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Invisible women: barriers for women professionals in the water, energy, food, and environment sectors in Nepal

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Despite evidence of women's roles and expertise in the management of water, energy, food, and the environment (WEFE), the WEFE literature is almost silent on gender issues. In the context of climate change, achieving more inclusive management of natural resources is vital; yet women continue to be underrepresented as professionals in WEFE sectors, and largely absent in leadership positions. Using Nepal as a case study, this paper explores the enduring barriers to their exclusion, and entry points for greater equity among professionals in these sectors. To do so, we draw on key informant interviews with 34 male and 31 women professionals from government, civil society, non-governmental organizations and consultants, as well as a roundtable discussion with 20 women professionals specifically focused on gender barriers in these sectors in Nepal. Drawing on Gaventa (2006)'s power cube, this paper examines how power dynamics within and between the public and the private spheres create a web of barriers that conflate to sideline women professionals. While women have reached the "closed space" as defined by Gaventa (i.e., are recruited to professional positions in WEFE sectors), different sources of "hidden" and "invisible" power at play in the public and private spheres continue to limit their participation, influence and decision-making. We argue that the continued marginalization of women professionals calls for a focus on understanding the power and intersectionality dynamics that sustain exclusion. This focus is critical for the development of strategies to increase the voice and leadership of women professionals in WEFE decision-making.

KEYWORDS

gender, women's leadership, power, water-energy-food-environment nexus, power cube

1. Introduction

Research into the barriers women professionals experience at home and in the workplace, and how the private/public interactions play out and are detrimental to women, started a few decades ago (to name a few: Witz, 1992; Nicolson, 1996; Halford et al., 1997; and more recently Stamarski and Son Hing, 2015). Research emerging from the field of natural resource management over the past three decades has shown that, despite playing and important role in the use and management of water, energy, food, and the environment (WEFE), gender inequalities in access to and control over resources and decision-making in these sectors (among others) play out against women's interests (Resurreccion and Elmhirst, 2008; Joshi et al., 2021).

The latest United Nations Development Programme gender index report (UNDP, 2023), which highlights limited progress and even stagnation for women since 2019, is a reminder that despite accumulated evidence and a better understanding of the challenges women face, continued questioning and exploring of the root causes of marginalization, and the processes continuing to marginalize women professionals, is needed. Given the interrelations among WEFE sectors and their centrality to climate change and action, attention to the WEFE nexus is increasing: yet here too, gender and inclusion remain largely ignored in the growing WEFE nexus literature and field of practice (Buchy et al., 2022).

This is the case in Nepal, which, like many other countries globally, faces a growing climate crisis and decentralization policies regarding the management of natural resources. These processes call for the involvement of men and women, as professionals and citizens, in reflecting, exploring, innovating and making decisions to promote an integrated, sustainable and socially just management of WEFE resources. Although the country has developed some of the most progressive gender equality and social inclusion (GESI) policies in South Asia, studies have highlighted the marginalization of women professionals in WEFE sectors in the workplace, underscoring the gulf between this reality and Nepal's official GESI discourse (Christie and Giri, 2011; Wagle et al., 2017; Bhattarai, 2020). As such, Nepal offers promise as a case study to examine how processes of inclusion and exclusion operate in these sectors. Shrestha and Clement (2019, p. 1018) explore the gap between policy intentions and implementation, and how the professional culture, the dominant discourse of science and technology and the institutional structures "intertwine" to create and maintain gaps between espoused theory and the practice of addressing gender and social inclusion. However, few studies explore in depth the causes of this marginalization.

In this paper, we explore in greater detail the where, how and why of these exclusions based on gender and other social relations in WEFE sectors in Nepal. More broadly, we draw from this case to explore how different dimensions of power interact and hinder progress toward gender equality in WEFE sectors; what Ryan (2022, p. 2) identifies as the "intersectionality of the experiences that women face". Specifically, we examine how different dimensions of power located within the entangled private and the public spheres underpin the marginalization of women professionals. We focus on WEFE workplaces, where such an analysis has not been done before. Understanding these dynamics can help to devise strategies to address the exclusions from decision-making that undermine the sustainability of climate and resource management approaches in the long term.

To contextualize the study, we begin by laying out the conceptual framework that guides this work. We then present our methodology and results from original data collection with female and male WEFE professionals in Nepal. In the discussion, we unpack how different dimensions of power in the closed WEFE sector space and across levels – both in the public (workplace) and private (family) spheres – interact dynamically to maintain women and men in unequal positions in WEFE sectors. In closing, we outline the implications of our findings for women's influence and career progression in WEFE sectors in Nepal and beyond. Although our data draw from specific sectors in Nepal, analysis from our case study can be applied to other sectors and national contexts.

2. Contextualizing GESI in Nepal

Nepal adheres to various international agreements and conventions, such as the Convention on the Elimination of All Forms of Discrimination Against Women and the Sustainable Development Goals, that seek to advance GESI. Moreover, Nepal's Fifteenth Five-Year Plan (2019/20–2023/24) acknowledges that inequality and exclusion have not been eradicated. The plan mentions that socially progressive economic arrangements will be made to ensure that women, Dalits and other marginalized groups have all the required protections and rights.

The position of women in Nepali society is not only determined by gender norms, but also intersects with their caste status. Though caste discrimination was abolished in Nepal in 1963, informally, caste and ethnicity matter in everyday Nepali life, from religious rituals to food habits, to "honor killings" that attempt to prevent marriages between "high" and "lower" castes. Caste and ethnicity continue to shape access to education, employment, social networks and social inclusion (Bennett et al., 2013). Lama and Buchy (2002)'s study of community forestry shows clearly that access to resources, benefit sharing and decision-making are not only organized along gender lines, but by caste as well. Since then, the conceptual framework of intersectionality which considers interlinked dimensions of oppression (such as, among others, caste gender, sexuality, ethnicity and age) has gained traction in natural resource management studies (Ergas et al., 2022).

The country has also seen substantial investments in GESI through development aid over the past two decades, and the entry of around 14,000 women as elected representatives at municipal level in 2017 in Nepal's federalist structure (Asia Foundation, 2018). However, Goodrich et al. (2021)'s "State of Gender Equality and Climate Change in Nepal" highlights that, despite progress in policies, such as GESI mainstreaming in the Nepal Climate Change Policy 2019, several gaps related to gender and inclusion in natural resource management remain. In forestry and agriculture, policies lack institutional anchoring, while in the energy and water sectors, policies have yet to address GESI issues. There are very few women working in the energy and water sectors, and they feel pressured to conform in a man's world [Asian Development Bank (ADB), 2018]. Mang-Benza (2021) has argued that the energy sector is not women friendly partly because it is dominated by "men talking to men" (p: 2). As a result, the energy sector has been considered gender neutral, which partly explains historically gender-blind energy policies as well as the difficulty to advocate for change. Building on the work of Udas and Zwarteveen (2010) and Liebrand and Bhushan Udas (2017) on dominant masculinities in water engineering perpetuating a narrow technocratic approach to water management, Liebrand (2021) has explored in more depth the colonial roots on the culture of water engineering. His research shows how the influence of the modernization paradigm translated historically in the transfer of euro-centric, top-down views of irrigation management, led by men engineers at a time when women were considered to be lacking technical abilities and physical strength. Goodrich et al. (2021)'s report highlights women's limited contribution to decision-making and their absence in leadership positions, especially in the energy sector. In the following section, we explore key concepts for understanding these exclusions in Nepal's WEFE sectors and beyond.

3. Conceptualizing power among WEFE sector professionals

Power has been analyzed and discussed from different epistemological and ontological standpoints and remains a contested concept (Avelino, 2021). Allen (2014) cites three conceptions of power: (1) power as capacity to act (action-theoretical conception); (2) power as structural pressures (systemic conception); and (3) power as force fields (constitutive conception). For Ahlborg and Nightingale (2018, p. 381), power is elusive and there is greater analytical potential in considering the relational dimension of power, "replacing the view of power as a personal attribute or resource". In turn, in her review of existing theories on power, Avelino (2021, p. 429) observes that each manifestation of power as "power over", "power to", and "power with" can help explain social change, but also that, "as the essence of power cannot be captured, it follows that the essence of its contestation can also not be fully captured".

In this paper, we embrace the concept of power as constitutive: relational, processual, resulting from "multiplicities of interactions" (Ahlborg and Nightingale, 2018, p. 383) and (re)produced through "force fields", "bundles" or "webs" of relations (Ahlborg and Nightingale, 2018, p. 385). To understand the force fields that embed women professionals in WEFE sectors, we draw on Gaventa (2006)'s "power cube". The power cube offers a framework for understanding power relations along three dimensions: (1) at different scalar levels (international, national and local); (2) within different spaces (closed, invited and claimed); and (3) in multiple forms (visible, hidden or invisible).

Closed spaces are exclusive spaces where elites (e.g., politicians, experts and other leaders) make decisions with limited consultation or engagement with those who are affected by those decisions. Access to closed spaces is regulated by law (for example, joining the public service[1] or being elected for public office). **Invited spaces** are those organized and managed by authorities, such as by the state (e.g., in community forestry in Nepal), supra-national organizations or non-governmental organizations (NGOs); where access and functioning are bureaucratically controlled through formal rules and regulations (visible power). Finally, **claimed spaces** are those created and occupied by citizens through social movements or networks, where the state has limited control.

Visible power is situated within the explicit rules and regulations that organize life in public spaces (e.g., in the workplace) or in the private sphere (such as the family). Visible forms of power play out mostly within decision-making processes and bodies. **Hidden power** is embedded within the tacit observed rules of socialization (social norms, such as those barring married women from going out for a drink with male colleagues after work). Hidden power is what allows powerholders to set the agenda and, in so doing, exclude issues that can challenge their vested interests. For example, whereas visible power is exercised by the state through policies, laws and procedures, hidden power reveals itself in the implementation (or not) of these regulations. Hidden power operates behind the scenes when, for

instance, key decisions are taken by senior officials or politicians before being submitted for wider consultation. While citizens are aware of the existence of hidden power, this form of power is by definition not always easy to trace. **Invisible power** is the internalization of defined social orders often prevalent when one social group has historically dominated another. This form of power is subconscious and invisible even to people who are marginalized within this social order. For instance, this is the case for Dalits or Madhesi in Nepal, who "know" that holding public office is not for them, or for women who have internalized the belief that they need to marry to garner social respect. Alternatively, invisible power can imbue privileged social groups with an inherent sense of entitlement.

Finally, Gaventa's power cube draws attention to **levels** of power: from the **local to** the **international**. Power is understood as multi-layered and multi-polar – exercised across a range of actors. In this paper, we focus on where the national (government) meets the local, in the arenas where women professionals are able to act. Although we did not specifically investigate issues related to family life, interviewees and roundtable participants raised the issue several times for its strong bearing on women professionals. Hence, we expand the power cube by opening up the local to illuminate the **private** (family) **and public spheres** that embed women's everyday experiences, and explore how gender identities play out in and across these two spheres. We narrow the public sphere to the workplace, on which our data focus, although we recognize that gender norms and power relations are at play in all public spaces. We focus on how interactions across spheres and the three forms of power described in the power cube influence or shape access to closed WEFE spaces and decision-making processes.

4. Methodology

Data for this paper were collected in Kathmandu in May 2022. Together, the first author and a research assistant conducted key informant interviews with 31 women and 34 men working in WEFE sectors within Government of Nepal (GoN) at the federal level (comprising the Ministry of Forests and Environment; the Ministry of Energy, Water Resources and Irrigation; and the Ministry of Agriculture and Livestock Development), civil society organizations, academia and the private sector. A workshop with 20 women professionals representing a cross-section of stakeholder groups (including some the key informant interview participants) was subsequently conducted to further examine gender dynamics in WEFE sectors. All participants were purposively selected based on their current or former prominent role in the WEFE sectors. Data on caste/ethnicity were collected throughout the process to assess and ensure the social diversity of the sample.

Themes explored in the interviews and roundtable included women professionals' influence and leadership in WEFE sectors, and the constraints and opportunities they face in trying to develop their skills and strengthen their voice and influence in these sectors. As described in Buchy et al. (2022), questions also focused on the institutional and policy changes over the past decades promoting equality in WEFE nexus sectors in Nepal.

Data were thematically analyzed both inductively and deductively. Inductive analysis allowed the themes most prominently discussed by participants to surface. Based upon these themes, we selected

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1 Access to government jobs at professional level in Nepal is organized nationally through a highly competitive exam testing generic knowledge and skills.

Gaventa's power cube as a conceptual framework for organizing participant experiences and perceptions and analyzing the power dynamics at play in professional WEFE sectors. We subsequently revisited the data deductively through the lens of the framework's key concepts. Iterating between inductive and deductive analysis encouraged us to "open up" the "local" level in the power cube to bring the public and private spheres to the fore, in recognition of the importance these spaces hold in participant narratives, as described below.

5. Results: exclusionary powers in WEFE workplaces

5.1. Discrimination in public WEFE sector spaces

> "Women are brainwashed by patriarchy, and since female officers face a lot of resistance, they end up feeling: why bother?" (Senior female GoN officer)

Interviewees acknowledged that more women are in the public service in WEFE sectors than before. However, female interviewees explained that discriminatory working conditions have meant that many of the trained female foresters or engineers did not join the service, or left after a few years. As some interviewees explained, despite the social status, benefits and livelihood security the public sector can offer (advantages not ensured in the private sector), several female foresters who joined the public service eventually left to work for NGOs, development projects or bilateral or multilateral development partners, or opted to become self-employed. Respondents attributed this to several forms of gender-based discrimination in the civil service, listed below.

5.1.1. Information and social network deficits

All women interviewed, independently of their level of seniority, experienced limited access to information. A female officer explained that women are less likely to be aware of or able to succeed in civil service entrance exams because they are less exposed to information generally. Once on the job, the women interviewed considered that their male colleagues are better informed about opportunities for additional training or study visits, especially abroad. This is because they are better connected, operate within their own male-dominated networks, and socialize easily outside office hours, which is socially unacceptable for women. This hidden power, embedded in social norms, has significant consequences for women. According to the senior women interviewed, it has meant that women are not only excluded from sources of information, but also have very limited networking skills since they have not had the chance to develop them.

The need for networking to progress in one's career was consistently and unanimously reported in our interviews. However, women considered that they have not been socialized to network outside family circles, and that meeting to discuss professional matters outside a work environment did not come easily to them. Women's exclusion from male-dominated networks hinders their access to information and opportunities, but encourages women to share information among themselves and to support each other through

mentoring. Senior women were very clear about their mentoring role, or even duty. They also recognized, however, that women are not doing enough to support each other, partly because of a lack of time (outside of working hours, due to domestic duties) and experience.

5.1.2. Uneven expectations and standards for male and female staff

The senior women interviewed believed that visibility is key for their professional advancement. They considered that they need to work hard (mentioned by all women), maintain high competency levels (i.e., up-to-date knowledge in their field) and accept or volunteer for challenging assignments to demonstrate that they are capable. Although these requirements are not explicitly spelled out, women said that they "knew" this was expected of them. They also felt that they have to know all the facts to be considered credible in meetings, whereas "men can just go on and waffle" (mid-level female GoN officer).

Even though the women interviewed said they felt confident about their professional competencies, they had implicitly internalized that they know less than men (invisible power) and need to work harder than their male colleagues to prove themselves. They had also implicitly accepted the cultural norm that women should not speak in public in the presence of men (even relatives), which resulted in all the women interviewed expressing a lack of confidence to speak in public and needing support to strengthen their public speaking skills.

5.1.3. Restricted mobility

About half of the women interviewed faced the challenge of traveling to field sites when they are the only woman. Male colleagues are used to being among men and often feel uncomfortable being around a woman, especially outside of working hours. Having a woman on the team is also considered to increase travel costs, as it implies paying for a separate hotel room for the woman whereas men can easily share rooms. Because they breech social norms, women who travel with men can also be the subject of gossip, which reflects poorly on them and their families. As one interviewee (a former female GoN officer) emotionally recounted, after one such travel, she "had to work hard to convince (her) family that there was nothing to it". Some female respondents simply do not put themselves forward for field assignments so as not to "embarrass the team" (as one respondent put it), which perpetuates the impression that women are not fit for field work.

5.1.4. Unsafe workplaces

Women interviewees considered that sexual harassment in the workplace is rife and goes unchecked and unpunished. There is no effective system within WEFE-related ministries for women to report harassment. As a female senior GoN officer interviewed explained:

> "Women face discrimination, bullying and harassment within the ministry and it is tough for young women. Cases of harassment are rarely followed up by the hierarchy. Women are addressed as Baihini, which is ambiguous. It can be interpreted as "I will protect you" or "you are only a little sister, not my equal". Some (male) colleagues develop an unhealthy power relationship with junior female officers. There are cases of sexual harassment, and women who complain have to justify their actions (due to victim blaming)." (Senior female GoN officer)

5.1.5. Insufficient GESI-related resources

According to interviewees, one concrete outcome of the GESI policy has been the creation of gender focal points in every ministerial department to support GESI mainstreaming within the organization. However, interviewees reported that focal points are typically junior women who have no incentives or clear terms of reference for this role, to the point where even they themselves find it hard to understand associated expectations. Being a focal point is rarely considered part of the job profile, and there is no accountability mechanism attached to the role. Given that they are typically quite junior, gender focal points in ministries are not involved in planning or decision-making processes. As a senior female professional from GoN explains:

> "In order to carry out a gender audit of the budget, for example, you need at least a joint secretary-level officer, as officers from under-secretary level and below are not heard and listened to."

In addition, despite many gender training programs over the years, the conceptual understanding of gender is generally very limited among WEFE sector staff. A female interviewee from GoN commented: "At the forestry school, we all studied the same courses, but when I came to the workforce, all of a sudden, I was asked to be a gender expert … but I had no idea about gender".

5.1.6. Internalized biases

In our study, generational differences separated older men with less awareness of gender inequalities in the workplace from younger men, who easily admitted that women professionals face a double burden. Older male GoN officials were unapologetic about their biases against female colleagues. One older senior male officer laughed off the question of GESI within his department saying "*Ha, ha! I always forget about women!*". This is an example of what Nicolson (1996, p. 90) calls "practical masculinity", when there is no reflexive ability, and masculine ways of behaving and values are taken for granted. Another older senior male officer agreed to the principle of gender parity in the workplace, but was irritated toward women professionals who complain about gender inequality at work to seek "benefits for themselves". In his words, "women staff at headquarters are already privileged and should not use GESI as a pretext to gain personal advantages". He considered instead that the issues of gender inequalities are legitimate and in need of addressing at the field level.

Even among women, awareness of how gender power relations play out in the public sphere was not obvious. Box 1 summarizes, in a third-person narrative, the picture that one female mid-level GoN officer painted of her understanding of gender in the workplace.

In Box 1, Rita begins by indicating that there is no discrimination, but concludes by acknowledging that female staff do not get equal opportunities. Although she implies that men and women are not treated differently, she points to men's networks favoring men in the same sentence. She does, to some extent, recognize that gender plays a role in career progression, but does not see clearly how hidden and invisible forms of power discriminate against women. She attributes success to hard work; how caste privilege and social background (which influence access

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Box 1

Rita (fictional name), a junior professional from a privileged caste, does not feel that there is discrimination within her department. She has been promoted through open competition and is confident that she will climb the ranks in good time. She and her female colleagues recognize, however, that older men with 15–20 years of service are less comfortable interacting with them (during field visits, for example), so it is easier for women to avoid these interactions.

Rita recognizes the difficulty she faces in meetings that are dominated by men. Women must feel able to express themselves, but they lack confidence. Junior women professionals particularly feel unlikely to be taken seriously and can only speak when summoning a strong evidence base, whereas many male colleagues are comfortable "waffling on" (the term she used during her interview) without evidence.

As women gain seniority, they command more respect; gender and age are both at play in workplace relations. Rita believes that her success is based solely on her hard work and does not acknowledge her social/caste privilege. She does recognize that opportunities are not fair, however. Deserving staff do not necessarily receive opportunities. There are mandatory selection criteria to take part in training in donor funded projects, but no such criteria in national level projects. She feels that rather than gender-based favoritism, the issue is one of a "men's club": men feel comfortable working with men.

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to schools, careers, and professional networks) play out in her favor never emerges during the interview.

5.2. Power at play in the private sphere

> "You can be an engineer and not be empowered" (Junior female GoN officer).

Restrictive social norms and heavy expectations placed on Nepali women in the private sphere also underpin their opportunities in the public sphere. Every woman interviewed declared that, irrespective of her profession, a married woman's first and foremost responsibility is her reproductive role. For example, one senior woman interviewed, with doctorate level education, explained how she was expected to prepare food for the entire extended family before leaving for work. Several women interviewees also mentioned the need for women "to maintain the peace in the family" by not neglecting domestic duties within an extended (virilocal) family context. Some interviewees reflected that the very act of gaining professional employment as a wife in middle-class urban families can be perceived as an afront by in-laws, thereby creating conflicts within the married couple and extended family. Thus, far from increasing their bargaining position (Agarwal, 1997), the double burden of women may result in a double penalty for women professionals within the household and at work. The challenge of the double burden goes beyond having to juggle many tasks: a woman's reproductive identity takes precedent and limits her capacity to achieve her potential in the workplace. The role assigned to the married woman in the private sphere is deemed more important by her family; as demonstrated above, education or employment are not sufficient to empower her.

Because of the expectations placed on married women, interviewees explained that some educated women professionals decide not to marry, which is a great sacrifice in a society where having a family is expected and a status symbol. Other younger women get as far as possible in their studies before agreeing to marry, as they know that once they do, family will come first. As one mid-level women respondent working for an NGO explained:

> "It is easier for unmarried women professionals to invest in their work and move around. But once they are married or with child, their priorities shift. Women feel the double burden. Women should not expect fast changes".

Younger women interviewees were more vocal about this situation, but overall, women talked about these realities as a fact of life to be endured, and that they would somehow evolve with time to the benefit of future generations.

Conversely, respondents noted that when family support is provided, it can be a success factor for women professionals. When asked, "what were the factors explaining your career achievements?", women overwhelmingly responded: "hard work and family support". Often, they specifically pointed to the support of their mother. For example, one Janjati interviewee explained how she was able to pursue her education up to tertiary level because her mother had fought to save her from an early marriage. She had come from a comparatively well-off background, and her grandfather had been a staunch advocate of Janjati education and her father was an academic. However, when she came of age, following tradition and social norms, her male relatives sought to marry her off, and it was only through the intervention of her illiterate mother, who had been married at 11 years of age, that prevented her early marriage.

For a minority of women interviewed, gender inequalities within the household were less evident. For example, a young women engineer from GoN interviewed explained that:

> "Women also need to believe that they can do it. Before taking a Training of Trainer program, I was not aware that I was lacking confidence in front of loud men. I have three sisters and no brother, so I have limited exposure to gender discrimination within the family".

5.3. Caste and ethnicity: entangled hidden and invisible powers

Of the 65 professionals we interviewed across all stakeholder groups, 85% were from advantaged castes, which represent only 35% of the total Nepalese population but most professionals in WEFE sectors. Despite this, only three interviewees highlighted caste as an issue for inclusion and diversity that needs to be addressed to promote social change, and none of the female respondents from advantaged castes explicitly acknowledged that their privileged caste might have contributed to their achievements. Hence, while all women were aware of gender discrimination, they were not vocal or necessarily aware of the role the caste system plays as a hidden and invisible form of power, either in a positive or negative way. Although many of the women professionals we interviewed were aware of caste discrimination and elite capture in rural areas, they were less vocal about how it affects (i.e., favors) them in urban middle-class Nepal.

6. Discussion

6.1. Visible power in closed spaces

Using the power cube as an analytical framework, our results highlight three key points that follow the three axes of Gaventa's framework. First, although women professionals are increasing in number in the **closed space** of WEFE sector workplaces, they remain in minority. For a long time, the numbers of women studying in the forestry and water sectors were very low – a product of invisible and hidden forms of power – and, relatedly, professions in these sectors were closed to women altogether. Until 1982, for example, only men had access to the Institute of Forestry in Pokhara (Christie and Giri, 2011). Women's relatively late entry into these studies and professions partly explains why women in this public sector have yet to reach secretary level – the highest civil servant grade.[2]

Selection for entry in WEFE sectors in the civil service remains very competitive. On paper, men and women who serve in the GoN are subject to the same recruitment procedures, and the existence of quotas (**visible power**) has increased the presence of women in WEFE sectors. The amendment in the 1993 Civil Service Act includes the provision of reservations for women along with Dalits, Janjatis, Madhesi, people with disabilities and people from remote regions. Together, these groups are allocated 45% of the total seats open for competition in the civil service. The amended Act has also increased the age limit until which women can sit the competitive exam to 40 years (Khadka and Sunam, 2018). Today, 26.6% of public sector positions are held by women (MOFAGA, 2021) and 5% of seats are reserved for women in forestry (Wagle et al., 2017).

Despite holding a presence in this closed space, however, once recruited, women face invisible hurdles that bar them from fully engaging in that space (e.g., Christie and Giri, 2011; Wagle et al., 2017). Similar points have been made for **invited WEFE spaces**, such as in community forestry. As Buchy and Subba (2003) have argued, although local women and disadvantaged groups are privy to the invited spaces of community forestry in Nepal, hidden and invisible power continue to limit their effective participation, voice and influence, and to uphold discriminatory power dynamics. Likewise, our results from WEFE sectors in GoN demonstrate that **visible power**, in terms of women's presence in closed spaces, *should be interpreted cautiously since it can conceal the persistent invisible and hidden forms of power that generate exclusions.*

6.2. Hidden and invisible power at play

Second, our results help to illuminate these *hidden and invisible forms of power* that *uphold barriers for women in WEFE sector workplaces, and which must be intentionally challenged to achieve equality in the workplace.* Over a decade ago, Christie and Giri (2011, p. 139) collected testimonies from women professionals in the forestry sector, including on their working conditions in the service and on their experiences as the first women district forest officers or rangers. The authors reported that, "obstacles ranged from socio-cultural biases against women, to harassment during field trips, to being

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2   As of 2023, the highest level reached (by only one woman) in the forestry sector is Joint Secretary – one step below Secretary level.

assigned purely administrative duties in the workplace". These obstacles and exclusions, symptoms of invisible and hidden forms of power, remain and are elucidated below.

One way to gain points toward promotion in the Nepali civil service is to be active in the field and serve office outside of Kathmandu. However, as our results substantiate, social norms – which reflect hidden power – result in women being assigned office work in the capital, which limits their chance of career progression. This is what Acker (2006) has described as "inequality regimes" – when practices and processes in place within an organization maintain inequalities prevalent in society. Water engineering and forest management are still considered physical male jobs (Liebrand and Bhushan Udas, 2017; Wagle et al., 2017), and thus women are often overlooked for positions in the field. Moreover, this is an area where the private and public spheres meet, in that although many women (and men) resist provincial transfers, social norms make it particularly difficult for women, especially when married, to accept postings (particularly without their family) in the field. This gender-based constraint has also been noted in the energy sector, where in the Nepal Electricity Authority: "one of the promotion criteria provides higher scores for service in difficult geographical regions, a factor that can be biased against female staff due to their responsibilities for their children and family, making it difficult for them to serve in remote locations" [Asian Development Bank (ADB), 2018, p. 26].

One issue that was not broached explicitly in our interviews, but which became evident as we struggled to find a diverse sample of study participants, is the embeddedness of social inequality and exclusion within Nepali society through the hierarchical system of caste and ethnicity. Caste discrimination is unlawful in Nepal, and hence no longer acting as visible power, but is still normatively and structurally relevant, and a significant social determinant. The caste system – maintained by invisible and hidden power – has deep and pervasive implications, as it means that not all women have equal chances to become professionals, let alone progress in their careers (Bishwarkarma, 2019).

Statistics confirm that, in Nepal's WEFE sectors, there is a concentration of individuals with similar socio-economic and caste backgrounds. For example, Madhesis and Dalits represent less than 1% of civil servants (Pokharel and Pradhan, 2020). The Asian Development Bank (ADB) (2018) reports that at the Nepal Electricity Authority, a key national institution in the energy sector, there is a severe under-representation of disadvantaged groups such as Dalits, Muslims, Janjatis, and Madhesis especially higher up in the organization. This lack of diversity tends to be self-reinforcing, creating an environment where there is less likely to be the freedom needed to challenge the social-hierarchical status quo and to bring diverse views, standpoints and decision-making to bear.

Even for women from upper castes, however, norms that exclude women from decision-making in the public sphere continue to limit their career progression and access to leadership positions in the civil service. In a webinar on Women's Political Leadership in Nepal,[3] Ms.

Kantika Sejuwal, the first elected female mayor in Nepal in 2017 (Chandannath Municipality), described how hard she had to fight to be selected as a candidate. Not only did some men refuse to stand as candidates on her list, but she was also abused and pressured by the electorate during the selection process to renounce her candidature. By 2022, only 3% of women were elected as chairpersons in rural municipalities, 1% as ward chairs, and 4% as mayors of urban municipalities (Shrestha et al., 2022). Hence, although urban women professionals may have formal education, high-profile jobs in the government, secure income, and advantaged caste status, many share similar gender constraints and barriers to rural women of disadvantaged castes, who have low levels of formal education and insecure livelihoods. Our results substantiate that, although women are accessing more WEFE public sector positions, they quickly reach a glass ceiling that prevents them from progressing in their careers. Inequalities linked to gender and caste in Nepal remain society-wide and continue to exclude women from leadership, despite electoral quotas and legal requirements for gender parity (visible power in a closed space).

Propping up other structural barriers for women in the public WEFE sector workplace, our results highlight that sexual harassment – another potent form of hidden power – maintains men's power over women in WEFE sector workplaces. This form of harassment serves to control women's behavior, limit their mobility outside the private sphere, and undermine their confidence and self-esteem (Benya et al., 2018). Sexual harassment is psychologically damaging, and in a context such as in Nepal's, where women's sexuality is tightly controlled by social norms, it carries high risks of stigmatization and shaming of the survivor and her family. Most women in Nepal can recount experiencing sexual harassment in the street, on public transport or at work[4] (see also Asia Foundation, 2021). There have also recently been two cases of harassment reported by GoN female staff in the environmental sector, mentioned during our interviews, which have tested the claims system and demonstrated that these issues are not seriously addressed by senior management.

Although there are legal provisions against sexual harassment in Nepal's Sexual Harassment at Workplace (Prevention) Act 2014,[5] according to interviewees, there is no effective system within WEFE-related ministries for women to report harassment. Everyone knows about harassment, but few people talk about it, and unsolicited attention toward women in their workplace can carry a penalty for them and their entire family. Because it interferes with women's image in the public and private spheres, female interviewees shared that they are not encouraged by their workplace or their family to challenge harassment instances openly.

Relatedly, our results show that social norms resulting from women's domestic responsibilities as well as fears of harassment and women's sexual misconduct, among others, result in women professionals' limited ability to travel for work and participate in informal social gatherings that support colleague bonding outside of formal working hours. In these spaces, a "second face of power" surfaces as decisions are made by the elites outside the formal decision-making arenas (Bachrach and Baratz, 1962 in Avelino,

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3 Organized by Daayitwa Abhiyaan, a Nepali NGO, as part of their Nepal Governance Dialogue Series within their Leadership for Economic Governance program, 10/08/2022. https://www.youtube.com/watch?v=rkU3eE5TVyc&ab_channel=GovernanceLab

4 Buchy, M. field notes, 2015–2022.

5 https://lawcommission.gov.np/en/wp-content/uploads/2021/12/The-Sexual-Harassment-at-Workplace-Prevention-Act-2014-2071.pdf

(2021), p. 430). Women's exclusion from these informal arenas – a product of invisible and hidden power – thereby limits their networks, influence and, it follows, career progression pathways.

The lack of effective gender focal points tempers the promise of change from GESI policies in WEFE sectors. In theory, there should be gender focal points in every GoN department (visible power). Yet, as our results show, these focal points, who are typically young women, are not given the resources or tools to function. The inadequate budgets and implementation of policies so commonly mentioned during interviews are a form of hidden power that hinders gender-transformative change (see also Paudyal et al., 2019; Shrestha and Clement, 2019).

6.3. Interwoven levels of power across the public–private spheres

The third key point is that in the WEFE workplace of GoN or NGOs, international, national and local levels of power, as well as the public and private spheres, intertwine. While visible power in the form of national policies and quotas formally provides a framework for GESI, the dynamics between hidden and invisible power that weave together the local workplace and private sphere interact and constrain women professionals and gender equality. The findings presented above show that women's normative responsibilities within their homes, and norms that stipulate how a good wife, mother and daughter-in-law should behave, reign in the opportunities women have within their careers in WEFE sectors. Indeed, Verschuur (2019, p. 171) reminds us that "women's oppression is not only located in the labor market (…) It is also located in the family – the home of unpaid domestic work and food production. Thus, attention needs to be paid to unequal power relations in the household, to the patriarchal system that influences all socializing institutions – that lead to women's subordination in the paid labor market".

The example of the Janjati interviewee whose mother delayed her marriage to secure her a tertiary education illustrates how gender norms that operate within the private sphere are linked to women's professional opportunities, including in WEFE sectors. Even in this example of a well-off family that values formal education, men were culturally expected to prevent capable daughters from being formally educated. Likewise, Menon (2012) observes that men's respectability in their community in South Asia is often linked to their ability to control the behavior of women in their family. Social norms that operate within the private space of the family are thus powerful unwritten rules (hidden power) that influence women's prospects and progression in the public sphere.

Sexual harassment and violence additionally link the public and private spheres. Whereas sexual harassment is a form of control over women in the public space, domestic violence controls women in the private space. A survey of Nepali men found that gender-based violence is prevalent within the home, with 44% of Nepali men aged 32–35 considered that domestic violence is acceptable, and 71% reported having used violence toward their partners (Nanda et al., 2012). UNDP (2023) data also show that a quarter of people worldwide believe that men beating their wives is acceptable. While this issue was not explicitly broached in the interviews or roundtable, the threat and reality of violence within the home reinforce women's need to fulfill their normative gendered roles in both the public and private spheres.

Within the home, this calls for women to exhibit the qualities and virtues associated with being a good wife, mother, daughter-in-law and more (Bennett, 2022). Beyond the home, women's sexual integrity is linked to the honor of their entire family, and reputational risks linked to women's behavior and experiences in the workplace (e.g., due to sexual harassment, travel and social gatherings, or other types of interactions with male colleagues) can carry consequences for them in the private sphere (Bennett, 2022).

The private and public spheres also collide as men and women embody the gender norms and values that shape their sense of self and others in the workplace. Nanda et al. (2012, p. 2) indicate that, "men in Nepal (…) are brought up in a socio-familial context where gender discrimination against women is common". In their study of masculinity in Nepal, the authors find that half of the 32- to 35-year-old men interviewed considered that women's main responsibility was toward their reproductive role and the maintenance of the household (Nanda et al., 2012). In our study, older male officers were more dismissive than their younger male colleagues of the challenges women face in their workplace. It is possible that, as heads of households, these older men who lead and dominate decision-making within the home are reluctant to share this role at work. On a personal level, recognizing female colleagues as equals would, by extension, imply that female members of the household (wife, sisters, and daughters) can be equals too; and sharing decision-making power with women could be perceived as a challenge to men's identity (invisible power). Nicolson (1996)'s psychological analysis of gender and power within organizations highlights this unconscious fear men may feel at the prospect of women becoming leaders.

Feminist scholars have long questioned the dichotomy between the "public" ("outside" the household) and "private" ("inside" the household) spheres, arguing that it obscures women's contribution to the (paid) production process (Mezzadri, 2019; Guha et al., 2021). Our results further demonstrate how gender relations in the household contribute to shaping women's exclusion in the (public) workplace. As such, our study substantiates Peterson (2000)'s claim that the private and public spheres cannot be approached as spatially separate and functionally independent.

Women's own biases act as another level of invisible power that hinders their influence in WEFE sector workplaces. Unconscious stereotypes and implicit biases are pervasive among us all (e.g., Chang and Milkman, 2020); and this invisible power, which is located within a person's thoughts (within the self) and "naturalized", is a resilient barrier to change in one's own behavior. This could explain why Rita in Box 1 seems to be partially blind to some gender inequalities at work that affect her career progression. The UNDP (2023) data show that 90% of men and women interviewed across the world hold at least one bias against women. Although we did not explore this, it is highly likely that men too internalize values and behaviors which affect their own ability to change and/or to foster change within the offices and organizations they lead. Thus, initiating change requires self-awareness and critical thinking among male and women professionals to allow them to challenge inequitable gender power dynamics in WEFE sectors.

7. Conclusion

This paper has shown how different kinds of power, exercised in different spaces, (re)produce the privilege of dominant groups

(i.e., older men from advantaged castes) in WEFE sector workplaces. On paper, Nepali GESI legislation (visible power) is well developed. Yet in practice, hidden power results in poor implementation of these policies and progress toward gender equality; and invisible power reinforces the barriers that limit women's influence and career progression, even as they access closed WEFE sector spaces. Although there are diverse versions of masculinities in Nepal, the dominant version is being the head of the household and empowered to make decisions for all. These norms in the private sphere are mirrored in the public sphere of the WEFE sector workplaces.

Drawing on the example of Nepal's WEFE sectors, this study has demonstrated that the dimensions of power elucidated in Gaventa's power cube must be understood as intertwined and mutually constitutive. Understanding gender in WEFE sector workplaces calls for an analysis of the interactions among the multiple spaces, forms and levels of power identified in the power cube. Hidden and invisible forms of power that sustain discriminatory social norms at work and at home must be challenged simultaneously.

However, not all women (or men) are fully aware of how invisible power shapes their behavior, or how they themselves incorporate and maintain discriminatory social norms. Change will require more than interventions in the closed spaces and visible forms of power in the public sphere, such as developing a GESI legal framework. Men and women will need to develop an awareness of how they perform their gender roles (invisible power) as part of their identity, and how this impacts gender dynamics across the private and public spheres. Changing gender relations and acting on social norms in the WEFE sectors is necessary to achieve sustainable management of natural resources in the context of climate change. It requires men and women, particularly in positions of leadership, to reflect on and work to redress power dynamics in the public as well as the private spheres.

Data availability statement

The datasets presented in this article are not readily available because interviews were conducted with the guaranty of anonymity and confidentiality. Though interview notes have been anonymized, someone familiar with the context could potentially identify individuals whilst reading the notes given some contextual details for example. Requests to access the datasets should be directed to m.buchy@cgiar.org.

Ethics statement

Written informed consent was obtained from the individual(s) for the publication of any potentially identifiable images or data included in this article.

Author contributions

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Conflict of interest

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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