

# Women's Professional Advancement in Urban Planning Industries: A Systematic Review of Barriers and Facilitators in the Indian Context

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## ABSTRACT

The primary focus of this study is to identify barriers and facilitators to women's participation in the field of Urban Planning through a comprehensive literature review. In addition, this work focuses on a quantitative and qualitative thorough assessment of 76 research publications. The study identified the research gap by conducting bibliometric analysis using R-Studio tools version 4.1.2 and finding reveals that hardly any articles are found on women role in urban planning and barriers to women's progression in urban planning worldwide and in India up to now. Significant barriers include discrimination in the built environment, a perceived glass ceiling in the workplace, a lack of mentoring policies, a lack of training in organizations, unequal pay wages, a lack of women's participation in the planning field and a lack of data on women's professional skills in India are observed. Nobody can disagree that women have a difficult time managing their personal lives and jobs under the masculine professional planning paradigm. So, to resolve all the barriers, facilitators are found. The present study will pave a path to conduct research in the field of women's professional advancement in urban planning.

**Keywords:** Women Participation, Women Centric Urban Planning, Gender Mainstreaming, Barriers, Facilitators, SDGs.

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## INTRODUCTION

Globalization is expanding daily throughout the world and world has now reached globalisation 4.0, often known as the digital-driven era of globalization. In which, gender equality, on the other hand, has remained static over the decades. As per the Global statistics Times, Males account for 51.95% of the population in 2023, while females account for 48.05% of the overall population in India. The most current research studies conducted by National Sample Survey Office (NSSO)<sup>[1]</sup> on Gender equality in labour force participation have found that gender equality is more important for the country's economic growth. Further, it is reported that the Indian economy has seen significant changes during the last three decades and reported an average increase of 5-9%. These factors are expected to reduce the requirement for women's household labour time while improving their chances of landing a paid employment.<sup>[2]</sup> Additionally, the United Nations describes "fundamental economic country conditions and prospects". In 2017, the United Nations

examined the Human Development Index using three essential components of human development: living a long and healthy life, obtaining a decent education and having a job. So, India's human development index is 0.64 compared to other emerging countries.<sup>[3]</sup> This index could have been higher in order to improve women's engagement in urban planning and design. As a result, raising the participation rate of women will directly increase the GDP growth of countries, whether developing or developed.<sup>[4,5]</sup> As a result, women's equality in emerging nations shifts the overall image toward developed countries. Additionally, most women are economically, physically, socially and morally reliant in today's world. Even though women's literacy and knowledge also increase, they should be able to make their own decisions, but they still require economic empowerment. Women's financial autonomy can only come through their opportunity to work.<sup>[6]</sup>

During India's G20 presidency, experts from the United Nations, UN-Habitat, gender advocacy groups and the Indian government addressed the barriers that women face in achieving bureaucratic positions. These challenges encompass a range of social factors, including stereotypical attitudes, economic barriers, limited access to education and training for financial independence and institutional barriers such as the gender mainstreaming policy in urban spaces and the built environment.<sup>[7]</sup>



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According to research carried out by organizations such as the Centre for Policy Research (CPR) and the Institute of Urban Designers India (IUDI), specific statistics on the percentage of women in the urban planning and development sector in India may vary and are not consistently tracked in public reports. However, it's widely recognized that women remain underrepresented in this field, both in India and globally.<sup>[8,9]</sup> According to Niti Ayog statistics, the proportion of women urban planners in India is around 14%, compared to 86% for men<sup>[10]</sup> and globally, women now hold 10% of senior architectural and urban planning posts worldwide, with this figure expected to rise to 20% by 2023.<sup>[11]</sup> There is a still lack of strong comprehensive reports on aggregated data on the access of women to workplaces and the status of women in the profession based on which policymakers and researchers can finalize policies for Indian cities.<sup>[12,13]</sup>

Additionally, City inclusiveness, equity and safety depend on the design of cities. So that, women participation in advancement professionals in urban planning is crucial to identify the barriers and rank them and removed by the most appropriate facilitators.<sup>[14,15]</sup> In order to comprehend the aforementioned hypotheses, an extensive literature review is need of the hour, based on which the researcher where sensitized about the research direction on women centric urban planning and women empowerment including gender mainstreaming in the urban planning. According to the<sup>[16]</sup> the current lack of research on women's involvement in urban planning and design in India is a significant issue. Indian women often face religious, ethical and discriminatory barriers, contributing to this situation. It is imperative to dismantle these barriers and involve women in urban planning to establish a more equitable and safer environment for women's freedom of movement.

This research paper aims to identify the barriers and solutions that women encounter in their progression as urban planning professionals for fair, sustainable and inclusive planning in cities and nations. The goal is to ensure that women have equal access to space and infrastructure in the built environment and public spaces by removing barriers and providing support. For that Bibliography study has been carried out considering various keywords in the Scopus database of the year 1991 to 2022. Based on those keywords, 76 articles are figure out on women in urban development and planning. To evaluate the bibliography, the RStudio version 4.1 programmer is used to create several graphical representations of published works over a decade, as well as average citations of each year. A literature review is also used to determine the 15 facilitators for breaking the 28 barriers to urban planning. According to the findings of this study, women make up a modest proportion of decision-making positions in the urban planning industry. The explanation discovered by the literature study is, women encounter many problems when they enter the workplace, such as family and caregiving responsibilities, under-representation of women in the planning field, digital

literacy and many other barriers. Gender mainstreaming policies and empowerment methods must be implemented consequently to attract more women into urban planning sector. Consequently, the issue cannot be solved without first identifying and ranking the barriers to the nation's progress, that's wise this research paper spark more attention towards the women progression in urban planning and urban development.<sup>[17]</sup>

Through this research spared more awareness towards the women participation and issues are highlighted which make cities safer for women by giving them equal access to decision-making possibilities and implementing laws that make it easier for them to move around in daylight and darkness. The in-depth literature review has been offered in this work to help readers grasp the issues and will pave a path to conduct research in the field of women's professional advancement in urban planning.

## BACKGROUND

The anticipated Labour Force Participation Rate (LFPR) on typical status for women aged 15 and older in the country was 30.0%, 32.5% and 32.8% in 2019-20, 2020-21 and 2021-22, respectively, showing a rising trend.<sup>[18]</sup> Contradictory women safety and securities in cities and working places showing worse trend day by day. Despite the different policies enacted by the government and organizations, 10 out of every 6 women encounter sexual harassment and discrimination in cities and workplaces.<sup>[19,20]</sup> The reasons for this unfavourable trend are that women's involvement in STRE jobs and decision-making positions is lower than in other industries.<sup>[21]</sup> Factors all contribute to low participation are the stereotype based on sex gender, a lack of role models, stressors related to family responsibility, childbirth, physical safety at work and others.<sup>[22]</sup> The fundamental issue for everyone is addressing gender disparities in India. Participation, empowerment and sustainability indicate interdependence, indicating that these three components are essential aspects of a whole entity,<sup>[23]</sup> suggest that the inclusion of a broad spectrum of community people in the hiring process plays a significant role in creating sustainability.

## Women and SDGs

India's inclusion of "women-led development" as a key priority during its G20 presidency, alongside other objectives such as inclusive growth, progress on Sustainable Development Goals, green development, technological transformation and reforming multilateral institutions, can be interpreted as an implicit recognition of the significant policy challenge posed by gender equality in India.<sup>[24,25]</sup> The Sustainable Development Goals (SDGs) "aim to accomplish all people's human rights and gender equality and empower all women and girls." Some Sustainable Development Goals (SDGs) are especially important for attaining economic empowerment for women and gender equality in employment.<sup>[26]</sup>

SDG 4: On ensuring fair and equitable quality education and fostering opportunities for lifelong learning for everyone.

SDG 5: On Succeeding Gender equality and the empowerment of all women and girls.

SDG 8: On encouraging inclusive, long-term economic growth, full and productive employment and decent work for everyone.

SDG 10: Reducing inequality within the organization and country.

SDG 11: Make City and Human Settlements inclusive and safe, resilient and Sustainable.

The five Sustainable Development Goals (SDGs) along with other SDGs are essential for making cities better, more resilient to climate change and liveable for all residents. Women's natural tendency to provide care may be contributing to the SDGs' realisation. In addition, there is a lack of infrastructure in the cities that is focused on women and children. Without women's participation in advancement professionals in urban planning, it would be difficult to solve all the issues that women and other minority face in the cities and nation at all levels of development. Urban planning practices nowadays disregard the needs of women. However, inadequate urban design can negatively impact women's income, mobility and safety. The situation may be improvised if there are women on the planning team.

### Women status in Global and Indian Context

Globally, gender gap score in 2022 is 68.1%, indicating a 31.9% remaining deficit to close. Only five of the 153 countries raised their score by at least 4.4%. As a result, the gap has narrowed by 0.24% points on average during the last 15 years. The worldwide gender gap will be filled in 135.6 years if progress toward gender parity continues at the same rate as indicated between the 2006 and 2021 editions. Since 2006, the Score for economic participation and opportunity has increased by only 2.4% points, so around a 0.16% increase by the year 2021. As a result, bridging this gap will take another 267.6 years at the global level.<sup>[27]</sup> World employment and social outlook report stated that, globally, women's labour-force participation percentage was 47.4% in 2022, compared to 72.3% for males. The 24.9% point difference implies that there are two such women for every monetarily inactive male.<sup>[28]</sup> The report (ILO) states that global employment growth will be 1.0% in 2023, less than half the level in 2022, while global unemployment will rise slightly to 5.8%, reversal of the decline in the 2020-2022.<sup>[29]</sup>

Women confront lower earning chances than males across the world. Women are less likely to work for a living or actively pursue employment. Women make up slightly more than half of the worldwide labor force, while males make up 80%. Women are less likely to work in formal jobs and have less prospects for business growth or career advancement.<sup>[30]</sup> As per the gender data portal, In South Asia and the Middle East and North Africa,

males participate three times more than women. Furthermore, the gender divide is smallest in Latin America and the Caribbean. In lower-middle-income nations, the gender participation gap is highest. Mercer's 2020 Survey,<sup>[31]</sup> over 1,100 firms worldwide discovered a leaky pipeline for women in leadership, with women's representation declining as levels progress. Such as, 23% women are in executive positions, 29% are at the senior level, manager level women are 37% and professional and support workers are 42% and 47%, respectively.

In Indian context, Gender equality report stated that,<sup>[27]</sup> India ranks 140<sup>th</sup> out of 156 nations in the equality gap. Furthermore, economic engagement and possibilities rank 151 out of 156 countries. Additionally, the labour force participation rate is just 22.3%, compared to 79.6% for men. In addition, the percentages of legislators, senior officers and managers and professional and technical employees are 14.6 and 29.2, respectively, compared to 85.4 and 70.9% for men.

Further many studies in India, lacks the statistics regarding female participation in the industries including urban planning profession. Furthermore, many research papers lack a legal source to justify the statistics they utilize in their publications. Additionally, women make up the smallest percentage of the workforce than in other developing nations. As a result, fluctuations in the country's growth rate can happen in the nation. The government mandated that the GDP growth rate in each sector has slowed from 2012-2013 to 2020-2021. It is projected that it would rise by 6.0% points in the fiscal year 2022-2023, according to the Ministry of Finance, Government of India.<sup>[32]</sup> This decreasing growth directly influences the country's overall growth and development. In India, the service industry is critical to improving the national economy and the growth of cities.

According to the Ministry of Women and Child Development report,<sup>[33]</sup> the involvement of women in decision-making authority in all sectors and government bodies created a strong bridge for the national economy rate and the growth of bodies. According to the research, women have a 33-percentage reservation in India, whereas many states have a 50-percentage reservation also. Despite this, female participation in several sectors remains minimal because women address the most unfavourable stereotypes in the workplace, decision-making processes and participation.<sup>[34]</sup> To elaborate, gender-based monitoring organisations are not used to uncover correct facts and data that will aid in the construction of cities and the nation for future projects.

### Urban planning workforce in India

India's workforce in urban planning is confronted with significant challenges. Although urbanization is a major force behind economic expansion, the nation is currently experiencing a scarcity of trained urban planners. India requires about 12,000 urban planners, yet there are only 3,945 sanctioned positions available at present. Remarkably, 42% of these jobs are still vacant.

A report recommends sanctioning an extra 8,268 postings as lateral entry positions for a duration of three to five years in order to close this gap. The goal should be to raise the quantity of urban planners while simultaneously raising the standard of planning. High-powered Expert Committee (HPEC), Town and Country Planner Organization (TCPO), India Urban Data Exchange (IUDE), the Artificial Intelligence Strategy for Urban India (AISUI) and Smart City Standards, this all the Indian institute and organization working on the issues and reforms pertaining to the town planning profession and provide cutting-edge training in contemporary issues to the next generation of urban planners, as well as to reinforce and reinvigorate existing urban planning institutions and to educate officials about urban planning. The country will need 300,000 urban planners by 2023. Every year, 1,800 urban planning graduates pass out from 49 institutes, including the school of planning and Architecture Bhopal, New Delhi and Vijayawada. The number of seats has to be scaled up considerably to fill this demand-supply gap. Union Finance Minister Nirmala Sitharaman, while presenting the Union Budget 2022-23, stressed the importance of urban planning. The minister also announced the government's decision to set up a high-level panel of urban planners. The Institute of Town Planners of India (ITPI), founded in 1951, is the country's central body for planners. As per the ITPI, the country needs many more planners than those who graduate from planning to meet its development demands. Besides that, focusing on employment in urban planning, planners, especially women, quickly obtain careers in the planning industry. However, there are questions and concerns about women in decision-making roles in planning practice and research which are unanswered.<sup>[10,35]</sup>

With the intention of enhancing women's employment participation, boosting social protection, enhancing women's health and enhancing security, the Indian government introduced a national plan for women in 2016. Nonetheless, women still encounter difficulties in fields where males predominate. However, enacting legislation alone is insufficient. It is necessary to modify the way society views women and to change men's and boys' conduct as well as family and women's corporations. enhancing data on women's involvement in a variety of fields, such as environmental services that are women-centric and women-friendly. Then and only then can we go forward with giving men and women equal rights and provisions.

According to the Women-Led Development Report, out of the 432 million working-age women in India, 343 million are in the unorganized employment sector. This sector lacks official recognition, consistent employment conditions and government regulations. In Indian cities, over 10 million street vendors operate, with over 50% being women. But, in term of continuing participation in various professions especially in advancement professionals and decision level in urban planning women are less likely to man. The reasons women are less involved is

the underrepresentation of women in urban governance and policy maker due to lack of accessibility and lack of physical infrastructure provide in cities and workplace.<sup>[36]</sup>

Finally, Dr. Mansee Bal Bhargava, National President of the Women's Indian Chamber of Commerce Industry (WICCI), stated on their blog, Planning is multi-inter-trans-disciplinary in both academia and research, but the concern for researchers is that it still needs that discipline to be more gender inclusive not just in jobs but also in choices that are made for cities and inhabitants. Still, Gender inclusion is a significant concern in areas such as transportation, public places safety.<sup>[37]</sup>

### **Bibliometric analysis on women involvement in professional advancement in urban planning and urban development in Indian context**

A study is carried out to examine the research gap regarding the number of articles published on women advancement professionals in urban planning. So, firstly search for secondary source on topic of women participation from the publications in relevant journals, book chapters, expert talk articles and international statics reports. Then, the publications were then identified using databases platform such as Scopus, Web of Science, Google Schoolers and the websites of international and national government organisations. Using that database, keywords are search in term of "women's workplace employment", "women in urban development and bodies", "women in urban planning and decision making" and "women empowerment", which was then filtered by the years 1991-2021 and the relatable articles were searched. A total of 2134 search results were obtained for the relevant areas, journals and periods as results of comprehensive studies worldwide. Out of these totals, there were 122 review articles and 2012 research papers published in secondary sources.

Furthermore, 122 research publications were found, primarily based on the barriers and facilitators of women's participation in decision-making in urban development.<sup>[38-41]</sup> The research papers highlighting the various topics such as, Policy and structure for gender.<sup>[41,42]</sup> gender and Sustainability, gender equality in administration and public workplace<sup>[43]</sup> and many more are filtered. The same is further filtered by the subject area "urban planning" and there is total 76 articles are finalised used for the Bibliometric analysis.

### **Bibliometric analysis using Scopus database data**

Scientific publications indexed Scopus database engines are used to conduct a literature search utilizing shortened keywords in urban planning from 1991 to 2021. The first world employs impediments to "women's," "employment," "women in the workforce," and the second is "women participation in urban planning. Each paper was identified after using several criteria: title, authors' names and institutional affiliations, country of origin, journal title and year of publication, a form of publishing

and some citations. As a result, 326 papers were discovered, with 76 related to the search topic. Then, 76 review papers are shortlisted based on the articles published from 1991 to 2021 to narrow down the subject related to the women in urban planning and development, issues, problems and challenges faced in advancing the urban planning and development field. The Data was analysed using RStudio v.4.1.2 Software and the bibliometric parameters were studied.

### The Analysis using R Studio Software

According to the findings of this study, on annual scientific production in last three decades which are depicted in Figure 1, yearly articles on the problem of women's engagement in urban workplaces, notably at the decision-making level in the planning sector, have changed from 1991 to 2021. It can be observed that when the United Nations issued a policy for women who work at a higher level in the workplace, the number of articles increased.

However, the yearly percentage climb rate from Figure 2 indicated a positive trend of roughly 6.37%. In the recent two decades, the average total citation has likely increased. According to the statistics, the highest citation score is nine as seen in Figure 2 and the lowest citation score is zero in the year 1991.

RStudio is used to determine which countries or territories have the most publications on search terms. Figure 3 shows that the United States has the most documents disclosed by a nation, with around 21 papers, followed by an undefined country with ten articles. Notably, throughout the previous 3 decades, just five papers have been published in India. As a result, in India, there is a void in the publication of papers on women and urban development.

Figure 4 illustrates a tree chart representing the keywords used by authors in their papers. The most common keywords are gender used in seven articles and women used in five articles and followed keywords are participation and urban planning. To deep

observation when urban planning that takes gender into account must consider all sexes, including the LGBTQ (lesbian, gay, bisexual and transgender) community as well as men, women, children and girls. And regarding urban planning, women professionals refer to women's participation and representation in field of planning and urban development. Based on this search term map, it is notice that, only 10 and 8% of the author use the keywords on women or women involvement in urban development. So, this bibliometric analysis from tree map gives a clear idea that women advanced professional participation in urban planning in India has not studies so far.

Furthermore, the most appropriate sources or journals for the supplied keywords were determined. As shown in Figure 5, Gender work and organization, journal of interpersonal violence, gender place and culture, equality diversity and inclusion and urban studies are the most relevant sources particularly 47 papers are applicable from the search terms.

As seen in Figure 5, women's engagement and gender representation in urban planning and designing-related journals are significantly lower than in other sources and, no other literature papers have been published on the topic of women in urban planning.

According to Scopus database research, 68 of the 76 publications on gender and women's progression in urban development were written by women. Of these authors, 38% were first authors and 26% were second or third authors. It is worth noting that only 12 female authors investigated women and urban planning in various contexts across the 68 review papers. However, while there were only a few articles focusing on women's issues in urban planning and development including industry as job opportunity. Nonetheless have done addressed the barriers on women professional advancement in urban planning and offered solutions for women with the help of expert committee of urban planning and development sectors. This research significantly contributes to enhancing our understanding of women's issues

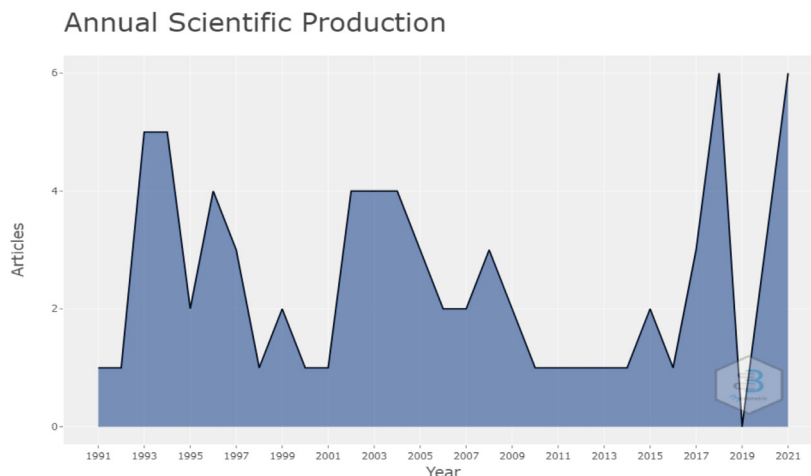


Figure 1: Annual scientific production from the year 1991 to 2021.

and promoting the development of equitable, women-centric cities and organizations.

Consequently, the bibliographic analysis reveals a significant limitation in the existing research literature, particularly in relation to the identification of women who encounter difficulties in the fields of built environment and urban planning. This restricted research gap poses a challenge for researchers seeking to address this issue. Consequently, there is a growing demand for scholarly journals to expand their research scope to encompass women's involvement in urban planning and development.

**Barriers to women's involvement and progress in the Indian urban planning sector**

Women's participation in various sectors is a significant issue globally and in India. According to Sima Bahous, UN women Executive Director, many nations worldwide still have legislation

that openly discriminates against women. This is because males have generally formed laws without considering the viewpoints and priorities of women and girls.<sup>[44]</sup> As a result, women-related barriers and issues are not solved until now; the visible or invisible women's participation rate at the senior level and decision-making process is less than that of men. This is because women faced many hindrances to participating in different organizations and the workforce, either government or private sectors. Consequently, literature review has been carried out to acquire more information on specific impediments and problems that women confront throughout their professional careers. However, no study on this topic has been undertaken so far. Table 1 contains a list of obstacles and sub-barriers, as well as the beneficial influence of their study, tools and approaches employed by different researchers. Because of this data, researchers may identify the research gap on women's impediments to participation and advancement in Indian urban planning and development.

Average Article Citations per Year

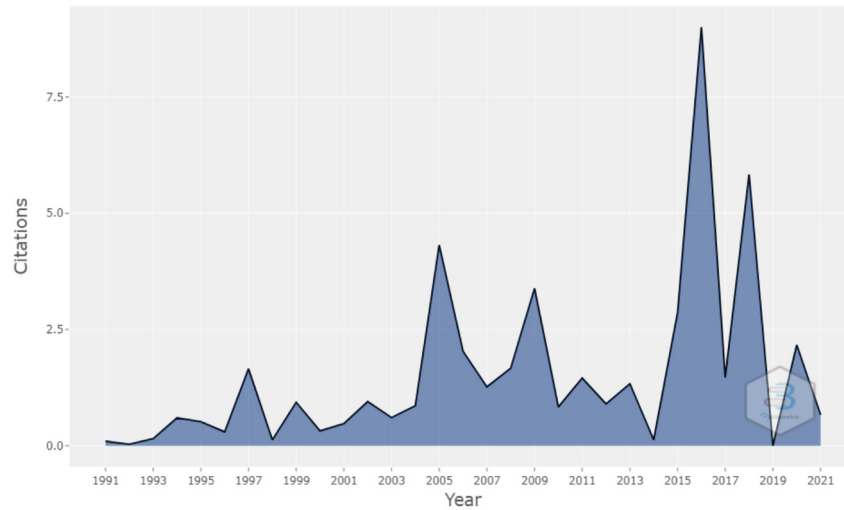


Figure 2: Average article citation from the year 1991 to 2021.

Documents by country or territory

Compare the document counts for up to 15 countries/territories.

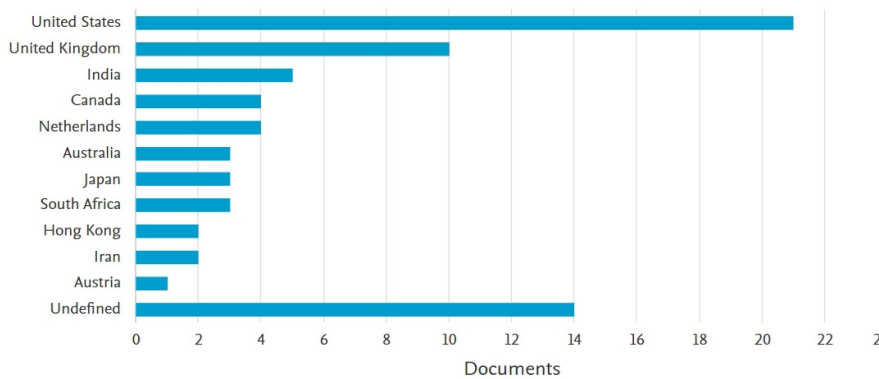


Figure 3: Analysis of the documents presented by nation or area.

**Table 1: List of Barriers and sub barriers reported by researchers.**

| Sl. No. | References | Barriers                                   | Sub -Barriers  | Positive Impacts   | Using Methods/tools/ Solution/  |
|---------|------------|--|--|--|---|
| 1.      | [45]       | Cultural Barriers.                         | The informal rules of society govern appropriate or acceptable behaviour.<br>Household responsibilities.<br>Jobs Transfer or far away from the Hometown.       | Developing countries' GDP will increase significantly.<br>Reducing Public Violence and Building the Environment for Equality in Developing Cities.           | U-shape Structure with Policy-Based Solution.   |
|         |            | Social Barriers.                           | Harassment and violence against women in public.<br>Limitations on women's social interactions and freedom of movement.<br>Financial command of the household. |  |   |
| 2       | [46]       | Societal mind-set Barriers.                | Decision-making process.<br>Discrimination in caste.   | Improve the governance of women's rights under the law. More women are entering the labour force and entering politics.                                      | Given Recommends the reconceptualization of laws.   |
| 3       | [47]       | Institutional mind-set Barriers.           | Gender discrimination against women in some sections of society.<br>Gender lens (Glass-ceiling.  | As a result, women tack a more sustainable, equal and accessible built environment for all the society members.  | Finish with the provided policy and interview with a male colleague from ULB.   |
|         |            | Governmental barriers.                     | Lack of interest in gender programs, especially in local government.   | In this study, many girls and women get opportunities and effectively increase social inclusion in society and the workplace.                                |   |
| 4       | [48]       | Social Barriers.                           | Entry barriers in desired sectors.<br>Family and household work.<br>Discrimination during the hiring.  | Women have a more difficult time matching to employment than males.<br>Women's engagement in the Economy helps to improve both the micro and macroeconomics. | For the Survey of data, the Finite mixture model (FMM) is provided, and the final result is provided. And reconsider the gender correct the NSS data and give the conclusion. |
|         |            | Economic and political landscape barriers. | Women face more difficulties in matching jobs than men.  |  |   |
|         |            | Tanning barriers                           | Lack of vocational training courses and programs.<br>Lack of representation in their career.   |  |   |
| 5       | [49]       | Institutional mind-set Barriers.           | Not considered while making critical decisions.<br>Discrimination against a member of the workforce.   | To solve poverty and illiteracy scale in women and girls and increase advancement opportunities in any sector and Organisation.                              | Study literature paper and out from them given solution-based suggestion.   |

| Sl. No. | References | Barriers   | Sub -Barriers   | Positive Impacts  | Using Methods/tools/ Solution/   |
|---------|------------|--|---|---|--|
| 6       | [50]       | Social barriers.                                 | Maternity leave issue.<br>Expand paid leaves.   | Built a positive environment in society to participate in the Labour force market.  | Used literature paper to find the conclusion.  |
| 7       | [51]       | Individual barriers.                             | Lack of confidence.<br>Unclear and uncertain goals.   | They envision the program's offering as a continuous supply of knowledge and mentoring to help women overcome these obstacles and directly improve women's labour force participation in India.             | Investigate qualitative research approaches for evaluating objectives, including sampling typologies derived from quantitative monitoring data from the program. |
|         |            | Structural and institutional hierarchy barriers. | Inadequate Socio-political, economic and infrastructure support.<br>Gender unfairness and stereotyping in the workplace.<br>Lack of social acceptability. |   |  |
|         |            | Social barriers                                  | Provider of household duties and caregiver responsibilities.  |   |  |
|         |            | Other barriers                                   | Gender bias during a physical activity at the workplace.  |   |  |
| 8       | [52]       | Structural barriers.                             | Insufficient support structure for women.<br>Internal structural barriers.<br>Glass ceiling.  | Improve an organization's and a city's production and effectiveness.<br>More women are taking on higher-level positions to break through these obstacles.   | Secondary data was collected from 1989 to the present and a solution-based conclusion was provided.  |
|         |            | Governmental barriers.                           | Inadequate and consistent monitoring and law enforcement.<br>Poor data collection cell.<br>Lack of information reporting and dissemination.               |   |  |
|         |            | Institutional barriers.                          | Lack of knowledge for the suitable required job.<br>Lack of awareness in Career advancement.  |   |  |
|         |            | Personal barriers.                               | Inability to create a balance between professional and personal life.   |   |  |
|         |            | Economic and other hindrances.                   | Wage gap.<br>Void in mentors.   |   |  |
| 9       | [53]       | Social barriers.                                 | Fear of sexual harassment and violence.<br>Feel insecure in public places and professional places.  | Urban planning is a crucial instrument for tackling sustainable urban development concerns. And it must be included at all stages of the planning process, by world commitments to promote gender equality. | This article author using tool ANOVA analysis and using BETA calculation.  |
|         |            | Professional barriers.                           | Lack of women in national and local advancement (decision-making) processes in planning.<br>Lack of infrastructure facilities in the workplace.           |   |  |



Figure 4: Tree map of keywords.

As shown in Table 1, likewise 76 published articles are examined and identify the various barriers for women participation and involvement in urban development. According to the articles, there are a total of 40 barriers that women face when working in organisations. Many of the terms used in the 40 barriers are similar and have overlapping scopes. To address this, a final list of 28 barriers was listed based on conversations with field specialists and modified them on context of urban planning and urban development. That is reported in Table 2.

Table 2 presents the final barriers that influence women's involvement and progress in the Indian urban planning sector and explanation for the same is reported as below.

Gender stereotypes in the built environment, discrimination and glass-ceiling are societal mind-set barriers in which society considers that women are unsuited for the people they work with. Also, there is still an absence of women-centric infrastructure and women-friendly planning. People are treated differently just because they are men and women rather than based on their aptitude, skills and capability. Furthermore, women may feel like they are fighting against a glass ceiling in a male-dominated environment and designing.

Sexual harassment, workplace violence, societal judgment and family responsibility toward the elderly and children all fall under social obstacles. Women are more vulnerable to workplace abuse and harassment by their co-workers, bosses, or other individuals. That sensible woman do not feel comfortable at work. Furthermore, it might be challenging for women to balance their job and social lives. It is often impossible for her to fulfil her commitment to offering a 100% to their task.

Financial inequality and mobility imply that many encounter transfer issues and transfer from one location to another and a lack of assistance from higher-level persons for their career

opportunities. These are the economic difficulties that women confront in their careers while working.

Digital Information technology is the most significant barrier for certain women because they have not been adequately educated from childhood. They are not aware of the technical understanding of new applications such as ArcGIS, AutoCAD, etc.

Furthermore, some workplaces/companies may not have much money or funds to invest in staff training. As a result, more women employees have not gained their talents and have not achieved a greater understanding of the company's shares. Most women do not have sufficient digital media facilities and some women do not have the type of information they get for employment in their field. As a result, women cannot achieve their goals and do not receive any jobs related to their ambition.

Additionally, government and policy issues are major concerns today, particularly in India. Indeed, a proper gender database connected to employment, how many women are in decision-making positions in various fields and a diversity inclusion strategy for higher employment careers. One of the most serious issues in India and throughout the world is the lack of a structural policy allowing women to take maternity leave or work flexible hours in specified circumstances. That wise many women will not work. And somehow, women face personal barriers like the inability to communicate and self-confidence issues; for these reasons, women do not enter the workforce.

Facilitators to overcome the barriers to women's involvement and progress in the Indian urban planning sector.

The listing and prioritizing of the barriers will not solve the problem. The barriers have to be removed by the appropriate solution approaches or facilitators.<sup>[17]</sup> Hence next task is to identify the facilitators which overcome the listed 28 barriers to

**Table 2: Final barriers that influence women's involvement and progress.**

| Sl. No. | List of barriers  | Literature support  |
|---------|---|---------------------|
| 1       | Experience Gender stereotypes in built environment.   | [34,54,55]          |
| 2       | Experience Gender discrimination at decision making level (Caste/gender/important decision.). | [20,46,47,54,56,57] |
| 3       | Experience Glass -ceiling at workplace.   | [47,52,58]          |
| 4       | Fear of Sexual harassment and violence in the workplace(physical/verbal/domestic).            | [53,59-62]          |
| 5       | Perception of Women's Lack of Physical Strength.  | [51]                |
| 6       | Wrong Perception and social judgments against women.  | [48,63]             |
| 7       | Family, household and caregiving responsibilities.  | [45,51,57,64]       |
| 8       | Society informal rules and family ethical issues.   | [45]                |
| 9       | Lack of financial inequality.   | [42,65,66]          |
| 10      | Face Mobility issue (moving one job/office to another company).                               | [48]                |
| 11      | No bear for Career progression (no support from women/males in higher position level).        | [40,67,57]          |
| 12      | Digital gap   | [42,68,48]          |
| 13      | Lack of technical education.  |                     |
| 14      | Absence of knowledge on legalization and Laws.  | Expert suggestion   |
| 15      | Lack of training and investment opportunities.  | [48]                |
| 16      | Lack of Recruitment strategies and Structure.   | [53,69]             |
| 17      | Lack of mentoring policies.   | [48,52]             |
| 18      | Lack of flexible hours.   | [60,70],            |
| 19      | Absent of Health care and hygiene issues.   | Expert Suggestion   |
| 20      | Lack of Public Infrastructure Facilities and Safety at work and public space.                 | [53]                |
| 21      | Less amount of women participation in the decision-making process.                            | [46,49,52,66,57]    |

| Sl. No. | List of barriers   | Literature support                 |
|---------|--|------------------------------------|
| 22      | Absent of Gender wise database in all Sectors.                               | [52]                               |
| 23      | Absence of diversity and inclusion policy for leadership role.               | [57,71]                            |
| 24      | Lack of support OR Policy before/during and after the M.L (Maternity Leave). | [50,52]                            |
| 25      | Political interference during the function of government bodies.             | Expert Suggestion, <sup>[72]</sup> |
| 26      | Lack of clear career path.   | [51]                               |
| 27      | Lack of self-esteem.   | [51,52]                            |
| 28      | An Inability to Communicate.   | [73]                               |

professional advancement of women in urban planning, through qualitative study. Based on 30 literature studies a total of 15 facilitators have been identified and reported in Table 3.

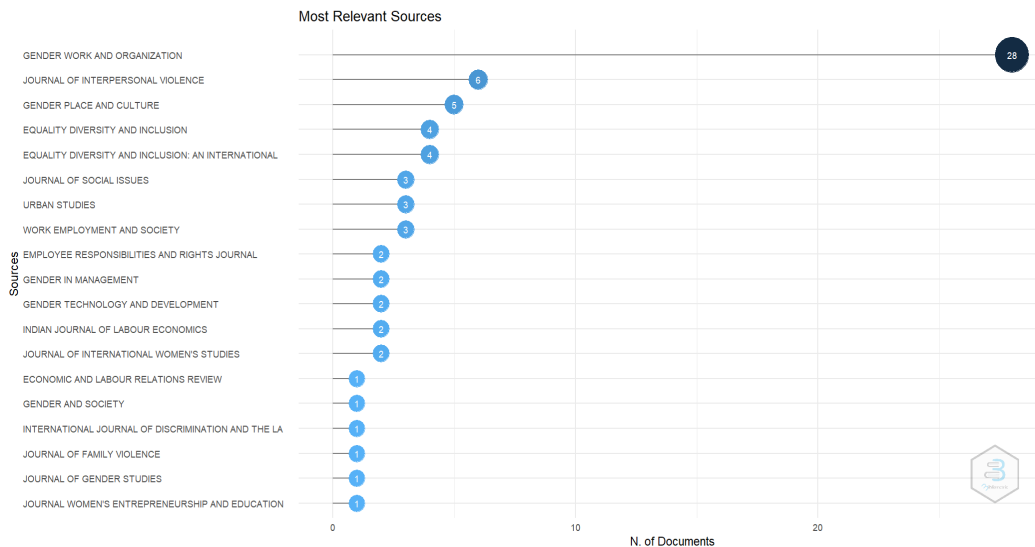
For the reader's convenience, a quick explanation of the mentioned 15 facilitators is provided below.

Governments have implemented a variety of initiatives, including as legislation and regulations, to reduce sexual harassment and violence against women in the workplace and in public areas. However, in the absence of knowledge, it has no influence on society; thus, audience-specific programmes for awareness and supportive social and organisational environments will be developed. Also the facilitator like, to create a structural and action plan to address gender equality in the workplace and organization must have some systematic strategy, policy, or structure for women in the working in the organisation.<sup>[54]</sup> More facilitators, for example, an online or offline training platform that offers knowledge and information about organizational operations and skill training to increase leadership quality to lead a significant number of employees are helpful to reduce the barriers related to absence of technical knowhow and digital gap.<sup>[51,74]</sup>

To improve organisational and policy barriers the government will need to establish agencies or organizations to collect data including the previous four to five decades in various disciplines and provides a single statistics database online for researchers who want to access their research, such as International Labour Organization (ILO). However, India has no database agencies to create many statistics to determine the gap between the numbers of women participating in various sectors. Women's need the overcome the barriers in the technological and digital area improve through skill and digital training for women.

**Table 3: List of different Facilitators reported in various literature studies.**

| Sl. No. | Identify the Facilitators.   | Research article                     |
|---------|--|--------------------------------------|
| 1.      | Action Plan to Tackle Gender Equality in the workplace.  | [54]                                 |
| 2.      | Taught Leadership Skill training Program for women in any organization.  | [51]                                 |
| 3.      | Conduct offline/online Workshop for Women.   | [74]                                 |
| 4.      | Adopting Peace-making and work-life balance Policy for both genders.   | [75,40]                              |
| 5.      | Having a mentor or someone who provides good advice on career opportunities includes the Gender Equality Plan. | [39,76]                              |
| 6.      | Developing Structural Program to Challenge Gender Structural in Organisation.                                  | [77,78]                              |
| 7.      | Improve Digital literacy and technological Skills through tanning.   | [79,80]                              |
| 8.      | Develop Gender-Sensitive Analysis in all sectors, including municipalities, to overcome equality.              | [81]                                 |
| 9.      | Store large number of Gender Database Collection at different levels (online/ offline).                        | [82]                                 |
| 10.     | Provide Gender-Based Budgeting.  | [64]                                 |
| 11.     | Improve maternity policy, either paid or unpaid.   | [50,83]                              |
| 12.     | provide Audience Specific program for awareness.   | [84]                                 |
| 13.     | Provide Quota System in every Organisation. (private/government/others) for women.                             | RTPI (Royal Town Planning institute) |
| 14.     | Boosting female labour force participation through awareness and job creation Structure.                       | [66]                                 |
| 15.     | Create a Supportive Social and organizational environment in the workplace.                                    | [40]                                 |



**Figure 5:** Relevant sources from several documents.

Furthermore, maternity leave is essential for women who work in higher positions and the urban planning industry since planning is an area of knowledge and application where new generations enhance the process and techniques of developing cities every year and month. As a result, every year in planning is a fresh learning experience. However, women have families and they require a break while caring for their new born baby. In these cases, maternity leave provides a solution.<sup>[50],[83]</sup> Many private

organisations in India still do not offer maternity leave or flexible hour policies, allowing women to continue working during their pregnancy. Finally, in order to overcome these many barriers, it is important to educate people and develop the built environment in all areas, which is one approach to increasing women's participation in the field of urban planning. Furthermore, more women in decision-making positions will result in more inclusive, sustainable and equitable planning and cities.

## Research Gap for the future study

The Finding of this research shows that the participation of Women in decision-making level and executive planning levels would have an impact on urban renewal programs. The reason is women are the pillar of the house and, she is the caregiver. To added interest, as stated in the introduction, women will rule half of the nation in India, roughly 48.50% in 2023, while employment in urban planning will be low, ranging from 13% to 16% as per the Times of India. However, at the highest levels, women's involvement is too low.

This study aims to identify barriers and provide solutions for the establishment of a comprehensive database that may facilitate in-depth research on inclusive planning, sustainable planning and the creation of a built environment that caters to the needs of women in urban areas. So, at the end, this article imperative for researchers to give precedence to the identification and ranking of the 28 barriers using various tools and methodologies. For instance, employing Multi-Criteria Decision Making (MCDM) approaches can aid in determining the most significant barriers encountered by women in developing countries, such as India. This study sheds light on the topic of boosting women's representation in professional progression within the field of urban planning, providing valuable insights for academics, policymakers and professionals for future research.

Finally, when it comes to urban planning and women's empowerment, it was discovered that there is a significant gap between actual physical data and digital data. In the absence of these data, researchers are unable to conduct this kind of research. Following the G20 presidency, the government launched measures to address the problem of women's participation in urban planning. In conjunction with foreign groups, several initiatives have been established. However, it is not possible to adequately address the challenges experienced by women in this profession without performing detailed ground surveys by conducting questionnaire interview in several cities across India, which can be further taken up by researcher. The study can also be conducted by the researchers to understand the role of women as decision makers and how women-centric infrastructures are provided in cities by conducting research on "examining how these barriers can be managed and overcome by various countries and cities where women professionals lead urban planning departments."

## CONCLUSION

The study examines the comprehensive literature and recent governmental initiatives aimed at promoting barrier-free and inclusive city planning for women. However, it is evident that there are still significant gaps in addressing the obstacles faced by women in the field of urban planning. To address obstacles, this study identified a total of 28 barriers and subsequently indicated a research need based on published article in past three decades

from 1991 to 2021, Out of 326, 76 review papers which only addressing the relevance of the study are shortlisted for the study, which focus the topic related to barriers and challenges for the women in urban planning field.

The highlighted barriers include the experience of discrimination in crucial choices related to city planning, practice and design, as well as biased statements against women and instances of sexual harassment, both in physical and verbal forms, within the built environment and the field of planning. In addition, women have a greater burden of responsibilities related to home management, childcare, eldercare and navigating social and cultural obstacles. They also face challenges stemming from digital and technological barriers, as well as professional barriers such as limited access to training and investment strategies, among others.

Also, other barriers that women face various workplace problems that males do not, such as personal or cultural psychological constraints and economic and professional barriers. Consider the future; working women's population in India will continue to grow. Thus, cities will require additional legislation and policies to support working women. Furthermore, more balancing policies will assist women in creating a balance between their personal and professional lives. Another barrier was found in this study is that, to create organizations and knowledge providing agencies since India does not have any structure or organization through which individuals may learn about soft skills and computer-assisted courses in urban planning. Since so much software's are employed in urban planning field. With this technology and software, the planner's job becomes faster than others; nonetheless, some women face such problems that they have lack confidence and do not enter this sector. Furthermore, to reduce governmental barriers, the government should build a solid database and a short-term training course for women who lack clarity in the sector and monitor regulations to help them through their experiences.

To address the mitigation of 28 identified barriers, 15 potential solutions have been proposed. These solutions include the development of a gender-sensitive analysis, the establishment of a framework and action plan, the provision of a safe and secure environment, the implementation of peace-making initiatives and the formulation of policies promoting work-life balance. Additionally, there are 11 other solutions that have been suggested to address the barriers.

To conclude that, this research article addresses the research gap to eliminate stereotypes, discrimination and sexual harassment in urban area and workplaces. Only until these barriers are overcome will women's participation in progressing professions increase. Furthermore, there is no one article in which all barriers and solutions are described in one paper and made available to researchers; it has not yet been carried out. As a result, this research will provide researchers with ideas for overcoming the

challenges that women confront in urban planning sectors at the professional level.

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## CONFLICT OF INTEREST

The authors declare no conflict of interest.

## REFERENCES

- Parwez S, Meena K. Worlds apart in India: analysis of contractualization of labor and evidence from labor market discrimination. *Forum Dev Stud* [Internet]. 2021;0(0):1-32. doi: 10.1080/08039410.2021.1927172.
- Sulaiman R, Toulson P, Brougham D, Lempp F, Haar J. The role of religiosity in ethical decision-making: A study on Islam and the Malaysian workplace. *J Bus Ethics* [Internet]. 2022; (0123456789);179(1):297-313. doi: 10.1007/s10551-021-04836-x.
- Desai S, Joshi O. The paradox of declining female work participation in an era of economic growth. *Indian J Labour Econ* [Internet]. 2019;62(1):55-71. doi: 10.1007/s41027-019-00162-z, PMID 32831498.
- IMF. Countries by GDP growth; 2015. *Statistics Times.com*. *Statistics Times* [Internet]. 2016. [cited Oct 27 2021] Available from: <https://statisticstimes.com/economy/countries-by-projected-gdp-growth.php>.
- Ratho A. Promoting female participation in India's urban labour force. Vol. 348. *Observer Research Foundation*; 2020. p. 2.
- Idris S. Economic empowerment of women in Pakistan. *Gend Econ*. 2018;3(Vii):411-32.
- Stangl AL, Pliakis T, Izazola-Licea JA, Ayala G, Beattie TS, Ferguson L, et al. Removing the societal and legal impediments to the HIV response: an evidence-based framework for 2025 and beyond. *PLOS One* [Internet]. 2022;17(2):e0264249. doi: 10.1371/journal.pone.0264249, PMID 35192663.
- Pandya MN, Shukla PS. Role of women led sanitation in community development. *J Content Community Commun*. 2018;4(7):71-7. doi: 10.31620/JCCC.06.18/09.
- Thelma CC, Ngulube L. Women in leadership: examining barriers to women's advancement in leadership positions. *Asian J Adv Res Rep*. 2024;18(6):273-90. doi: 10.9734/ajarr/2024/v18i6671.
- Aayog N. Government of India [Internet] (September); 2021. *City mission\_ India sets big goals, gears up for 4,000 cities expansion in 2 years, Government News, ET Government.pdf*. Available from: <file:///C:/Users/Admin/OneDrive/Desktop/Smart>. Available from: <https://www.niti.gov.in/sites/default/files/2021-09/UrbanPlanningCapacity-in-India-16092021.pdf>.
- Colson A. *Mainstreaming gender into urban planning and design*; 2022.
- Vyas-Doorgapersad S. Challenges to achieve the Goal 5 of the Sustainable Development Goals (SDG) in South Africa. *Int J Res Bus Soc Sci*. 2023;12(6):257-66. doi: 10.20525/ijrbs.v12i6.2687.
- Sareen R. Building cities for women: India's G20 presidency can show the path ahead [Internet]; 2023. Available from: <https://www.orfonline.org/expert-speak/building-cities-for-women/>.
- Singhal R, Patel CR. Prioritisation of barriers in the implementation of electric mobility in Indian context using fuzzy analytical hierarchical process. *J Inst Eng (India) A* [Internet]. 2022;103(4):1225-36. doi: 10.1007/s40030-022-00676-8.
- Patel SJ, Patel CR. Prioritizing facilitators for successful implementation of PBSS in Indian urban areas using BWM method. *Int J Math Eng Manag Sci*. 2020;5(6):1108-17. doi: 10.33889/IJMEMS.2020.5.6.084.
- Patel LP PC and TR. Prioritising barriers to women's professional advancement in urban planning in India. *Proc Inst Civ Eng Urban Des Plan* [Internet]. 2024;1-18. doi: 10.1680/jurdp.23.00025.
- Patel SJ, Patel CR. Prioritizing barriers for successful implementation of public bicycle sharing system. *Proc Inst Civ Eng Municipal Eng*. 2022;175(2):61-71.
- Ministry of Labour & Employment. *PIB Delhi* [Internet]; 2023. Available from: <file:///D:/PHDWORK/>. Available from: <https://www.pib.gov.in/PressReleasePage.aspx?PRID=1908961>.
- Azcona G, Bhatt A, Davies SE, Harman S, Smith J, Wenham C. Spotlight on gender, Covid-19 and the SDGs: will the Pandemic derail hard-won progress on gender Equality? Vol. 31; 2020. *UN Women* [Internet]. Available from: <https://www.unwomen.org/-/media/headquarters/attachments/sections/library/publications/2020/spotlight-on-gender-covid-19-and-the-sdgs-en.pdf?la=en&vs=5013%0Ahttps://www.unwomen.org/en/digital-library/publications/2020/07/spotlight-on-gender-covid-19-and-t>.
- Senthil Kumar A, Sana Begum M. Economic impact of gender inequality in service sector in Bengaluru city. *Int J Emerg Technol*. 2020;11(3):212-7.
- Scientist. C, Excellency H, Singla S. Need for sociocultural changes, flexi work times & gender-neutral pays highlighted at India-Israel Women in STEM conference; 2021.
- Crystallography X-ray D; 2016. *STEME*. p. 1-23. Available from: <https://www.drishtiias.com/daily-news-analysis/women-participation-in-stem>.
- Lyons M, Smuts C, Stephens A. Participation, empowerment and sustainability: (How) do the links work? *Urban Stud*. 2001;38(8):1233-51. doi: 10.1080/00420980125039.
- Sharma NC. G20 bats for empowerment of women: where do Indian women stand?; 2023.
- Contributors ET. India's G20 Presidency: why it is an opportunity to showcase women-led development; 2023.
- International Labour Organization. *Empowering Women Work*. 2020. 110 p.
- World Economic Forum. *The global gender gap report* [Internet]. 2021; 2021. p. 1-405. Available from: <https://www.weforum.org/reports/global-gender-gap-report-2021>.
- Unsombut K. *World and Social Outlook Employment Trends 2023.pdf*. 2023.
- Law L. *World employment and social outlook. Trends; 2023* [an ILO report] [Internet]. Available from: <https://industrialrelationsnews.ioe-emp.org/industrial-relations-and-labour-law-february-2023/news/article/world-employment-and-social-outlook-trends-2023-an-ilo-report#:~:text=According%2C%20global,unemployment%20seen%20between%2020-2022>.
- Pimkina S, de La Flor L. Promoting female labor force participation. *Promot Female Lab Force Part*. 2020;56.
- Mercer. *Let's get real about Equality: when women thrive 2020 global report*; 2020. p. 1-80. Available from: <https://www.mercer.com/content/dam/mercer/attachments/private/gl-2020-wwt-global-research-report-2020.pdf>.
- Mudoi H. Government policies for gender Equality and constitutional measures in India: an analysis. Vol. 6(5): 593-9; 2022. *Journal of Positive School Psychology* [Internet]. Available from: <http://journalppw.com>.
- NLDBD. *Executive summary -Report on the status of women in India*; 2015.
- Burgess D, Borgida E. Who women are, who women should be: descriptive and Prescriptive Gender Stereotyping in Sex Discrimination. *Psychol Public Policy Law*. 1999;5(3):665-92. doi: 10.1037/1076-8971.5.3.665.
- Sivaramakrishnan KC. Infrastructure and services. In: *Governance of megacities*; 2015. p. 56-81.
- National Institute of urban affairs. *Ministry of Housing and Urban Affairs Government of India Mainstreaming Women-Led Urban Frameworks*; 2023.
- Mansee B, Bhargava B. Is India ready to be led by women planners, especially in decision making positions? [Internet]; 2020. Available from: <https://www.counterviaweb.net/2021/10/is-india-ready-to-be-led-by-women.html>.
- Organisation IL. *Breaking barriers: Unconscious gender bias in the workplace. ACT: EMP* [research note]; 2017. p. 3-12.
- Abdalla IA. Career facilitators and barriers of Arab women senior executives. *Int J Bus Manag*. 2015;10(8). doi: 10.5539/ijbm.v10n8p218.
- Hirayama M, Fernando S. Organisational barriers to and facilitators for female surgeons' career progression: a systematic review. *J R Soc Med*. 2018;111(9):324-34. doi: 10.1177/0141076818790661, PMID 30175935.
- Greed C. Institutional and conceptual barriers to the adoption of gender mainstreaming within spatial planning departments in England. *Plan Theor Pract*. 2006;7(2):179-97. doi: 10.1080/14649350600673112.
- Kulkarni L, Ghosh A. Gender disparity in the digitalization of financial services: challenges and promises for women's financial inclusion in India. *Gend Technol Dev* [Internet]. 2021;25(2):233-50. doi: 10.1080/09718524.2021.1911022.
- Johnston K. Women in public policy and public administration? *Public Money Manag*. 2019;39(3):155-65. doi: 10.1080/09540962.2018.1534421.
- Union UW and the IP. *Gend-Respons Law Mak*. 2021.
- Jayachandran S. Social norms as a barrier to women's employment in developing countries. *IMF Econ Rev* [Internet]. 2021;69(3):576-95. doi: 10.1057/s41308-021-00140-w.
- Begum A. Local governance in Bangladesh: towards a "critical mass" to combat discrimination against women with special reference to India. *J Soc Sci*. 2007;14(3):261-72. doi: 10.1080/09718923.2007.11978358.
- Burgess G. *Planning and the Gender Equality Duty-why does gender matter?* PPP. 2008:112-21. doi: 10.3351/ppp.0002.0003.0001.
- Sheikh RA, Gaurav S, Mishra T. Race among equals? An inquiry into the segmentation of Indian labor market. *Rev Dev Econ*. 2021;25(4):1-27. doi: 10.1111/rode.12804.
- ISSN NO: 2347-6648 *Gender Discrimination and Women's Rights in Indian context*. Singh H. 2020;IX(2347);IX(I), January/2020 Page No : 851 ISSN NO : 2347-6648 *The scale of gender bias in India Volume IX, Issue I, January Page No : 852:851-60*.
- Son K, Böger T. The inclusiveness of maternity leave rights over 120 years and across five continents. *Soc Inclus*. 2021;9(2):275-87. doi: 10.17645/si.v9i2.3785.
- Wadhwa S, Retnakaran D. Barriers and enablers to women's participation in the workforce: A case study from India. *Rev Mark Integr*. 2020;12(3):114-38. doi: 10.1177/09749292211013680.
- Kapoor D. Women as leaders: a systematic review of glass ceiling and organisational development. *Int J Indian Psychol*. 2021;9(1):572-91.
- Areas U. Urban areas and women's security: smart -city plans in border cities (case study:western Kurdistan, iran) *pjaee*. 2021;18(4):8115-38.

54. Segovia-Pérez M, Rubio-Andrada L, Figueroa-Domecq C, De la Fuente-Cabrero C. Facilitators and barriers to women's access to top management positions in the hospitality industry. *J Hum Resour Hosp Tourism* [Internet]. 2021;20(3):442-71. doi: 10.1080/15332845.2021.1923941.
55. Nguyen TL. Barriers to and facilitators of female Deans' career advancement in higher education: an exploratory study in Vietnam. *Higher Educ*. 2013;66(1):123-38. doi: 10.1007/s10734-012-9594-4.
56. Fletcher E, Pande R, Moore CM. Women and work in India: descriptive evidence and a review of potential policies. *SSRN Electron J*. 2018.
57. Joseph JK, Shaji J. Career barriers for women executives in India and the glass ceiling syndrome. *J Soc Sci*. 2021 (September).
58. Ellemers N. Women at work: how organizational features impact career development. *Policy Insights Behav Brain Sci*. 2014;1(1):46-54. doi: 10.1177/2372732214549327.
59. Wamoyi J, Ranganathan M, Mugunga S, Stöckl H. Male and female conceptualizations of sexual harassment in Tanzania: the role of consent, male power, and social norms. *J Interpers Violence*. 2022;37(19-20):NP17492-516. doi: 10.1177/08862605211028309, PMID 34182809.
60. Banerjee M. Gender Equality and labour force participation: mind the gap. *ANTYAJAA Indian J Women Soc Change*. 2019;4(1):113-23. doi: 10.1177/2455632719831827.
61. Tacoli C, Satterthwaite D. Gender and urban change. *Environ Urb*. 2013;25(1):3-8. doi: 10.1177/0956247813479086.
62. Sahama I, Wyeth S, Pojani D. Gender bias in the planning industry and planning outcomes. *Australian Planner*. 2021;57(3-4):211-21. doi: 10.1080/07293682.2021.2017994.
63. Few WS. Women engineers. *Nature*. 1967;215(5098):231. doi: 10.1038/215231c0.
64. Atkinson J. Gendered organizations and women's career progression in the UK financial services sector. *J Soc Welf Fam Law*. 2011;33(3):243-54. doi: 10.1080/09649069.2011.626243.
65. Next S, Equality E, World C, Barriers R, Employment T, Women. *Economic Equality in Changing World: Removing Barriers to Employment for Women*.
66. Lavena C, Riccucci NM. Exploring gender mainstreaming in the European Union. *Int J Public Adm*. 2012;35(2):122-36. doi: 10.1080/01900692.2011.616991.
67. Tlaiss H, Kauser S. Perceived organizational barriers to women's career advancement in Lebanon. *Gend Manag Int J* [Internet]. 2010;25(6):462-96. doi: 10.1108/17542411011069882.
68. Jbara NA, Darnton G. A practical approach for measuring women. *Empowerment*. 2019:344-52.
69. Francis V, Michielsens E. *J Manag Eng*. 2021;1.pdf:37(5): 04021051.
70. Çivici T, Yemişçioğlu Ş. One of the barriers that female architects face in their career development: glass ceiling syndrome. *Online. Art Des*. 2021;9(3):185-95.
71. Turesky M, Warner ME. Gender dynamics in the planning workplace: the importance of women in management. *J Am Plann Assoc* [Internet]. 2020;86(2):157-70. doi: 10.1080/01944363.2019.1691041.
72. Patel SJ, Patel CR, Dhonde B. Ranking barriers and optimum solutions to implement public bicycle-sharing system in cities. *Proceedings of the Institution of Civil Engineers - Municipal Engineer*. 2023;176(3):173-86. doi: 10.1680/jmuen.23.00002.
73. MacLeod A, Tatangelo G, McCabe M, You E. There isn't an easy way of finding the help that's available. Barriers and facilitators of service use among dementia family caregivers: A qualitative study. *Int Psychogeriatr*. 2017;29(5):765-76. doi: 10.1017/S1041610216002532, PMID 28351450.
74. Osborne N, Grant-Smith D, Bosman C. Advancing an agenda for women in planning: an epilogue. *Aust Plann* [Internet]. 2017;54(1):59-65. doi: 10.1080/07293682.2017.1297322.
75. Adhikary JR. Barriers to career progression: A study of the perceptions of Nepali women employees. *J Bus Manag Res*. 2016;1(2):17-32. doi: 10.3126/jbmr.v1i2.15657.
76. Pirra M, Carboni A, Diana M. Assessing gender gaps in educational provision, research and employment opportunities in the transport sector at the European level. *Educ Sci*. 2020;10(5). doi: 10.3390/educsci10050123.
77. Rindfleish J, Sheridan A. No change from within: senior women managers' response to gendered organizational structures. *Women Manag Rev*. 2003;18(6):299-310. doi: 10.1108/09649420310491477.
78. Steege R, Taegtmeier M, Ndima S, Give C, Sidat M, Ferrão C, *et al*. Redressing the gender imbalance: A qualitative analysis of recruitment and retention in Mozambique's community health workforce. *Hum Resour Health*. 2020;18(1):37. doi: 10.1186/s12960-020-00476-w, PMID 32448359.
79. Warnecke T. Social innovation, gender, and technology: bridging the resource gap. *J Econ Issues*. 2017;51(2):305-14. doi: 10.1080/00213624.2017.1320508.
80. White C, White C. Issues and trends. *Lang Learn Distance Educ*. 2010:47-85.
81. Forsberg G, Stenbacka S. How to improve regional and local planning by applying a gender-sensitive analysis: examples from Sweden. *Reg Stud* [Internet]. 2018;52(2):274-84. doi: 10.1080/00343404.2017.1296942.
82. Lord K, Livingston G, Cooper C. A systematic review of barriers and facilitators to and interventions for proxy decision-making by family carers of people with dementia. *Int Psychogeriatr*. 2015;27(8):1301-12. doi: 10.1017/S1041610215000411, PMID 25870004.
83. Chaturvedi S. Social safety net for maternity protection and early childhood development in India (April); 2019. Available from: <https://iw wage.org/wp-content/uploads/2019/12/ChildcareseriesPaper3.pdf>.
84. Wang XR, Liu SX, Robinson KM, Shawler C, Zhou L. The impact of dementia caregiving on self-care management of caregivers and facilitators: a qualitative study. *Psychogeriatrics*. 2019;19(1):23-31. doi: 10.1111/psyg.12354, PMID 30088311.

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