclusion of women in politics. A case study of women career politicians from Pakistan Tehreek Insaf political party.</i>	It aims to examine the challenges that women and men career politicians face and to explore the opportunities for women in the politics of Pakistan. It takes the Pakistan Tehreek Insaf (PTI) as a case study, and employs a qualitative methodology, mainly in-depth interviews and secondary data.
Maryoriet Rosales Salgado. <i>The stay-at-home paradox: urban narratives of domestic violence in the Central District of Honduras during COVID-19.</i>	It examines the women’s lives and experiences in the peri-urban settlements of the Central District of Honduras during the first one hundred and twenty-four days of the Corona Virus Pandemic. It is a qualitative study based mainly on people’s narratives on domestic violence.
Sofia Saleem. <i>Curriculum and Gender Relations in Secondary School Education in Pakistan.</i>	It was designed to explore gender codes in school textbooks and teacher’s responses to these gender codes. The main method applied is the examination of Urdu curriculum and text books in secondary school education in Punjab. It is complemented by semi-structured interviews and focus group discussions with male and female teachers.
Oyewole S. Oginni. <i>Womanitarianism: the representation of self and the Others in overlapping displacement context.</i>	The work explains the relationship and collision of representation of urban margins and displaced women in post-conflict African cities. This is done through the concept of ‘womanitarianism’, which emerges from a 5-year of ethnographic fieldwork in the border cities of the Lake Chad Basin region. Womanitarianism offers a critical insight into the discourse and counter-discourse on the ways displaced women and men observe and contest the structures that frame their lives in fragile contexts.
<b>PROJECTS PRESENTED BY SENIOR RESEARCHERS</b>	
Sundus Saleemi. <i>Empowerment of women and girls in rural Pakistan, migration, decision-making and consciousness.</i>	One gender bias in rural Pakistan refers to the households’ investment (both enrolment as an investment and expenditure on schooling as an investment) in girls’ education. This research attempted to assess one process that may reduce this inequality: women’s role in household decisions. Foremost, household data segregated by gender helps unpack gender within households. The secondary data used in the analysis is the Pakistan Rural Household Panel Survey. The survey instrument used to gather

	data from rural households consisted of two questionnaires, one applied to male and another to female subjects.
Tina Beuchelt. <i>NutriHAF-Africa - Diversifying agriculture for balanced nutrition through fruits and vegetables in multi-storey cropping systems.</i>	The research and capacity building project explored fruit and vegetable crops into multi-storey cropping systems to increase (micro-) nutrition security, diversify and intensify agriculture. The project applied a gender-sensitive participatory action research, increased knowledge about appropriate fruits and vegetables, and improved knowledge on food behavior and adoption constraints. Among other results, the project identified gender-differentiated needs and preferences of poor male and female smallholders towards the increase of the adoption potential.
Lisa Biber-Freudenberger. Land Use Research: thoughts and experiences from the LANUSINCON Project Team	At the Science Policy Interface: LANd Use SYNergies and CONflicts within the framework of the 2030 Agenda (LANUSYNCON). It aims at solving the question on how can we use the land that we have most efficiently and thereby allow for human development and reduce the negative impacts on the environment. It explored gender and diversity in Land use science through a meta-analysis based on systematic literature review. Also, through on-line surveys, it examined the interconnection between family obligations and doctoral performance through a gender lens on a diverse and international sample of current and former ZEF doctoral students.
Anastasiya Shtaltovna (Parliamentary Centre, Canada/ ZEF Alumni) <i>Comparison and Reflection on Ethnographic Fieldwork by two female researchers in Asia</i>	Presentation based on the autobiographical reflections and accounts of the subjective experiences of two female researchers who have conducted qualitative and ethnographic research from 2008 to 2014 in Central and in Southeast Asia. The main research question referred to the role of positionality in conducting qualitative research.
Jan Börner. <i>Short commentary on the pitfalls of using gender-sensitive information in quantitative development research.</i>	The comments highlighted obstacles for a better integration of gender in research: gender is not considered central in research projects even when it is; there are gaps in appropriate methodologies to address, for example, adoption of technology or how to design sampling strategies. In quantitative research, it is important to rely on the data collected; however, in many cases the specific condition of female headed households or women in general are hidden. This leads to general conclusions. A gender policy at ZEF and a course on econometrics from a gender perspective could contribute to solve these obstacles.

\*Recordings of the workshop are partly available on the ZEF YouTube channel; other presentations are under editing work by the ZEF PR office.

Photo 1: Second day of the workshop “Gender in ZEF”: Junior Researchers present their work and reflections



### Perceptions among ZEF Senior Researchers.

Additionally, to the workshop, a survey was sent to all ZEF Senior Researchers, who provided some recommendations (Table 6). Although it was sent in two opportunities, only ten of them answered the short questionnaire (ca. 25 percent, six male and two female).

The respondents worked at ZEF between 16 months and 20 years. Asked whether gender dimensions of the topics addressed in their project(s) are sufficiently included in the research process, three of the researchers expressed that they are not required to do so by donors, two of them include gender actively in their projects and three expressed that they do it only partially.

Asked about ZEF's capacities to include gender considerations in research in comparison with ZEF's partners, two senior researchers expressed “somewhere in the middle”, while the other answers were very different, from the opinion that ZEF lacks any capacity on gender issues to the perception that ZEF is stronger than its research partners.

To the question on whether it is necessary to strengthen ZEF staff's capacities in gender analysis, five researchers considered that it is, while one said ‘yes’ but only after analysing the current situation. Two responses were negative; one argued that “it is not very high on the global agenda of pressing problems” and the other argued that “gender” should be engrained in ZEF's mission and goals.

Researchers were also asked whether they would like to learn more about integrating gender aspects in their research: Five answered yes, one said ‘yes’ but “not right now” and two said ‘no’. One did not provide a reason while the other argued that other areas are of much more important and of higher priority.

## VI. CHALLENGES AND WORK AHEAD

The interviews, questionnaires and the internal workshop 'Gender in ZEF' showed three areas where ZEF could act in helping to reduce social and political exclusion and the lack of equal opportunities and multiple forms of discrimination due to origin, religion, ethnicity or gender (ZEF Strategy 2021-2030) and to position itself at the forefront of gender-sensitive development research.

**Gender-related constraints faced mainly by female students:** These constraints relate to cultural norms, gender roles and stereotypes (care work, time poverty, security in the field) and are addressed by the Coordination of the BIGS-DR. However, they also relate to research methodologies and preparedness in the field. A ZEF Gender Policy could include specific actions to strengthen the actions already taken to prevent gender-based risks and discrimination (i.e. the ethical clearance and the Security Check). ZEF Senior Researchers and the ZEF GG could be instrumental in supporting the BIGS-DR work addressing obstacles in research faced by students due to cultural norms and stereotypes, as described in Sections I and II of this report. This document does not deal in detail with them, as this requires a different specialized knowledge and actions; the work of the ZEF GG focuses on research, but it recognizes the interlinkage between cultural stereotypes and research opportunities and the need to follow coordinated actions to overcome gender-related constraints faced by the students.

**Research-related constraints,** such as lack or insufficient theoretical frameworks, methodological tools, confused concepts and conceptualizations on gender(s), women/gender studies and gender sensitive research along the research cycle. Results show that there is, in general, clarity on the concept of "gender" as an historical and cultural construction cemented by social and economic systems and based on phenotypical biological characteristics. There is less consideration of gender in terms of diversity (transgender or different gender identities) and the intersectional character of oppression associated to the category of gender.

The diversity of genders is neither considered in the bureaucracies at the University neither has been a topic of consideration in research. By norm, gender is assumed to be binary and associated with heteronormativity. Likewise, there is a tendency to "homogenize" subjects of study as "indigenous", "small-farmers" and others, hidden their specific challenges and agencies. The widespread use of intersectional or multi-factor analysis can help to unveil specific positions of advantage-disadvantage, after a systematic first exploration of the topic at hand.

It is confirmed that gender studies are often conflated with women studies. While both focus on women's situation, the first do so considering unequal power relations and analysing them in terms of specific male-female-diversity power unbalances, while the latter can be carried on considering only women's realities and perspectives. Therefore, the more complex characteristic of "gender" is ignored and simplified, sometimes by using an unassuming sex-disaggregated data methodological approach.

Awareness and interest on gender dimensions of development research it is growing at the three ZEF Departments, but there is a lack of specific theories and methodologies that an interdisciplinary course can not resolve. As mentioned by Senior Researcher S. Saleemi: "Since the emergence of gender as a field of inquiry in development research, considerable

progress has been made in terms of theories, frameworks, and analytical methods... it may be useful if both Junior and Senior Researchers can be updated on the state of the art in the field”<sup>8</sup>. Disciplinary courses need to pay attention to these needs by providing specific examples and exercises. External experts could be invited to provide specialized courses, for example on econometrics from a feminist perspective. Internal workshops, ZEF papers and dissemination of already existing resources could also contribute to this end.

In general, there is lack of consistency along the research cycle as the gender perspective is neither considered in the initial exploration nor during the design phase, often gaining relevance only during the field work, to lose relevance again against the main topic of study in the conclusions. Of course, exceptions occur when the focus of the study is on “gender” or “women” specifically.

**ZEF’s strategic position**, there is a lack of a specific policy on gender sensitive research, insufficient awareness, important but dispersed achievements, and lack of a “critical mass“ of gender-sensitive researchers / research.

The following table summarises the suggestions that emerged from three sources of consultation: The ZEF Gender Group, the questionnaire addressed to Senior Researchers and the workshop itself. Among the suggestions, it was a consensus on the importance to elaborate a Gender Policy at ZEF. This is a common practice among development organizations, research institutes and high academic organizations. The aim of a gender plan or a gender policy in higher education is, ultimately, to integrate gender dimensions in research content and teaching, to encourage critical thinking among students and to promote innovative methodologies in the way research is conducted so they can lead to changes towards gender equality. All these requires commitment at the leadership positions and public endorsement of the principle of gender equality, all reflected in organisational documents, monitoring tools and clear responsibilities.<sup>9</sup>

The success of the workshop, interest awoken among Senior and Junior Researchers and the importance of the exchange and information gathered, suggest the importance of continuing with similar events on “Gender in ZEF” in a regular manner (e.g., every two years).

Other converging suggestions refer to the need to foster capacities on gender-sensitive research among Senior and Junior researchers; although the later showed greater interest in receiving this kind of training. The lack of responsiveness to the questionnaire by Senior Researchers and a few comments showing less concern by the issue deserves to be explored.

---

<sup>8</sup> Personal communication (January, 2021). Sundus Saleemi, ZEF Senior Researcher.

<sup>9</sup> For a comprehensive description on the elaboration of a Gender Equality Plan in research organizations, including equal opportunities at the workplace, see EIGE, 2016b.

Table 6: Suggestions towards a gender-sensitive research - from different sources at ZEF

SOURCE	SUGGESTIONS
ZEF gender group	Organisation of workshops, seminars or events on specific issues (e.g.: gender-based violence, masculinities, gender and migration, others).
	Incentivize male participation in the debate.
	Review and improve syllabus every year, promote inter- and disciplinary courses (ZEFa, ZEFb, and ZEFc) on gender and development.
	Promote an institutional network on gender in research in Bonn.
	Promote incentives to ensure the integration of a gender dimension in research and teaching.
	Organise activities that highlight the benefits of integrating gender dimensions in research and innovation content.
	Continue supporting doctoral students in integrating a gender dimension in their work through debates and exchange of experiences.
	Look for calls to initiate a specific research project on gender and development (interdisciplinary).
Questionnaire to Senior Researchers	Analysis of current situation and needs, before taking any action.
	Engrain "Gender" in ZEF mission and goals before training
	Include qualitative (anthropology mainly) and quantitative approaches on gender.
	Elaborate guidelines to include a gender dimension in research
	Focus training on how to carry out field work, particularly interviews.
	Consider mid as well as long term effects in ZEF projects and regions.
	Elaborate on a gender policy (participatory process).
Workshop "Gender in ZEF", May 2021	A gender policy at ZEF
	A course of econometrics from a gender perspective
	Explore and encourage action/transformational research
	Discuss cognitive biases (researcher vs. subject) and own positionality as researcher
	Increase gender awareness within ZEF researchers.
	Provide with theories, analytical tools and methodologies on gender and feminist research to those interested.

To finalize this report, I highlight the need to continue interdisciplinary and critical analysis and discussions on gender dimensions in research. Assumptions of their relevance seem to be unproblematic at first sight, but an overview of the research approaches, as the one provided during the workshop, shows different conceptualizations, from a more functional participation of women in labour markets or food production, to a tangible transformational and human rights-based approach. The academic discussion of these aspects could enrich the research contents, build capacities and rise awareness on the importance to generate evidence on gender-based discrimination in all its forms, for the elimination of one of the most pervasive forms of exclusion.

## REFERENCES

- Alabi, O.J., Seedat-Khan, M.& Abdullahi, A.A. (2019). The lived experiences of postgraduate female students at the University of Kwazulu Natal, Durban, South Africa. *Heliyon* (5) 11: e02731, Elsevier Ltd. DOI:<https://doi.org/10.1016/j.heliyon.2019.e02731>
- APA. American Psychological Association. (2006). Answers to your questions about transgender individuals and gender identity. Retrieved from <http://www.apa.org/topics/transgender.htm>
- APA. American Psychological Association. (2012). Guidelines for psychological practice with lesbian, gay, and bisexual clients. *American Psychologist*, 67, 10-42. doi: 10.1037/a0024659
- Banerjee, S. & Ghosh, N. (2018) Introduction. Debating Intersectionalities: Challenges for a Methodological Framework. *South Asia Multidisciplinary Academic Journal* [Online], 2018 (19). DOI: <https://doi.org/10.4000/samaj.4745>
- Beuchelt, T. & Nischalke, S. (2018). Adding a gender lens in quantitative development research on food and non-food biomass production: A guide for sex-disaggregated data collection. ZEF Working Paper No 170. ZEF.
- Beuchelt, T.D. (2016). Gender, Social Equity and Innovations in Smallholder Farming Systems: Pitfalls and Pathways. In F. W. Gatzweiler and J. von Braun (eds.), *Technological and Institutional Innovations for Marginalized Smallholders in Agricultural Development*. Springer. 181-198.
- Beuchelt, T.D. and L. Badstue. (2013). Gender, nutrition- and climate-smart food production: Opportunities and trade-offs. *Food Security*, (5): 709–721.
- Casad, B.; Franks, J.; Garasky, C.; Kittleman, M. Roesler, A.; Hall, D. & Petzel, Z. (2020). Gender inequality in academia solutions for women faculty in STEM. *Journal of Neuroscience Research* 99(1), 13-23. DO:10.1002/jnr.24631 *Journal of Neuroscience Research*.
- Choudhury, B. (2014) New Rationales for Women on Boards. *Oxford Journal of Legal Studies*, 2014: 1–32. doi:10.1093/ojls/gqt035
- Curiel, O. (2007). Crítica poscolonial desde las prácticas políticas del feminismo antirracista. *Nómadas* (Col). (26):92-101. Available at: <https://www.redalyc.org/articulo.oa?id=105115241010>
- De los Reyes, P. (2017). Working life inequalities: do we need intersectionality? *Society, Health & Intersectionality*, (8), 14-18. DO:10.1080/20021518.2017.1332858
- ECOSOC. Economic and Social Council. (1997). *Gender Mainstreaming*. Report of the Economic and Social Council for 1997. (A/52/3, 18 September 1997). Report.
- Espinoza, B. & Goetschel, A.M. (2014). Construcciones de calidad e igualdad en las universidades ecuatorianas. In R. Valls, M., D. Campderros, L. & P. Arteaga, M. (eds). *Nuevos Desafíos para la Inclusión Social y la Equidad en la Educación Superior. Actas del III Congreso Internacional MISEAL*.
- European Union. (2011). Toolkit Gender in EU funded research. European Commission.
- European Institute for Gender Equality (EIGE). (2019). *Intersecting Inequalities*. Gender Equality Index. Available at: <https://initiative-chefsache.de/content/uploads/2019/08/European-Institute-for-Gender-Equality-2019-Gender-Equality-Index.pdf>
- European Institute for Gender Equality (EIGE). (2016a). *Gender in Research*. Available at: <https://eige.europa.eu/gender-mainstreaming/policy-areas/research>
- European Institute for gender Equality (EIGE). (2016b). *Gender in academia and research. Gear tool Luxembourg: Publications Office of the European Union*. Available at: <https://eige.europa.eu/gender-mainstreaming/toolkits/gear>
- Gainor, K. A. (2000). Including transgender issues in lesbian, gay, and bisexual psychology: Implications for clinical practice and training. In B. Greene & G. L. Croom (Eds.), *Psychological perspectives on lesbian and gay issues*, (5). *Education, research, and practice in lesbian, gay, bisexual, and transgendered psychology: A resource manual*. 131–160. Thousand Oaks, CA: Sage
- GIWPS. Georgetown Institute for Women, Peace and Security. (2020). *Beijing +25. Accelerating progress for women and girls*. Report.

- Grosfoguel, R. (2011). Decolonizing Post-Colonial Studies and Paradigms of Political-Economy: Transmodernity, Decolonial Thinking, and Global Coloniality. *TRANSMODERNITY: Journal of Peripheral Cultural Production of the Luso-Hispanic World*, 1(1). <http://dx.doi.org/10.5070/T411000004> Retrieved from <https://escholarship.org/uc/item/21k6t3fq>
- Huang, J., Gates, A., Sinatra, R. & Barabási, A.L. (2020). Historical comparison of gender inequality in scientific careers across countries and disciplines. *PNAS*. 117(9), pp. 4609–4616. DOI: 10.1073/pnas.1914221117
- IANGWE. United Nations Inter-Agency Network on Gender Equality (2020). *25 Years after Beijing. Summary report. A review of the UN system's support for the implementation of the Platform for Action, 2014-2019*. Available at: <https://www.unwomen.org/-/media/headquarters/attachments/sections/library/publications/2020/ianwge-review-of-un-system-support-for-implementation-of-platform-for-action-2014-2019-summary-en.pdf?la=en&vs=3841>
- Institutional Shareholder Services, Inc. (2017). *Harvard Law School Forum on Corporate Governance*. January 6, 2017. Article. Available at: <https://corpgov.law.harvard.edu/2017/01/05/gender-parity-on-boards-around-the-world/>
- INSTRAW. United Nations International Research and Training Institute for the Advancement of Women. (n/d). *Gender Research: A How-To Guide*. Available at: <https://genderaveda.cz/wp-content/uploads/2017/10/gender-research-a-how-to-guide.pdf>
- Israel, A. & Sachs, C. (2013). A Climate for feminist Intervention: Feminist Science Studies and Climate Change. In M. Alston M. & K. Whittenbury (eds). *Research, Action and Policy: Addressing the Gendered Impacts of Climate Change*. Springer: Dordrecht. [https://doi.org/10.1007/978-94-007-5518-5\\_3](https://doi.org/10.1007/978-94-007-5518-5_3)
- Juhász, B., Pap, E., & European Parliament (2018). *Backlash in Gender Equality and Women's and Girls' Rights: Women's Rights and Gender Equality*. Report.
- Khan, Javeria. (2019). *Challenges of Women in pursuing Doctor of Philosophy (PhD) after Marriage*. [Doctoral Dissertation, International Islamic University]. DO: 10.13140/RG.2.2.18493.00489
- Mergaert, Lut & Emanuela Lombardo. (2014). Resistance to implementing gender mainstreaming in EU research policy'. In E. Weiner & H. MacRae (eds). *The persistent invisibility of gender in EU policy' European Integration (EIoP)*, [Special issue] 1 (8). Available at SSRN: <https://ssrn.com/abstract=2523414>
- Mohr, A., Beuchelt, T., Schneider, R. & D. Virchow. (2016). Solving Trade-Offs Between Food Security and Biomass Use: Rights-Based Food Security Criteria for Biomass Sustainability Standards and Certifications. *Biomass & Bioenergy*, 89, 133–145.
- Mohr, A., Beuchelt, T., Schneider, R. & D. Virchow. (2015). A rights-based food security principle for biomass sustainability standards and certification systems. ZEF Working Papers No. 143, Center for Development Research (ZEF), Bonn, Germany (peer-reviewed).
- Nischalke, S.M., Abebe, M., Assefa, B., Keding, G.B., Kriesemer, S.K., Randrianarison, N., & T.D. Beuchelt. (2018). Gender challenges in horticultural research in Ethiopia and Madagascar. *Acta Hortic.*, 1205, 137-146.
- Nischalke, S.M., Abebe, M., Assefa Wondimagegnhu, B., Kriesemer, S.K., and T.D. Beuchelt. (2017). Forgotten Forests? Food Potential of Ancient Coffee Forests and Agroforestry Systems in the Southwestern Ethiopian Mountains, Seen Through a Gender Lens. *Mountain Research and Development*. 37 (3), 254-262. Doi: 0.1659/MRD-JOURNAL-D-16-00096.1 (open access).
- Nischalke, S. & Bisht, S. (2017). Challenges to women as food and risk managers in the context of floods: A case study from Tinsukia, Assam. 67-84. In S. Hazarika & R. Banerjee (eds.): *Gender, Poverty and Livelihood in the Eastern Himalayas*. Routledge India.
- Lanz Vargas, K. (2014). Empoderamiento de mujeres indígenas en Guatemala: un nuevo enfoque desde las Ciencias Sociales. In R. Valls, M.; D. Campderros, L. & P. Arteaga, M. (eds). *Nuevos Desafíos para la Inclusión Social y la Equidad en la Educación Superior. Actas del III Congreso Internacional MISEAL*, 96-111.

- LEAD-CGIAR. (2021). *Gender in Agriculture and Food Systems: An Evidence Gap Map*. Lead at Krea University and CGIAR Gender Platform. Report. May 2021. Available at: [https://www.wocan.org/wp-content/uploads/CGIAR-EGM-report\\_May2021\\_V2.pdf](https://www.wocan.org/wp-content/uploads/CGIAR-EGM-report_May2021_V2.pdf)
- Leduc, B. (2009). Guidelines for Gender Sensitive Research. ICIMOD. November 2009.
- Prpic, M., Shreeves, R., & Dobrova, A. (2019). *Promoting equality between women and men*. EPRS. European Parliamentary Research Service. Briefing. Available at: [https://www.what-europe-does-for-me.eu/data/pdf/focus/focus10\\_en.pdf](https://www.what-europe-does-for-me.eu/data/pdf/focus/focus10_en.pdf)
- Rwafa, U. (2016). Culture and Religion as Sources of Gender Inequality: Rethinking Challenges Women Face in Contemporary Africa. *Journal of Literary Studies*. 32(1), 43-52. DOI: 10.1080/02564718.2016.1158983
- Sen, G. (2018). The SDGs and Feminists Movement Building. UN Women. Working Paper No. 27, December 2018. Available at: <https://www.unwomen.org/-/media/headquarters/attachments/sections/library/publications/2018/discussion-paper-the-sdgs-and-feminist-movement-building-en.pdf?la=en&vs=2356> (accessed 07.09.2021).
- Suárez, C. I. & MISEAL. (2014). Estudiantes indígenas en la Universidad en Perú: criterios y orientaciones para su permanencia. In *Nuevos Desafíos para la Inclusión Social y la Equidad en la Educación Superior en América Latina*, 1 (1), 252-266.
- Tang H.H. (2019). World-Class Universities and Female Leadership in the Academic Profession: Case Studies of East Asian Higher Education. In D. Neubauer & S. Kaur (eds). *Gender and the Changing Face of Higher Education in Asia Pacific. International and Development Education*. Palgrave Macmillan, Cham. 41-56. [https://doi.org/10.1007/978-3-030-02795-7\\_4](https://doi.org/10.1007/978-3-030-02795-7_4)
- Torrado, A. & Fischetti, N. (2018). Apuestas del feminismo: Ciencia/Técnica/Latinoamérica Nuevas urdimbres desde el Sur. *RevIISE*. Vol 11, Year 11, 267 – 279.
- Turner, B.L. & Fischer-Kowalskic, M. (2010). Ester Boserup: An interdisciplinary visionary relevant for sustainability. *Proceedings of the National Academy of Sciences of the United States of America*. December 21, 107(51), 21963–21965. Available at: <https://doi.org/10.1073/pnas.1013972108>
- UNDP. United Nations Development Programme. (2014). Guidance Note: Gender statistics.
- UNDP. United Nations Development Programme. (2010). *Humanity Divided: Confronting Inequality in Developing Countries*. Chapter 5: Gender inequalities, 161 – 193.
- UNESCO. (2019): Institute for Statistics, *Fact Sheet No. 55: Women in Science*: p. 2
- UNESCO. (2015). *Science Report: towards 2030*. UNESCO.
- UN Women. (2019). *Turning Promises into Action. Gender Equality in the 2030 Agenda for Sustainable Development*. Report.
- UN Women (n/d). Redistributing unpaid care and sustaining quality care services: A prerequisite for gender equality. Policy brief No 5.