



Federal Institute for Research on Building, Urban Affairs and Spatial Development

within the Federal Office for Building and Regional Planning



BBSR-Analysen KOMPAKT 03/2022

India, Germany and Europe

A Spatial Perspective at SDG 5 on Gender Equality

Responding to crucial challenges in spatial and urban development, the United Nations agreed upon the 2030 Agenda and the Sustainable Development Goals (SDGs) as well as the New Urban Agenda. This publication checks the progress made in implementing the SDGs against the New Urban Agenda and vice versa. In order to understand the spatial patterns, a national and supranational spatial perspective is taken on some of the SDGs. Given the relevance of gender equality for balanced urban and rural societies, SDG 5 covers, amongst others:

- Gender ratio and partner violence
- Labour force participation
- Female representation in parliamentary bodies

by

Dr. André Müller, Antonia Milbert, Volker Schmidt-Seiwert, Regine Binot

Prof. Dr. Debolina Kundu, Dr. Biswajit Kar, Swastika Chakravorty

NIUA wishes to acknowledge the contributions of Aksheyta Gupta, Nelson Mandela S and Pragya Sharma.



Photo: Schafgans DGPh

Joint foreword

Dear Reader,

The Federal Institute for Research on Building, Urban Affairs and Spatial Development (BBSR) and the National Institute of Urban Affairs (NIUA) signed in 2018 a Joint Declaration of Intent to cooperate on different aspects of evidence-based research and expert positioning as well as policy advice. Expert workshops and presentations at the United Nations World Urban Forums 2018 and 2020 have led to a better understanding of our common challenges and an in-depth knowledge of possible solutions. Further presentations are foreseen to be held at the World Urban Forum 2022.

A first joint publication of BBSR and NIUA (BBSR-Analysen KOMPAKT 06/2019) was dedicated to spatial structures and trends in India, Germany and Europe and focused on population development and migration, urbanization and suburbanization. Further publications (BBSR-Analysen KOMPAKT 11/2020, 13/2020, 15/2020) took a spatial perspective at various Sustainable Development Goals of the United Nations (SDGs): SDG 3 on Good Health and Well-Being, SDG 4 on Quality Education and SDG 11 on Sustainable Cities and Communities. The positive resonance by readers encouraged us to continue our joint analytical work.

The United Nations remind us with their World Urbanization Prospects of 2018 and subsequent ad hoc revisions of the urbanization changes and their various facets affecting all countries worldwide. In that respect, our joint work and expert exchange are a part of the bilateral urbanization partnership between the responsible ministries in India and Germany. Both countries are seen as strategic partners.

In the framework of our cooperation, we develop and deepen a comparable picture of the spatial structures and trends in our countries and continents. In doing so, we try to find and further strengthen a common data-oriented language that is based on national and supranational data sources and may contribute to making global data sets compatible in the same way as it may serve practitioners in their daily work.

Our joint efforts are guided by the thematic priorities defined in the SDGs and their references to the New Urban Agenda of the United Nations. This publication focuses on SDG 5 on Gender Equality.

We wish you a stimulating reading.

and Spatial Development (BBSR)

Dr. Markus Eltges Director of the Federal Institute for Research on Building, Urban Affairs Hitesh Vaidya

Director of the National Institute of Urban Affairs



Photo: NILL

Introduction

BBSR and NIUA continue with this publication on SDG 5 in India, Germany and Europe as well as the accompanying publication on SDG 8 their efforts in identifying and applying a comparable approach to reporting on urban and rural development. The publication describes the findings in texts and maps in the same way as it discusses similarities and dissimilarities from national and supranational perspectives – all within the limits of available and comparable data sources.

The United Nations set a global policy framework for urban and rural development with the 2030 Agenda and the Sustainable Development Goals (SDGs) in 2015 and the New Urban Agenda in 2016. Their revised World Urbanization Prospect (UN DESA 2018) and subsequent ad hoc revisions provide updated estimates and projections for all countries of the world as well as their major agglomerations.

In addition to the global level, also states, cities and communities, India and Germany amongst them, consider the 2030 Agenda and the SDGs as guiding political framework. India has initiated a respective national dialogue. The coalition agreement of the new Federal Government of Germany, elected in 2021, explicitly mentions the SDGs and their relevance.

Reporting on the implementation of the SDGs is carried out every year with presentations at the High-Level Political Forum. Reporting on the implementation of the New Urban Agenda starts in 2022. UN HABITAT, the housing and settlement programme of the United Nations, is expected to provide evidence-based and data-oriented reports - so called Quadrennial Reports – every four years. Member States of the United Nations are invited to report on the national, sub-national and particularly local implementation. Some countries, amongst them Germany in close cooperation with a group of representative cities and communities, have already handed over their National Reports (BBSR 2021).

As cross-references between the 2030 Agenda and the New Urban Agenda are evident, the SDGs and their underlying indicators constitute the analytical pattern of the publication. Considering the availability of data sources at national and supranational level, it covers with regard to SDG 5 the following selected sub-goals (the figures in brackets refer to the numbering of the Global Indicator Framework adopted by the General Assembly of the United Nations):

- Gender ratio (SDG 5.1.1.3)
- Gender ratio at birth (SDG 5.1.1.4)

- Child gender ratio (SDG 5.2.2.7)
- Intimate partner violence against women and girls (SDG 5.2.1.2)
- Child marriage (SDG 5.3.1.1)
- Ratio of female to male labour force participation (SDG 5.4.1.2)
- Unpaid work of women (SDG 5.4.1.2)
- Elected women in national parliaments (SDG 5.5.1.1)
- Elected women in regional or local parliaments (SDG 5.5.1.7)

While data availability determines the analysis, national or even supranational programmes support respective development paths and changes. Given the cross-cutting nature of most of the SDGs as well as the different constitutional settings of India and Germany, this part of the introduction mentions crucial aspects in that respect. European aspects are referenced in the respective chapters.

Ending all forms of discrimination of women and girls is the primary goal of SDG 5. One of the most widespread human rights violations worldwide is violence against women and girls. It has short-term and long-term physical, psychological and

economic effects preventing women and girls from participating equally in society (United Women in the United Nations 2021). Women and girls affected by violence isolate themselves more in to private from public spheres, showing self-harming behaviour more often as well as health endangering abuse of alcohol, tobacco, drugs and psychotropic medication. As domestic violence is mostly perpetrated by close persons in a safe and protected environment, those affected lose additionally their familiar and secure surrounding and eventually need special protective facilities, which are not sufficiently available in many cities and countries. Not in all countries worldwide women are protected by law from intimate partner violence. Victims of partner violence are also children witnessing violent conflicts between their parents (RKI and DESTATIS 2008). Violence and discrimination against women and girls starts, however, already with upbringing the male offspring. In 1997, the United Nations agreed upon a resolution to legally prevent gender-based abortions (UN General Assembly 1998). The skewed gender ratio based on early preselection also influences the gender ratio of subsequent generations. The selected indicators of the spatial analysis illustrate this. Of particular interest for India, and most parts of South Asia, but for Germany and Europe only as a minor topic is child marriage as a complex social phenomenon – and is thus put in front of the publication.

A strong link exists between financial poverty and time poverty (UNSD 2020). Unpaid work is usually less appreciated as paid one, although many aspects of life are covered by unpaid work, e.g. health care at home and early child education are provided by households and in three quarters of the cases by women. According to an estimation carried out by Oxfam (2020), women and girls work 12 billion unpaid hours per day worldwide. Taking the minimum wage in Germany of 9.20 EURO in 2019/2020 as a reference, that would correspond to approximately 10 trillion EURO per year an amount 24 times more than the combined turnover of the tech giants Apple, Google and Facebook in 2018. The more women and girls have to do unpaid work, the less time they can spend on education, paid work and participation in social activities and parliamentary work. Unpaid work thus determines further discrimination against women and girls in the same way as it causes a greater risk of poverty in general and at retirement age in particular. An important goal of sustainability is thus the promotion of an equity of unpaid and paid work as well as the distribution of the share of unpaid work in a more balanced way between women and men. On the one side, investments ought to be made in technical and social infrastructure aiming at a reduction of the burden of unpaid domestic and care work. On the other side, a change in social norms, supported by legal and

fiscal programmes, would promote the equal distribution of unpaid work. Bringing more women in conditions of paid work, including fairer wages, as well as in local, regional and national parliaments would also be a condition for transferring a larger share of unpaid domestic and care work to men and boys. Raising awareness for this is the reason for applying the respective indicators.

Worldwide, women hold 1 in 4 national parliamentary seats and 1 in 2.8 seats in local representative bodies (United Women in the United Nations, 2021). Women as members of parliamentary representation are not only a question of mathematics with regard to their demographic share but also relevant in terms of content. Taking the critical mass approach for example means to address at which threshold a numerical increase of women would lead to a qualitative change in the policy content, its implementation process or even the political culture. Neither are women a homogenous group nor can their interests be clearly framed with one single definition and the needs for respective political representation. In addition, women pass challenging situations specific to their course of life, e.g. birth and care of children (Hoecker and Scheele 2008). This is an issue for both, national as well as local and regional parliamentary institutions. Corresponding indicators thus back up the spatial analysis of both levels.

Child marriage

This analysis constitutes a phenomenon of particular interest in India. Child marriage is a complex social phenomenon everywhere on planet Earth. It is determined by a set of cultural values and beliefs, e.g. preserving the chastity and honour of a family (Bicchieri et al. 2014). Child marriage though constitutes far-reaching economic, social and health costs. It is also associated with reduced opportunities in education, increased occurrences of a poor health status, chronic morbidities and violence. UNICEF (2021) records that in South Asia 28 % of women had been married below the legal age of 18 years. India witnesses the highest number of child brides worldwide. As of 2020, 15.6 million women aged from 20 to 24 years were married or in a partnership before reaching the age of 18 years.

Although the absolute number of child brides is still high in India, due to its generally large population, a constant decline may be observed: The National Family Health Survey estimates that the percentage was 47.4 % in the reference years of 2005/2006, 26.8 % in 2015/2016 and 23.3 % in 2019/2020. Child marriage is also a phenomenon that is of greater significance for women aged between 20 and 24 years in rural areas of India (27 %) than in urban areas (14.7 %). Large disparities also exist between the states. In states, such as Bihar, West Bengal, Jharkhand, Rajasthan, Andhra Pradesh, Madhya Pradesh and Assam, 30 % of all women aged between

20 and 24 years were married at an age below 18 years. In other states and union territories, like Lakshadweep, Kerala, Punjab, Himachal Pradesh, Jammu & Kashmir and Goa, less than 10 % of all women of the same age group entered marriage before reaching the legal age.

At district level varies the prevalence of child marriage between 67.9 % in the District of Shrawasti in Uttar Pradesh and 0 % in the District of Ernakulum in Kerala. Altogether 320 districts constituting 43 % of all districts in India show an above-national-average share of women aged from 20 to 24 years and married before reaching the legal age. Most of the districts are located in Bihar, West Bengal, Rajasthan and Uttar Pradesh. There are 93 districts where 40 % of all women of this age group had been married at an age below the legal one.

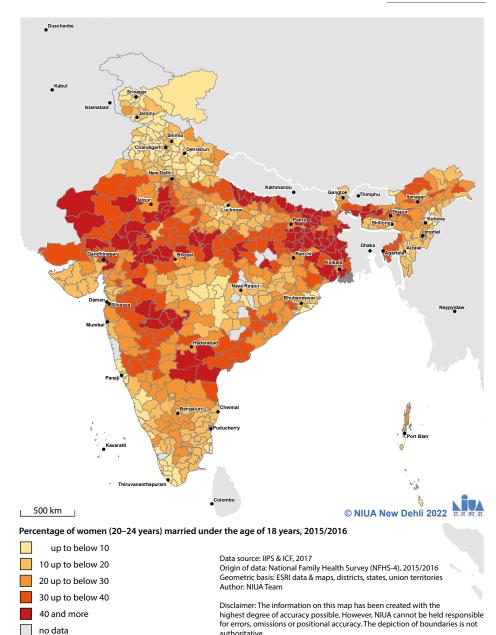
Multi-sectoral policies focusing on various subjects, such as poverty reduction, access to education and labour force participation, should be designed with regard to different socio-economic settings and applied accordingly in order to reduce and possibly erase child marriage in India.

The situation of child marriage in Germany is a different one, it is simply forbidden. A respective act, the Act to Combat Child Marriage (BGBl. I 2017, p. 2429), was adopted in Germany in July 2017. Child marriage Child marriage of a minor below the age of 18 years is no longer allowed in the country for both, German citizens and foreign passport holders, and irrespectively of religious or cultural customs in the country of origin. Existing child marriages with minors are annulled after having examined various requirements. The law seems to be effective with regard to concluding new child marriages, yet ineffective considering the annulation of existing ones, particularly those concluded abroad. Since the law had been adopted, 813 child marriages were reported and only a minor part of these could be cancelled.

The legal age of marriage in Europe is, similar to Germany, generally 18 years of age for both partners. Exceptions exist in some countries for persons aged between 16 and 18 years. In Austria, just to take an example, a court can declare a person to be at a marriageable age upon his or her application, if she or he is judged to be ready for marriage and the future partner has already reached the legal age. In the European Union, however, a huge difference exists between countries in relation to the age of marriage. In countries in the eastern part of Europe is the percentage of women getting married below the age of 20 years relatively high. In Bulgaria and the Czech

Republic are women in 40 % of all cases part of this age group, in Hungary and Romania the share of respectively aged women is at one third. 3 % of women aged below 20 years get married in the Nordic Countries and 5 % in the countries of the western part of Europe.

Figure 1 Child marriage in India



Gender ratio

The gender ratio is estimated in India on its district levels based on the disaggregated population figures provided by the 2011 Census. It is often perceived as important demographic and social indicator measuring the equity between females and males of a society at a given point of time. It is also expected to be of almost parity by nature in the same way as any non-normative asymmetry is supposed to reflect a variety of phenomena such as, amongst others, gender differentials in mortality, gender selective outmigration and an asymmetric gender ratio at birth.

The overall gender ratio in India stands at 943 females to 1,000 males (Office of the Registrar General and Census Commissioner India 2011). With reference to the 2001 Census and a ratio of 933 to 1,000, this indicates an improvement. The gender ratio has retrospectively always been unfavourable to females. It witnessed a constant decrease from 972 to 930 between 1901 and 1971. However, an increase could be registered to 934 in 1981, a decrease again to 927 from 1981 to 1991 and another increase to 943 per 1,000 in the last two decades. Progress in the gender ratio has thus not been uniform but indicates a positive turn in the long run.

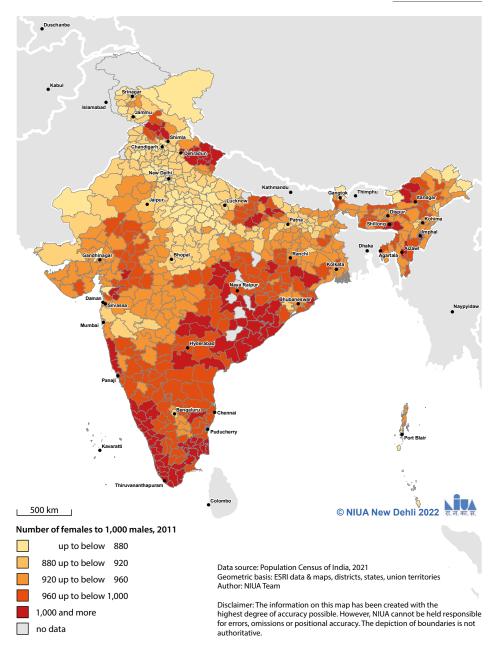
The range of the gender ratio spans at state level from 618 in Daman & Diu to 1,084 in Kerala. There are 9 states and union territories, including Punjab,

Jammu & Kashmir and Haryana & Delhi, showing a gender ratio below 900. At the other end of the spectrum, there are 15 states and union territories, amongst them West Bengal, Karnataka, Mizoram, Pondicherry and Kerala, indicating a gender ratio above 950. Trends in various states also present their inconsistency in general: states and union territories like Jammu & Kashmir, Bihar, Gujarat and Daman & Diu faced a decrease in the gender ratio between 2001 and 2011, whereas most other states showed an increase in their gender ratio in favour of females.

Analysing the gender ratio at district level reveals a broad disparity in the entire country with districts like Mahe in Pondicherry, Almora in Uttarakhand and Kannur & Kollam in Kerala and respective gender ratios of more than 1,100 females to 1,000 males. There are also districts, such as Surat in Gujarat, Tawang in Arunachal Pradesh and Leh in Jammu & Kashmir, where the gender ratio is 800 to 1,000. Around 135 districts indicate a gender ratio below 900 females to 1,000 males.

The analysis proves that, though India in general has moved towards a more balanced gender situation, still large disparities exit between districts and require comprehensive planning measures.



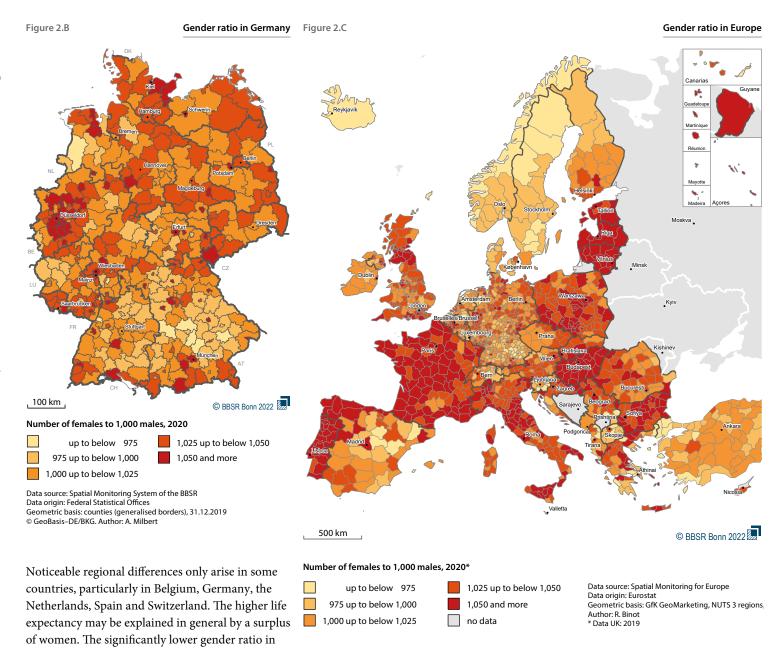


Out of its total population of 83.2 million people, 42.1 million persons (50.7 %) in Germany were women and 41 million persons (49.3 %) were men according to 2020 statistics. The respective age proportions vary gender-wise. As men from their mid-50s onwards are more likely to die than women do, most regions in Germany show a surplus of women against men. Rural districts constitute an exception of this observation. There, population is of a relatively younger average age and young women migrating out to cities affect these districts.

In cities, women dominate due to their higher level of education and job-related in-migration. Because of their higher life expectancy, women are the larger part of elderly people living in rural areas. The gender ratio though hides that a varying dominance of women according to age exists, depending on the respective urban-rural context. This phenomenon enormously influences demographic development on the one hand and the need of elderly for care infrastructure on the other hand.

The gender ratio in the European Union (EU27 as of 2020) is quite balanced: 228 million women (51.2 %) meet 218 million men (48.8 %) and are thus equivalent to a gender ratio of 1,048 females to 1,000 males. A distinct majority of men lives in only in the Nordic Countries, whereas in most countries the number of females outweighs the one of males. A possible explanation refers to demographics and the age of population.

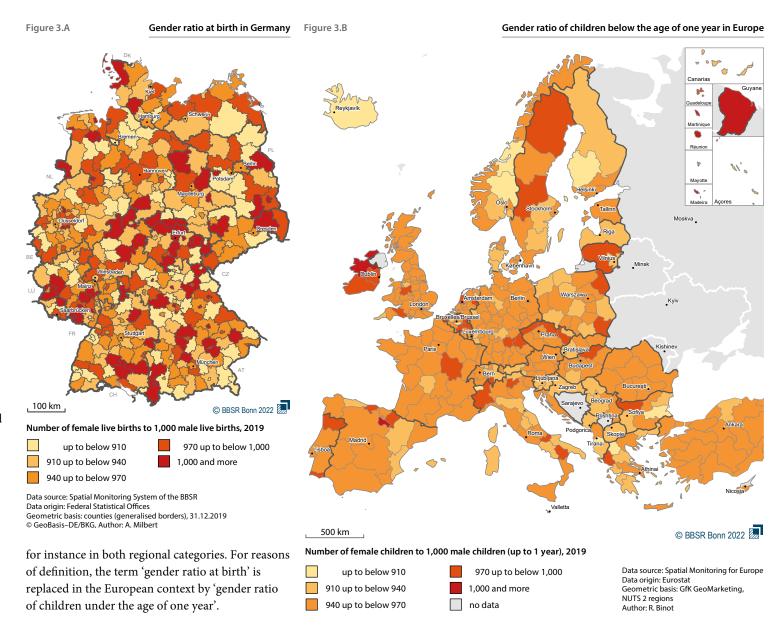
rural areas is caused by gender-specific migration.



Gender ratio at birth

The long-term average ratio of live-born girls to boys is approximately 950 to 1,000 in general. Modern medicine ensures that the probability of boys and girls dying in their first year of life is almost the same. The gender ratio of newborn girls to newborn boys can vary at district level between 765 and 1,114. These large deviations may solely be explained by annual coincidences. The regional distribution of the gender ratio among newborns varies from year to year; no correlation exists between the years observed. The only regional effect, which might be observed, is that the extreme deviations accumulate more in areas with a smaller population size than in large areas where these deviations tend more towards the respective average figure. The society in Germany equally appreciates girls and boys. Differences in social status exclusively develop through upbringing as well as promoting talents and later on, as young adults, in attributing certain societal roles with regard to the status of a family and paid work.

The gender ratio of children under the age of one year varies in European regions on a wider scale between 850 and 1,180 as girl to boy ratio. The quite homogenous regionalised picture is characterised in general by a slight surplus of boys. Lower or higher gender ratios cannot be explained by spatial structures, such as urban or rural. A surplus of girls or a surplus of boys occurs



In India, the gender ratio at birth is based on estimates provided by the Sample Registration System and is applied to indicate the absence of natural fertility and the prevailing preference of sons instead of daughters (Dalla Zuanna and Leone 2001), as it is the case in the country.

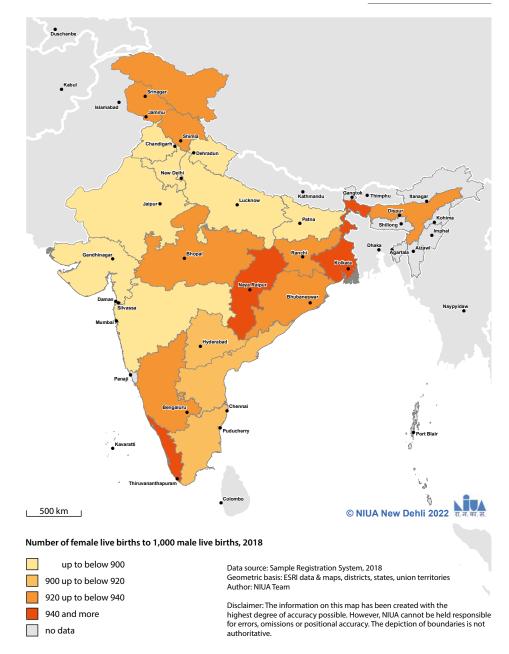
A history of severe imbalances in the gender ratio at birth exists in India - due to a prevailing preference of sons and existing prenatal gender selection practices despite the enactment of stringent laws banning the use of prenatal diagnostic techniques. The gender ratio at birth was at 898 to 1,000 from 2014 to 2016 and raised by one point to 899 between 2016 and 2018. Two states, Chhattisgarh and Kerala, show a gender ratio at birth above 950. There are 9 other states, amongst them Bihar, Uttar Pradesh, Gujarat and Delhi, where the gender ratio at birth is below 900. Huge differences in progress-making between states can be observed when comparing the estimated gender ratio at birth for the aforementioned two time periods. While states, such as Assam, Jammu & Kashmir and Rajasthan, witnessed a significant increase in the gender ratio at birth, other states, amongst them Bihar, Delhi, Karnataka and Uttarakhand, registered its serious decrease.

The gender ratio at birth disaggregated at the national level by places of residence reveals a diverging spatial pattern. The overall gender ratio at birth was in rural areas at 902 to 1,000 between 2014 and 2016 and at 900 from 2016 to 2018, in urban areas at 888 in

the earlier period and at 897 in the latter. Even within states, disaggregated figures by places of residence reveals that some states, like Chhattisgarh and Kerala, register a gender ratio at birth above 950. Rural areas in some states, as there are Gujarat, Uttar Pradesh, Uttarakhand and Haryana, show a gender ratio at birth of 866, 865, 851 and 840 respectively.

Madhya Pradesh and the newly established State of Telangana register a gender ratio at birth in urban areas of 968 and 947 respectively, whereas Himachal Pradesh, West Bengal and Uttarakhand reveal a gender ratio at birth below 850 each. Certain states, like Uttar Pradesh and Haryana, show a wide rural-urban disparity gap in their gender ratio at birth. That might prove that in urban areas gender awareness rising activities and law enforcement had been effective in reducing the prevailing preference of sons, whereas in rural areas they failed to counteract pervasive gender discrimination.

Figure 3.C Gender ratio at birth in India



Child gender ratio

The child gender ratio for those between 0 and 6 years of age is assessed in India at district level with reference to the national 2011 Census (Office of the Registrar General and Census Commissioner in India 2011). It has been declining in India since 1981 (Ramaiah et al. 2011), with a particular decrease from 927 to 1,000 in 2001 towards 918 in 2011.

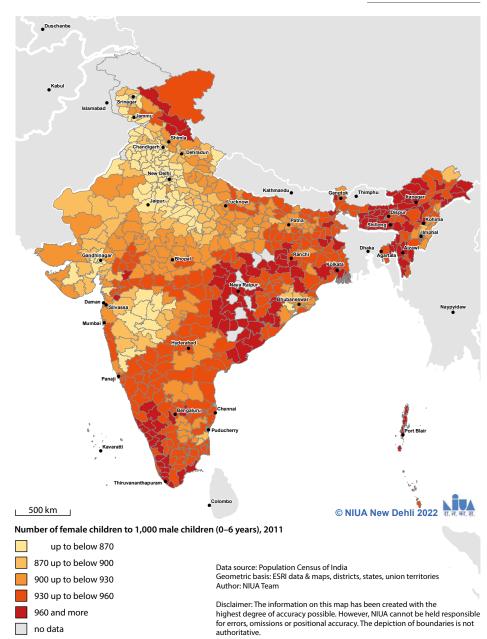
Significant geographical variations exist at state and district level. Most states and districts show a child gender ratio above 930 and below 960. 21 states and union territories register a higher child gender ratio than the national average, while 12 states show a lower one. 3 states in the northeastern part of India, i.e. Arunachal Pradesh, Mizoram and Meghalaya, experience also a higher child gender ratio. In contrast, 3 states and union territories in the northern part of the country, i.e. Haryana, Jammu & Kashmir and the National Capital Territory of Delhi, register a much lower child gender ratio. Moreover, 2 states and union territories are below 870 in child gender ratio, 6 of them below 900, another 6 below 930, 12 below 960 and 8 states and union territories above 960.

The spatial pattern at district level is a different one. Districts in the southern, eastern, northeastern and most northern part of India are better off than districts in its northern and western parts. 395 districts

in the country show a child gender ratio of more than 918, while 241 districts register a lower one. Only 3 districts experience a child gender ratio in favour of girls, i.e. in Lahul & Spiti in Himachal Pradesh, Dakshin Bastar Dantewada in Chhattisgarh and East Kameng in Arunachal Pradesh. A few other districts topping the child gender ratio in that respect are Nabarangapur, Bastar, Malkangiri, Anjaw, Narayanpur, East Siang and Rajnandgaon. The bottom 10 districts showing a very low child gender ratio in favour of girls are all located, with the exception of Bid in Maharashtra, in the northern part of India. More than half of them can be found in Haryana, i.e. Mahendragarh, Jhajjar, Rewari, Sonipat, Ambala and Kurukshetra. The remaining 3 districts with a very low child gender ratio are Samba as well as Jammu in Jammu & Kashmir and Pithoragarh in Uttarakhand. 88 districts register a child gender ratio below 870, 87 below 900, 141 below 930, 183 below 960 and 141 districts a child gender ratio above 960.

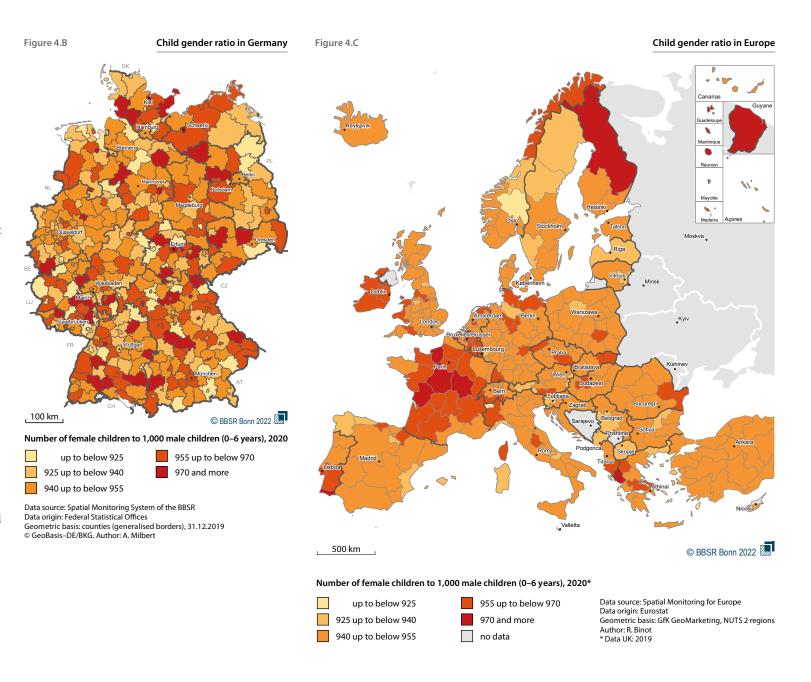
The decrease in child gender ratio in favour of girls may be explained with the still generally prevailing preference of sons instead of daughters in the Indian society – as also in other countries of South Asia – as well as gender-selective abortion measures and an excessive female child mortality rate (Ramaiah et al. 2011).





The ratio of girls to boys at the age between 0 and 6 years is at 950 to 1,000 on average in Germany. The ratio in childhood however fluctuates less extremely than with newborns. Considering the aforementioned age groups, the range decreases to a window from 868 to 1,000 girls to 1,000 boys. There is also no clear spatial pattern to be observed with the gender ratio of children. As the relation between newborn girls and boys changes annually, due to coincidences in the regions, also regional regularities do not exist in considering the gender ratio of children at the age between 0 and 6 years. Although some families move to larger and more family-friendly housing units after the birth of the (first) child, a regional randomness of the girl-boy relation exists that seems inexplicable.

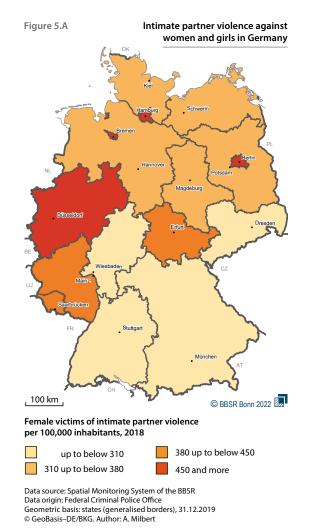
The difference in the gender ratio in Europe gets smaller in the age group between 0 and 6 years; generally speaking, the gender ratio is balanced. Differences between the regions in Europe are not very large. To some respect, the ratio tends to be more balanced in a few peripheral and rural regions, e.g. in Finland, Iceland or Norway. The generally smallest difference in the number of girls and boys arises in France – a phenomenon that seems to be unique in this context – when taking a European perspective at a nation.



Intimate partner violence against women and girls

Domestic violence in partnerships happens in a context of protection and care, according to public perception. These circumstances hinder both, victims and persons of their social environment, in recognising violence and reporting it to the police. Crime statistics in Germany only record the cases reported; a large number of unreported cases may thus be assumed. Different behaviours in reporting may explain the statistical differences between the federal states.

The most common form of domestic violence against women and girls, but also men and boys, is wilful assault. Violence originating from (former) partners affects 41.6 % of female and 8.3 % of male victims. Violence against girls and women happens in partnerships 6 times more often than against boys and men. Every fourth woman experiences violence in her partnership at least once in her lifetime, two thirds more than once. Respective applications are recorded in victim statistics so that not only persons count but also the number of applications referring to a single person.



Domestic violence in India cuts across age, education, religion and social class (INCLEN 2000) and is perceived as behavioural pattern applied to gain or maintain power and control over an intimate partner through physical, psychological, emotional, sexual or economic actions (United Nations 2021). It is assessed at state level, because the robustness of the estimates carried out by the National Family Health Survey is low due to large non-response parts and small sample sizes in many districts.

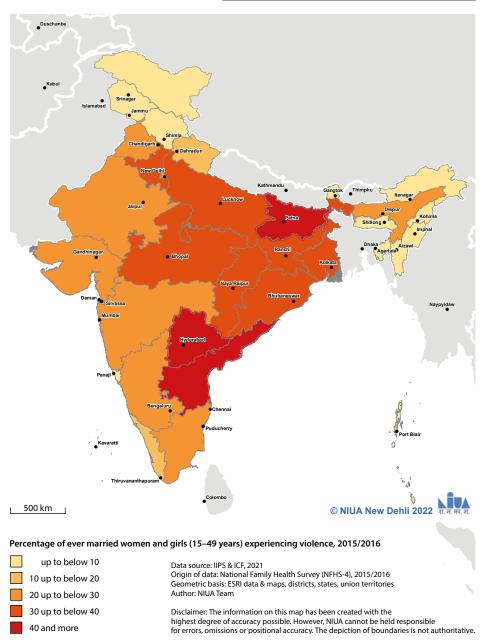
Around 29 % of women and girls aged between 15 and 49 years face domestic violence in India, usually committed by their male partner, i.e. almost 1 in every 3 women. The rate of domestic violence has nevertheless decreased in general with reference to 37.2 % in the period of 2005/2006.

The domestic violence rate varies significantly between the states and union territories. Compared to the national average, it can be observed that 14 states or union territories witness a high rate of domestic violence, while 19 states show a low rate below the national average. More than half of all women in Manipur (54.5 %) face some forms of domestic violence. Quoting Khamdamov (2016), this high level of domestic violence may be attributed to the principle of dowry, alcoholism, extra-marital affairs and the prevailing preference of sons instead of

daughters. Apart from Manipur, also Bihar (45.2 %) and Andhra Pradesh (43.9 %) register a high rate of domestic violence. Women in Himachal Pradesh and Jammu & Kashmir in contrast face a lower share of domestic violence. Taking domestic violence as a general indicator for the empowerment of women (and girls) would be challenging, due to inconsistent associations and spatial pictures in relation to the economic development of the respective state or union territory. In addition, the shares vary widely: 2 states and union territories show a domestic violence rate below 10 %, 7 below 20 %, 10 below 30 %, 11 below 40 % and 3 states above 40 %.

The relatively high rate of domestic violence in India could be attributed to the general aspect of inequality. Women are still considered a 'second' gender, due to the patriarchal character of the country's society – a significantly determining factor of domestic violence (Sahoo and Pradhan 2007). Another aspect refers to the reporting of domestic violence cases. Women in India often do not report it and prefer to suffer and blame themselves.

Figure 5.B Intimate partner violence against women and girls in India



Ratio of female to male labour force participation

Women participating in the labour force and accessing quality jobs are crucial elements of sustainable development. They face many barriers while wishing to enter the labour market, due to various social and economic factors. Sources in India collect data on the labour force by considering both, a principal status (majority of the working time in the respective 365 days of the data survey) and a subsidiary status (at least 30 working days in the respective 365 days of the data survey).

The ratio of female of male labour force participation in India is 40 to 100. 287 out of 619 districts, for which data is available, fall below this national average. The women's labour force participation rate compared to men's varies largely across districts. The ratio is lowest in the Districts of Samastipur (1.4) and Vaishali (1.8) in Bihar. The highest ratio is registered in the Districts of Mandi (97.3) and Bilaspur (95.6) in Himachal Pradesh. In 110 districts is the ratio below 20, in 130 between 20 and up to below 35, in 132 from 35 to up to below 50, in 142 between 50 and up to below 65 and in 105 districts at 65 and above. No data is available or the sample size is too small in 64 districts. Districts in Uttar Pradesh, Bihar, Haryana, Assam and Arunachal Pradesh, all covering the northern and northeastern part of the country, show lower female to male labour force participation ratios.

Studies detect increasing household incomes, a high enrolment rate of young women in institutions of education and a lack of suitable employment opportunities as reasons for the relatively low female labour force participation ratio in India (Verick 2014; Kaspos et al. 2014). Other studies explain that many women work in informal economies where the nature of work is often "scattered, intermittent and temporary" (Hirway and Jose 2011: 69). In addition, prevailing gender norms in India discourage women from participating in labour force and do not acknowledge women's work in societal terms. This results in underestimating and disregarding the work or women (Swaminathan 2020). Designing respective policies for India shall consider these crucial aspects when propelling the country towards a more gender-equitable labour market.

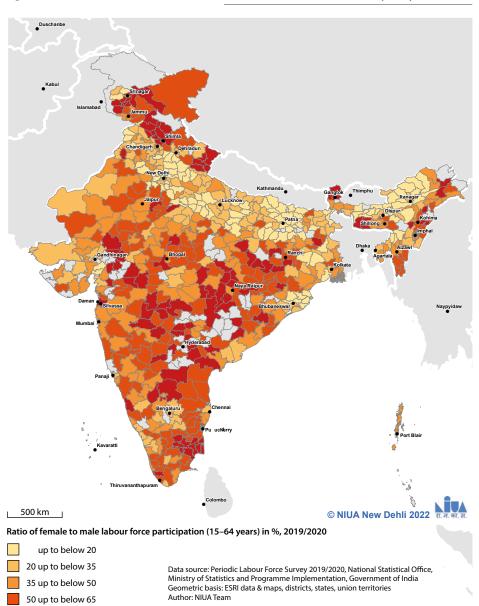
The ratio of female to male labour force participation of those working or seeking work and being available for work in the age group between 15 and 64 years in Germany is 90 to 100. The ratio of women participating in labour force has continuously increased. It was of about 70 to 100 in the western part of Germany in the 1990s and 85 in the eastern part of Germany. A difference still exists between East and West, though of marginal 5 percentage points (East: 95, West: 90 to 100).

Figure 6.A

65 and more

no data

Ratio of female to male labour force participation in India



Disclaimer: The information on this map has been created with the highest degree of accuracy possible. However, NIUA cannot be held responsible

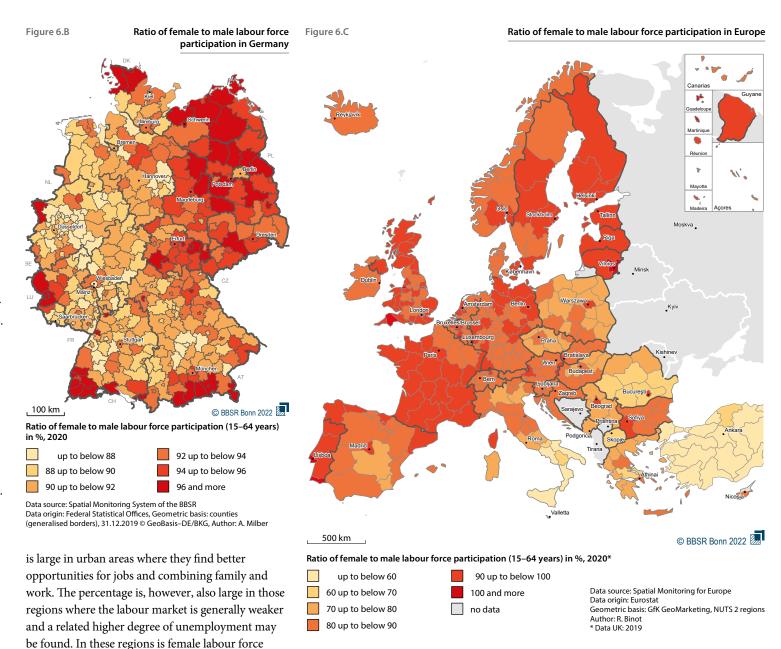
for errors, omissions or positional accuracy. The depiction of boundaries is not authoritative.

In some districts of Germany, the ratio is over 100 to 100 in favour of women. Apart from the City of Rostock, those cities and districts can be found in the western part of Germany mainly in regions bordering Luxembourg, Switzerland and Austria. There, a lively exchange of residential and labour migration can be observed between those countries. Regions in Germany, predominantly in its western part, which traditionally have been or are still influenced by the industry sector, show comparatively low participation rates of women. Although the gap between the female and the male labour force is shrinking, even larger differences in the scope of work exist: Women, especially in the western part of Germany, are more likely to work part-time or in low-income-earning-contracts than men do.

Differences in this ratio are distinct between countries in Europe as well as between its regions. Considering an average value of 86 females to 100 males, the range varies from 75 to 100 in Italy and 57 to 100 in its Campania Region up to 100 to 100 in Portugal and 102 to 100 in its Algarve Region. The gender imbalances are smaller in countries in the western part of Europe than in its eastern part. Particularly in these countries, but also in Spain for example, is the ratio the highest in the capital or metropolitan regions. Referring to the situation in Finland, France or the United Kingdom, smaller differences can be found in rural areas.

A higher ratio of women than men participating in the labour market reflects two of its aspects: The percentage of women

participation crucial of securing living conditions.



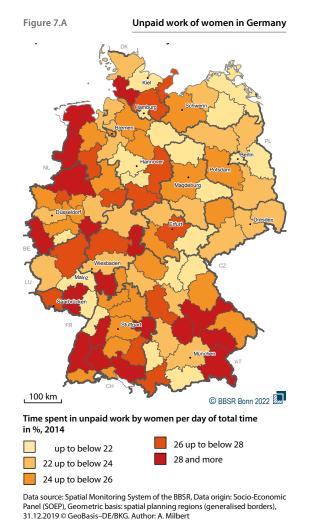
Unpaid work of women

Unpaid labour activities and care work are still carried out predominantly by women – independently from the respective geographical context. With agreeing upon the SDGs has unpaid household work and its possible impact on societal development paths gained attention in the global community.

The Federal Statistical Office of Germany conducted in 2012/2013 a similar survey as the one mentioned in the context of India. This Time Use Survey quantifies the daily time spent for household as well as child and elderly care work at an average of 229 minutes or 16 % for women and 144 minutes or 10 % for men. The information provided by the Socio-Economic Panel (in German: Sozio-oekonomisches Panel, in short: SOEP) in 2014 estimates the daily efforts differently with 357 minutes or 24.8 % for women and 165 minutes or 11.5 % for men.

The information originating from SOEP can be attributed to the 96 spatial planning regions in Germany as indicated in the map. Women in the western part of Germany spend around 25 % per day for unpaid work and therefore about 1 hour more than women in the eastern part of the country who work on average 22 % of their daytime unpaid. Women there use less time in child care than their western counterparts, as all-day child care institutions exist more often

in the eastern part of Germany. Men in the eastern part spend around 12 minutes more for unpaid work than men in the western part. The more women spend on paid work, the less time they invest in unpaid work. This correlation, however, is weak. Women can essentially only save time in household work and use child care facilities for small children. Women often compensate less for unpaid work than expected. Despite the double burden, they generally, according to SOEP, wish to meet the ideal of a good housekeeper and mother, even when they are employed full-time.



Inequalities in households, particularly in India, become often manifest in the unequal distribution of domestic labour, which is predominantly undertaken by women without receiving any remuneration or compensation (Sridharan 2021). The National Statistical Office of India conducted in 2019 a Time Use Survey estimating the time use of individuals above the age 6 years in different working activities. The survey follows a 24-hour recall period method capturing the time disposition of household members according to their gender. All activities are generally categorised into paid, unpaid and residual activities. Time spent in unpaid activities by women indicates the share in all domestic activities, including household chore as well as child and elderly care.

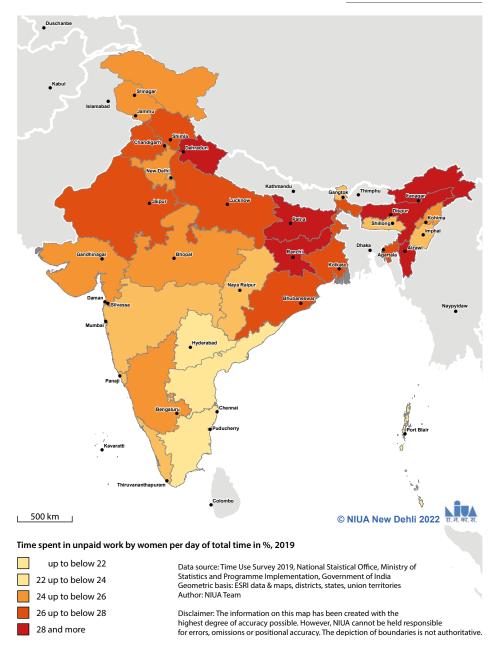
The 2019 Time Use Survey indicates that women in India spend on average 305 minutes per day or 25.3 % of their daily time in unpaid domestic duties – a share which is well above the average time that men spend with only 67 minutes per day or 4.1 % in these activities. The share of time spent by women varies widely across the states ranging from 18.8 % in Telangana to 31.4 % in Bihar. A reason why women spend a larger share of their daily time in unpaid domestic activities in hilly states, i.e. Assam (30.6 %), Arunachal Pradesh (30 %), Uttarakhand (29 %), Mizoram (28.2 %), Tripura (27.9 %) and Himachal Pradesh (27.6 %) for instance, might be related to their challenging terrains.

A similar pattern can be found in Jharkhand (29 %) and Odisha (27.4 %). In southern states, i.e. Telangana (18.8 %), Tamil Nadu (19.9 %) and Andhra Pradesh (20.4 %) for example, women spend a lesser share of their time budget, which is much lower than the national average, in unpaid domestic activities. Obviously due to a higher labour force participation rate there, women spend in Union Territories, like the one of Chandigarh (19.7 %) and Puducherry (20.8 %), less time in unpaid domestic activities.

It may also be noted that the states, where women spend a larger share of their time in unpaid activities, record also extremely low rates of their labour force participation. Himachal Pradesh is an exception. It may be assumed that women's larger domestic responsibilities in households located in these states may act as barriers to their labour force participation. As a consequence is the share of time spent in unpaid domestic activities of women comparatively lower in states where their labour force participation rate is higher, i.e. in states in the southern part of India.

Programmatic interventions might thus be required particularly in hillier states in order to reduce women's share in unpaid domestic activities and increase their presence in active labour force involvement.





Elected women in national parliaments

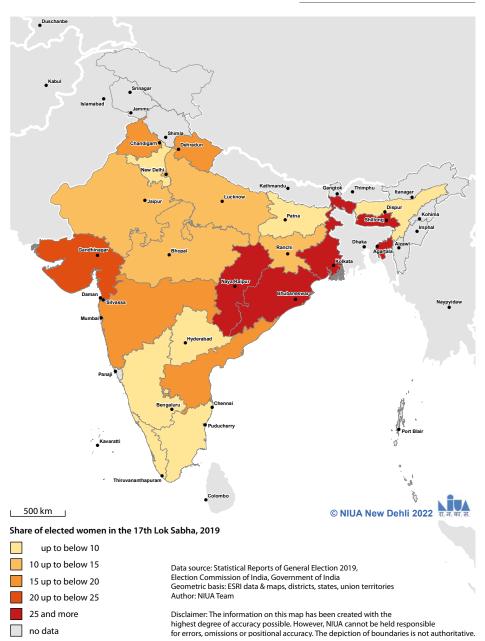
The SDGs declare the participation of women in political activities of a society as one of a couple of pathways in order to achieve a more equitable world for all. Addressing the issue of equitable political representation is the one side of efforts already made, associating a larger number of women elected for parliaments with a stronger attention to gender aspects and a greater accountability towards women the other side of social awareness still to be raised. SDG 10.2 thus outlines the target of empowering and promoting social, economic and political inclusion of all, irrespectively of origin, ethnicity, age, gender, disability or economic status.

The political representation of women in the Lok Sabha, i.e. the Lower House of the National Parliament of India, is far from being satisfactory. In its current composition (17th term), women won only 14.4 % of the total 543 parliamentary seats. Women, who make up almost half of all voters in India, represent around 1 in 7 of the candidates. There are no female members of the Lok Sabha from 14 states and union territories, including 6 states of the northeastern part of India, except Assam and Tripura. As the number of available parliamentary seats is linked to the population figures in the constituencies, there are fewer seats designated to smaller sized states in the same way as the chance of women winning there a seat is also smaller. 5 states, namely

Kerala, Telangana, Assam, Karnataka, Bihar and Tamil Nadu, show respectively women-related figures below 10 % of all seats available at the Lok Sabha, whereas other states and union territories, like Chandigarh, Tripura and Meghalaya rank the highest. In terms of absolute figures, Uttar Pradesh and West Bengal register 11 seats each of the Lok Sabha won by female candidates.

The World Economic Forum and its recent Global Gender Gap Report (2021) also points out India's poor record on women's political representation. According to the index as basis of this report, India is ranked 140 out of 156 countries there. Its indicators related to the political empowerment of women with regard to estimating the gender gap index observe the largest slump with India actually being ranked 51 compared to rank 18 in 2020. Increasing the political accountability to women should be one of the focuses in order to reach the respective SDG targets. It might begin with increasing the number of women in political decisionmaking positions along with strengthening the legal and administrative support of and cooperation with multiple stakeholders like women's organisations.

Figure 8.A Elected women in the Lok Sabha of India

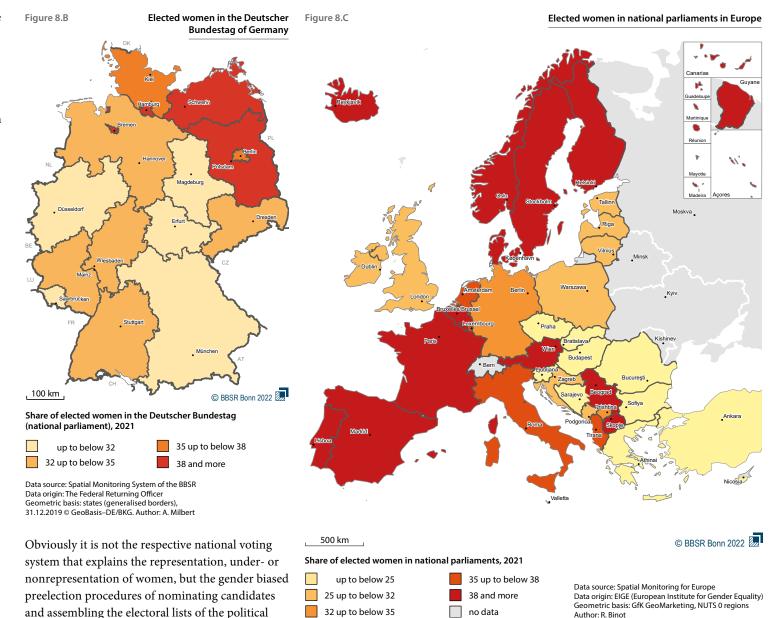


Considering the proportion of women in the entire population of the country, they are less represented in the National Parliament of Germany (Deutscher Bundestag). Their proportion rose slightly to 34 % in the elections for the 20th Bundestag in 2021. This rate has fluctuated more or less between 30 % and 36 % during the last 7 electoral terms.

Into the National Parliament of Germany women and men can be elected directly in their respective constituencies or via a position in the register of the political parties. A successful candidacy is more likely for women than men via a register position. This is however linked to the strongest political party in a constituency. Three political parties (Bündnis 90 / Die Grünen, Die Linke, SPD) composed their registers of women and men in an alternate way so that their chances are equally high in the same way as the share of elected women rises with the electoral success of these parties. Nevertheless, 50 % to 60 % of all direct mandates deriving from the Federal States of Bremen, Brandenburg, Hamburg and Mecklenburg-West Pomerania were attributed to women.

Women are blatantly underrepresented in the national parliaments of some countries in Europe. Almost half (up to below 48 %) of the national parliament members in the Nordic Countries are women, whereas national parliaments of other countries, are dominated by men.

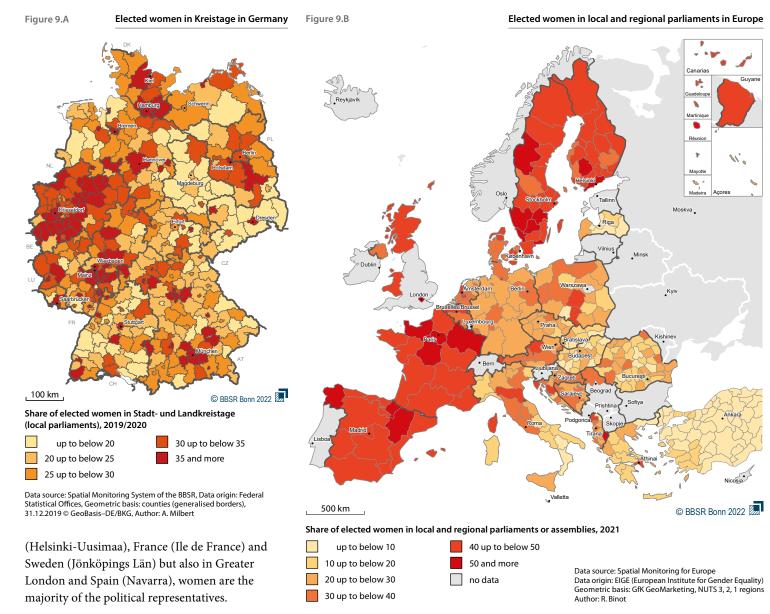
parties.



Elected women in local and regional parliaments

Local and district parliaments (Kreistage) mirror the notion of local self-government in Germany. The tasks of districts and their associated municipalities range from granting social assistance, municipal family and youth policy, local-regional public transport, health care, waste management, food safety monitoring, etc. In local electoral terms, all municipal bodies and their parliamentary parts are elected. The share of female representatives in these bodies ranges from just under 10 % to 60 % - on average at 28 %. In most cities and urban districts in Germany, women take a larger number of parliamentary seats than in rural areas. There, the principle of registers also counts. Similar to the situation on the national federal level, Bündnis 90 / Grüne, Die Linke and SPD apply rotating registers thus increasing the chance of women being elected.

Taking a regional European perspective offers a rather broad range of the share of women as members of local and regional parliaments and assemblies, resulting in a more or less North-West and Mid-East gap. With the exception of a few regions in Hungary and Latvia, where there are no female members at all, does the proportion of women in elected bodies not exceed 20 % in 72 NUTS 2 regions (out of 290 regions in EU Member States as well as EFTA and Balkan Countries). In as many as



India's political life is based on a decentralised power structure in order to meet best the needs of its very large and highly diverse population. The 73rd and 74th amendments to the Constitution of India delegated the mantle of rural local self-governance to Panchayati Raj Institutions. These institutions are defined as a system of rural local self-governments consisting of local bodies with representatives elected by the respective local people. By the Constitution of India, 33 % of seats and key decision-taking positions of these institutions of local self-governance are reserved for women.

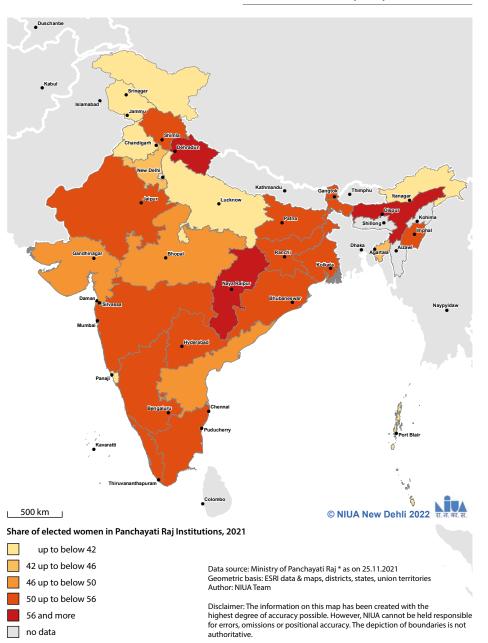
Compared to the political assemblies at the state and national level, the participation of women at the lower level of governance is much better off. In the national perspective, altogether 46 % of all seats in the Panchayati Raj Institutions are held by women. 2 union territories, i.e. Ladakh and Dadra & Nagar Haveli, show a lower share of female representatives in these institutions than the aforementioned reservation mark. Additional 6 states and union territories register a share of seats won by female candidates of less than 40 %. These states are Jammu & Kashmir (33.2 %), Uttar Pradesh (33.3 %), Andaman & Nicobar Islands (35.7 %), Goa (36.7 %), Lakshadweep (37.2 %) and Arunachal Pradesh (39 %). Most of the larger states, namely Karnataka, Telangana, Rajasthan, Jharkhand, Bihar, Kerala, Odisha, Tamil Nadu, Maharashtra and Assam, observe more than half of the

total number of seats in the Panchayati Raj Institutions won by female candidates.

Including women in rural local governments as mandated by the 73rd amendment to the Constitution of India has obviously ensured the adequate representation of women in decision-making processes at the local level. Anecdotal literature illustrates that female leaders are pivotal in laying comprehensive and sustainable growth trajectories at grass-roots level. Nevertheless, institutional support and capacity-building programmes are required to enhancing the effectiveness of policies related to affirmative actions and women's participation in the political life of India.

Figure 9.C

Elected women in Panchayati Raj Institutions in India



Conclusion

The joint publication is another milestone of the cooperation between BBSR and NIUA. Its underlying common understanding of analysing spatial structures as well as the collaboratively transcultural cooperation of both institutions show that the envisaged blueprint of joint spatial research in the area of urban and spatial development might be of added value for both, methodological approach and policy advice.

The joint analysis illustrates the spatial structures as defined by selected indicators of SDG 5 on Gender Equality. It uses, in the large number of cases, the lowest common data level possible in India, Germany and Europe and develops also here a common visual language, partly with variations.

Knowledge on the gender ratio is crucial for many political, societal and economic processes. It is affected at the subnational level in both, India, Germany and Europe, by migration and gender differences in the mortality rate - in addition by genderselective abortion measures in India. In Germany, the gender ratio of children and at birth varies significantly among districts. Unexplainable factors exit with regard to the natural ratio of girls and boys born (Brachat-Schwarz 2021). Nevertheless, large disparities and annual fluctuations are also likely to be statistical random effects at county level registering fewer than 1,000 children born per year. While

the gender ratio of the total population is of disadvantage for women in India, it is of disadvantage for men in Germany, mainly caused by an excess mortality rate of men aged 50 years and older. Considering a regional distribution, the internal migration of young adults takes a particular effect with young women showing a stronger affinity to (large) cities than young men do. A ratio of less than 900 women to 1,000 men, as to be found in 135 districts in India, however does not exist in Germany.

Data referring to domestic violence and their underlying indicators are not directly comparable between India, Germany and Europe. Statistics in India refer to evermarried women and girls aged between 15 and 49 years, whereas in Germany all cases of domestic violence are recorded from the age of 16 years onwards. According to an evaluation carried out by the Federal Criminal Police Office (2021), most female victims of domestic violence executed by intimate partners are aged between 25 and 49 years. Intimate partner violence is strongly gender-specific in both geographical contexts. It may also be assumed that a large number of unreported cases, incorporating variations from region to region, exist in both geographical contexts. Achieving a higher degree of equality for women and girls in societies would possibly end domestic violence.

The share of all women spending unpaid domestic work can be compared between India and Germany; it is of around 25 % in general. Regional differences in India are partly due to natural conditions and partly because of a different labour force participation of women – a fact that is also the reason for the situation in Germany. However, the gender differences in India are significantly larger than in Germany and Europe. Men participate less than women but significantly more in domestic work in Germany than in India. A reason might be an increasing desire for active fatherhood. In both cultural contexts can be found traditional role concepts and patriarchal thought patterns influencing the divide between unpaid and paid work, the genders and the participation of women and girls in decision-making bodies.

On average, only 15 % of all national parliament seats in India and 34 % of those in Germany are occupied by women. The spatial picture of Europe is similar. Regional nominations vary to a larger extent in India than in Germany and Europe. Two of the political parties, which took part in the last federal parliament elections in Germany, introduced electoral lists with an equal representation of men and women. Particularly in Germany, direct mandates are decisive for appointing women to the Deutscher Bundestag. Most prominently in India, local and regional bodies of

political representation, the Panchayati Raj Institutions, show a share of women of 33 % women, in some cases of up to 48 %. As the constitution of the country requests a respective share of at least 33 %, the increase of women in parliamentary decision-making processes may be assumed as influence of legislation.

Gender-differentiated statistics are not yet selected systematically in many areas of the world. They are partly based on estimates (e.g. gender ratio at birth in India), surveys (e.g. unpaid work in India) or counting (e.g. electoral lists in Germany) and may reveal large amounts of unreported data (e.g. domestic violence in both geographical contexts). SDG 5 raises gender discrimination as an issue. Its influence on development paths and the interdependencies with other SDGs might thus be discovered and proved at a first step – not only theoretically but also empirically.

Bibliography

BBSR – Federal Institute for Research on Building, Urban Affairs and Spatial Development (2021): National Progress Report on the implementation of the New Urban Agenda, BBSR-Publikation 03/2021, access: https://www.bbsr.bund.de/BBSR/EN/publications/OnlinePublications/2021/bbsr-online-03-2021-dl.pdf?__blob=publicationFile&v=4 [retrieved on 31.01.2022].

Bicchieri, C.; Jiang, T.; Lindemans, J. W. (2014): A social norms perspective on child marriage: The general framework.

Brachat-Schwarz, W. (2021): Mädchen oder Junge? Zur Geschlechterproportion der Neugeborenen in Baden-Württemberg, Statistisches Monatsheft Baden-Württemberg 9: 15–20.

Bundeskriminalamt (Ed.) (2021):

Partnerschaftsgewalt. Kriminalstatistische Auswertung – Berichtsjahr 2020, access: https://www.bka.de/SharedDocs/Downloads/DE/Publikationen/JahresberichteUndLagebilder/Partnerschaftsgewalt/Partnerschaftsgewalt_2020.html;jsessionid=8E3FDC 37231533D1C1653D24ADE711A9.live612?nn=63476 [retrieved on 31.01.2022].

Dalla Zuanna, G.; Leone, T. (2001): A gender preference measure: the sex-ratio at last birth, Genus: 33–56.

Election Commission of India (2019): Statistical Reports of General Election, Government of India, access: https://eci.gov.in/ [retrieved on 31.01.2022].

Hirway, I.; Jose, S. (2011): Understanding women's work using time-use statistics: The case of India. Feminist Economics, 17(4): 67–92.

Hoecker, B.; Scheele, A. (2008): Feminisierung der Politik? Neue Entwicklungen und alte Muster der Repräsentation. Femina Politica Heft 2: 9–19.

ILO – International Labour Organization (2013): Decent work indicators: Guidelines for Procedures and Users of Statistical and Legal Framework Indicators (Issue December), access: http://www.ilo.org/wcmsp5/groups/public/---dgreports/---integration/documents/publication/wcms_229374.pdf [retrieved on 31.01.2022].

INCLEN – International Clinical Epidemiologists Network (2000): Domestic Violence in India 3: A Summary Report of a Multi-Site Household Survey, Washington, DC: International Centre for Development and Population Activities.

International Institute for Population Sciences (IIPS) and ICF (2017): National Family Health Survey (NFHS-4) India 2015–2016, Mumbai, IIPS.

Kapsos, S.; Bourmpoula, E.; Silberman, A. (2014): Why is female labour force participation declining so sharply in India? International Labour Organization, access: https://www.ilo.org/wcmsp5/groups/public/---dgreports/---inst/documents/publication/wcms_250977.pdf [retrieved on 31.01.2022].

Khamdamov, K. (2016): Narratives of domestic violence against married women in Manipur, International Journal of Applied Research, 2(10): 563-566.

Mamgain, R. P.; Tiwari, S. (2016): Youth in India: challenges of employment and inclusion, Journal of Social and Economic Development, 18(1–2): 85–100, access: https://doi.org/10.1007/s40847-016-0025-8 [retrieved on 31.01.2022].

Ministry of Panchayati Raj (2021): Government of India, access: https://panchayat.gov.in/ [retrieved on 31.01.2022].

Mitra, A.; Verick, S. (2013): Youth Employment and Unemployment: An Indian Perspective (ILO Asia-Pacific Working Paper Series).

National Statistical Office (2020): Time Use Survey 2019, January–December 2019, Ministry of Statistics and Programme Implementation, Government of India.

Office of the Registrar General India (2020): Sample Registration System, Statistical Report 2018, New Delhi.

Office of the Registrar General and Census Commissioner India (2011): Census of India 2011. Provisional population totals, New Delhi, access: https://censusindia.gov.in/ [retrieved on 31.01.2022]. Oxfam (Ed.) (2020): Im Schatten der Profite. Wie die systematische Abwertung von Hausarbeit, Pflege und Fürsorge Ungleichheit schafft und vertieft, access: https://www.oxfam.de/system/files/2020_oxfam_ungleichheit_studie_deutsch_schatten-der-profite.pdf [retrieved on 31.01.2022].

Periodic Labour Force Survey (2020): National Sample Survey (NSS) data (unit level) 2019–2020. Ministry of Statistics and Programme Implementation, Government of India, access: https://www.mospi.gov.in/download-tables-data [retrieved on 31.01.2022].

Ramaiah, G. J.; Chandrasekarayya, T.; Murthy, P. V. (2011): Declining child sex ratio in India: Trends, Issues and Concerns, Asia-Pacific Journal of Social Sciences, 3(1): 183–198.

RKI – Robert-Koch-Institut and DESTATIS – Statistisches Bundesamt (Eds.) (2008): Gesundheitliche Folgen von Gewalt unter besonderer Berücksichtigung von häuslicher Gewalt gegen Frauen. Gesundheitsberichterstattung des Bundes, Heft 42.

Sahoo, H.; Pradhan, M.R. (2007): Domestic Violence in India: An Empirical Analysis.

Sridharan, G. (2021): How Much Time Is Too Much Time? The Growing Gender Gap in Time Use and Well-being, Economic and Political Weekly, Vol. 56, Issue 26-27: 58-62.

Swaminathan, M. (2020): Time-Use Survey Report 2019: What Do We Learn About Rural Women? Review of Agrarian Studies, 10(2): 93–98, access: http://www.ras.org.in/time_use_survey_ report_2019#bib5 [retrieved on 31.01.2022].

UN DESA – United Nations, Department of Economic and Social Affairs, Population Division, 2018: World Urbanization Prospects. The 2018 Revision, access: https://population.un.org/wup/Publications/Files/WUP2018-Report.pdf [retrieved on 31.01.2022].

UN General Assembly (1998): Resolution on the Girl Child, A/RES/51/76, access: http://www.worldlii.org/int/other/UNGA/1997/160.pdf [retrieved on 31.01.2022].

UNICEF – United Nations Children's Fund (2021): Global databases, based on Demographic and Health Surveys (DHS), Multiple Indicator Cluster Surveys (MICS) and other national surveys, 2014–2020, acces: https://data.unicef.org/topic/child-protection/child-marriage/ [retrieved on 31.01.2022].

United Nations (1991): Handbook of Vital Statistics Systems and Methods, Volume 1: Legal, Organisational and Technical Aspects, United Nations Studies in Methods, Glossary, Series F, No. 35, United Nations, New York.

United Nations (2021): What is Domestic Abuse?, access: https://www.un.org/en/coronavirus/what-is-domestic-abuse [retrieved on 31.01.2022].

UNSD – United Nations Statistics Devision (2020): Gender Statistics, access: https://unstats.un.org/ unsd/statcom/51st-session/documents/2020-17-GenderStats-E.pdf [retrieved on 31.01.2022].

United Women and United Nations (2021): Progress on the sustainable development goals. The gender snapshot 2021, access: https://unstats.un.org/sdgs/gender-snapshot/2021/UNW_GenderSnapshot.pdf [retrieved on 31.01.2022].

Verick, S. (2014): Female labor force participation in developing countries, IZA World of Labor, access: https://wol.iza.org/articles/female-labor-force-participation-in-developing countries/long [retrieved on 31.01.2022].

World Economic Forum (2021): Global Gender Gap Report 2021, World Economic Forum.



Multi-Level Analysis of Urban and Spatial Development (IzR 1/2021)

Original title: Stadtentwicklung beobachten, messen und umsetzen

BBSR, Bonn

www.bbsr.bund.de > EN > publications
The journal is available for a fee (print or e-journal) and contains some articles in English.

The journal uses concrete examples from Germany and abroad to show how 'city' can be defined methodically. In their contributions, the authors discuss which approaches to multi-level monitoring of urban development have already proven successful or have failed in practice. Specific project examples highlight the way in which public funding institutions use corresponding data-based monitoring systems.



Source: UNO 2019

Published by

Federal Institute for Research on Building, Urban Affairs and Spatial Development (BBSR) within the Federal Office for Building and Regional Planning (BBR) Deichmanns Aue 31–37, 53179 Bonn

Contact

Dr. André Müller andre.mueller@bbr.bund.de Antonia Milbert antonia.milbert@bbr.bund.de

Edited by

Dorothee Gintars

Typesetting and layout

Bettina Mehr-Kaus

Printed by

Federal Office for Building and Regional Planning, Bonn

Orders from

beatrix.thul@bbr.bund.de Reference: BBSR-Analysen KOMPAKT 03/2022

The BBSR-Analysen KOMPAKT are available free of charge and can be downloaded from the BBSR homepage www.bbsr.bund.de

ISSN 2193-5017 (print version) ISBN 978-3-98655-057-8

Bonn, 2022

"BBSR-Forschung-Online" newsletter

The German-language BBSR newsletter informs every month about new publications, internet articles and events of the BBSR: www.bbsr.bund.de/BBSR/newsletter

Information

This publication is accompanied by another publication on SDG 8 (05/2022). The chapters visualise the spatial analysis of SDG 5. Alternating maps illustrate the spatial perspectives on SDG 5 in India, Germany and Europe by taking national as well as supranational views wherever feasible. The colour code used follows the choice of the United Nations, which assigned a reddish colour to SDG 5.

Disclaimer

The information on the maps produced by the National Institute of Urban Affairs (NIUA) has been created with the highest degree of accuracy possible. However, NIUA cannot be held responsible for errors, omissions or positional accuracy. The depiction of boundaries is not authoritative.