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- ★ Economic and Political Participation in Nepal: Issues and Challenges of Gender Disparities
- ★ State of Municipal Finance in Uttar Pradesh (A Situational Analysis)
- ★ Women's Human Rights and Gender Equality – From Theory to Practice
- ★ Reviewing Blue-Green Infrastructure in Amritsar City

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Editorial

Eliminate Child Labour

“If we don't work, we don't eat,” an adult relative of a child worker says. “It's very simple. Men, women and children must all work to survive.” He adds. In 2015 the United Nations set a goal to end child labour by 2025. Yet as per the UN (<https://www.un.org/en/observances/world-day-against-child-labour>) about 160 million children worldwide or one in ten children are still involved in child labour. Child labour represents an unfair, even inhuman practice prevalent till today and which persists inspite of concerted efforts worldwide in crafting policies, deploying wide-ranging programmes and putting in place strict regulatory frameworks to prevent it. While there were several hurdles in achieving the 2025 goal, the COVID-19 pandemic added to them.

June 12 every year is observed as **World Day Against Child Labour**. This observance is led by the International Labour Organisation and joined by its many constituents and partners all over the world. The event is a significant move to address a key issue confronting the world, especially the developing world, where children are made to work, even exploited in the process of performing work when they are unwilling, maybe even unable to carry out the tasks assigned.

This year's theme is **Progress is clear, but there's more to do: let's speed up efforts!** It underscores the fact that progress has been made on this front but there is still a lot remaining to be done, and at a faster pace in order to achieve the objective of eliminating child labour from the world. This calls for renewed commitment, a need to craft policies and implement programmes, while forging partnerships among key organisations and stakeholders to achieve what we set out to do.

The legal age for a person to work differs across countries and jurisdictions, although any person under the age of 18 is usually considered a 'child'. In several countries, those below the age of 18 are allowed to work. However, in many cases, the regulations also restrict or limit the kind of work based on the age of the worker.

For example lower age thresholds may apply only for light, non-hazardous kind of work while for other types of work, the thresholds could be higher. However, these do not cover the entire spectrum of issues. For example, it would be unfair for a young boy or girl of, say, 15 years to work purely out of economic compulsions, by sacrificing the pursuit of crucial education or other interests – say, a sport. Then there are other types of compulsion, often in unpaid work, say in cases where a young girl has to help out with domestic chores in the family. Often these girls are also made to drop out of school to contribute on the home front and get accustomed to household duties. Similarly young boys may be required to help out with farm work in agricultural families especially in times of greater workload. All these involve sacrifice of educational and other pursuits that are essential for the overall development of the child.

The movement against child labour would involve multi-pronged strategies from various stakeholders to achieve more just and fair outcomes. Primarily there must be thrust on creating awareness especially among parents and other family members that deploying under-age youth in work deprives them the right to pursue education, higher education, acquire skills, etc. and thus their overall well-being. In other words, the long-term future of the child is being bartered for short-term benefit (usually free labour or small wages). The other is to enable education for all. On the policy front, in India, the Government provision under the Right of Children to Free and Compulsory Education is a significant enabler. This enables free education for all upto Class VIII, or about age 14. Therefore, when the child pursues elementary education, the parents need not spend on fees, etc. In several states and regions, there are other schemes beyond this, to support the education of the girl child, scholarships, children of Economically Weaker Sections, etc.

And then the Mid-day Meal Scheme is a key initiative. Under this scheme school going children of primary and upper primary classes are provided a free meal on school working days. It aims to address the children's hunger and nutrition needs thereby enhancing their performance and enabling their overall development while ensuring that children are in schools, not workplaces.

Local governments – their elected representatives and officials - could play a key role by identifying families with children and encouraging them to put children in school, especially in rural areas. The elected representatives could also monitor and strengthen initiatives like the mid-day meal scheme, streamlining implementation and ensuring child/family satisfaction. Instances of child labour in violation of regulations can be identified by them and prevented through counselling of families and acting against employers. Among other current

initiatives, the apprenticeship and other entry level livelihood options will encourage families to send children to school as there will be confidence about post education livelihood opportunities.

There is thus need for renewed commitment by all, especially those in policy-making and governance roles, to swiftly achieve the goal of making the world free from child labour. In the words of APJ Abdul Kalam, “Let us sacrifice our today so that our children can have a better tomorrow”.

Economic and Political Participation in Nepal: Issues and Challenges of Gender Disparities

Manjamuthu Viruthambal Vaithilingam, Usha Iyer

Abstract

Gender equality and social inclusion is a global concern addressing the unequal power relations based on caste, class, ethnicity, age, disability, gender, geography and language or a combination of these dimensions. As we are in democratic, modern, scientific, egalitarian welfare state, the female segment is equally perceived and importantly treated in every aspect of human life. Economic and political participation of women is expected to be equally with men in the recent women's empowerment scenario. Gender studies in Nepal reveal that women face many challenges, particularly disadvantages with regard to accessing services, employment, asset ownership and participation in governance. This paper attempts to analyse the gender disparities in various spheres, which is a critical challenge for the peace-building process and to ensure that excluded groups have equitable access

to the opportunities and benefits of development based on secondary data obtained from national and international publications and also private researchers. A bi-variate analysis is used to draw the appropriate conclusions. The basic results obtained from a bi-variate analysis reveal that the life expectancy of women is greater than men; the educational attainment of women is much lower than that of men; women exhibit lower health and education outcomes; the economic participation of employed women is less as compared to men; the non-economically active females are much higher than that of males; there is a severe gender gap in earned income; there is an increase in women's participation in politics but their role in governance is very meagre; women have been oppressed a lot and are not found to take leading roles and positions due to lack of capacity and awareness; men continue to hold a majority of high-level government positions as women face a lot of

barriers that obstruct their meaningful participation and social inclusion; and the gender-based violence in Nepal is very high due to male-dominant attitudes which calls for stringent policies by the government for the safety, security, awareness and empowerment of women. Introducing some new innovative policies, ensuring the effectiveness of the existing policies and programmes and efficiency of the administrators and programme implementers on education, health, employment, political participation of women in Nepal will help for further improvement in gender equality.

Keywords: Gender disparity, Economic participation, Political participation, Gender based violence

+ This paper was presented in the International Conference on Inclusive and Sustainable Development through Transformation, Innovation and Digitization, Sauraha, Chitwan, Nepal during 16-17 November 2024.

1.0 Introduction

The importance of gender equality is perceived with social equality, economic equality and social development. Gender Equality and Social Inclusion (GESI) is a global concern that addresses unequal power relations based on caste, class, ethnicity, age, disability, gender, geography and language or a

combination of these dimensions. The focus of GESI is to ensure fair treatment and equal opportunities, rights and responsibilities for women, men, LGBTIQ and, girls and boys. Gender equality and social inclusion is one of the biggest and most persistent challenges facing Nepal and many of the South Asian countries. In practice, this means the fruits of development are spread unevenly across ethnic, gender and geographic categories. Vulnerabilities and inequalities are exacerbated by geographic and environmental factors (UNDP, 2024). Though the Nepal government has taken remarkable efforts with regard to gender equality and women's empowerment, the discriminatory institutions and structures, ideology and social norms continue to limit women's progress. In the Gender Inequality Index for 2021, Nepal ranks 106 out of 156 countries. One-third of women have no education, fifty-two percent of women are involved in non-paid jobs, and women are less likely than men to own a home or land (Government of Nepal, 2022). This paper attempts to present the gender disparities in Nepal with reference to economic and political participation and gender-based violence.

2.0 Literature Review

There have been many studies on the importance of gender equality and education, health, aspects of girl children, and economic and political

participation of women. Gender equality and social inclusion is a recently growing approach to bring about gender equality and women's empowerment in the society. Gender Equality and Social Inclusion (GESI) is a global concern that addresses unequal power relations based on caste, class, ethnicity, age, disability, gender, geography and language or a combination of these dimensions (LWF Nepal's Policy 2021). Demographically, there are more women than men in Nepal, where women constitute 51.04 percent of the total population and men 49.96 percent. According to the prevailing patriarchal thinking in society, although the number of women is greater than men, they are far behind in every field of socio-economic and health, which makes women vulnerable in every aspect of development (Khanal, 2022). Malnutrition is a serious public health issue for women in Nepal, with prevalence rates varying by region, socio-economic status, and other factors. Forty-one percent of women of reproductive age (WRA) in Nepal are anaemic, 17% are underweight, and 22% are overweight or obese (Adhikari, et.al., 2020).

Although Nepal has achieved gender parity in primary school enrolment, girls tend to drop out of school, especially in the upper grades. Factors that explain this situation include living in remote areas, being

from low-income families, early marriage, gender-based violence, and poor learning environments. Women also have significantly lower literacy rates than men (UNESCO, 2019). The United Nations Development Programme (UNDP, 2024) Gender Empowerment Measure, which considers whether women are active in public and economic life, indicates that women's participation and representation remain lower than that of men in the political, economic, and professional domains. Although there has been an increase in the proportion of economically active women, their earned income is about one-third that of men and women continue to have low access to property ownership, financial credit, and political power. Liberal feminists argue that political participation is currently male-dominated and women's participation should be equal to that of men within the existing political structures. They emphasize the importance of legal and institutional reforms to eliminate discriminatory laws and practices that act as barriers to women's participation (Sapkota, 2024).

3.0 Objectives

This paper has the major objectives such as: (1) To analyze the gender disparities among the population in Nepal based on National Census statistics of 2021; and (2) to highlight the gender gap in economic and political participation and suggest measures for women empowerment.

4.0 Data and Method

This study has used the secondary data obtained from Population and Housing Census 2021, Nepal, relevant international publications and publications of private researchers. The bivariate analysis has been carried out to realize the objectives of the paper.

5.0 Results and Discussion

Demographic features, health, education, economic participation, and political empowerment, and gender-based violence in Nepal are discussed in this section.

5.1. Demographic features of Nepal

The total population of Nepal, as per the 2021 Census is 29,164,578, of which the number of males is 14,253,551 (48.9%) and the number of females is 14,911,027 (51.1%). The population in urban municipalities is 66.2 percent, while the population in rural municipalities is 33.8 percent. The sex ratio in the urban municipalities is 96.06 males per 100 females while in rural municipalities it is 95.59 males per 100 females indicating that there are more females than males in Nepal. As far as the age structure is concerned, the census 2021 shows that 61.96 percent of Nepal's total population is between the ages of 15-59 years. The population aged 14 years or below is 27.83 percent and the

population aging 60 years or above is 10.21 percent revealing a large working population. The household statistics reveal that 31.55 percent of the total households (6,666,937) are headed by female (Population and Housing Census, Nepal 2021) (Table 1, Fig. 1).

5.2 Health

Nepal has made much progress over time in the reduction of maternal mortality ratio, reducing maternal mortality by almost three quarters between 1990 and 2015 (UNICEF). Among the low-income groups, the maternal mortality ratio dropped from 796 per 100,000 live births in 2000 to 479 in 2015 (World Bank Group, 2019). The maternal mortality ratio in Nepal in 2021 is 151 (a total of 151 deaths of mothers per 100 thousand live births) (Government of Nepal, 2021).

Life expectancy at birth for females has also shown a positive trend rising from 63.4 in 2000 to 71.9 years in 2016. However, women's share of the population aged 15 years and above living with HIV has registered an increase from 29.5 percent in 2000 to 37.5% in 2016 (World Bank Group, 2019).

Undernutrition among women has been rampant and there are inequalities in terms of access to reproductive, maternal, neonatal and child health services between rural and urban areas.

Nepal is facing a double burden of malnutrition. In 2016, the global nutrition report estimated that 17.4% of women and 16% of men were underweight, and 22.8% of women and 19.1% of men were overweight in Nepal. Approximately 17% of women of reproductive age have chronic energy deficiency (ie, body mass index <18.5) and 22% of reproductive-age women are overweight (Global Nutrition Report 2021).

In 2017, 41% of reproductive-age women were anaemic in Nepal. On the other hand, over-nutrition has also been a great threat in recent years. Evidence suggests that overweight and obesity among women aged 15-49 years increased from 13% to 21% from 2011 to 2016. Similarly, current statistics show 17% of men aged 15-49 years are overweight or obese. The growing rate of obesity has substantially contributed to the prevalence of non-communicable diseases, which accounts for 66% of total deaths in Nepal (Nabin, et. al., 2023).

5.3. Education

The literacy rate of the country's total population aged 5 years and above is 76.2 percent in 2021 census. There has been some notable progress made on literacy but due to issues of equity and access only 69.4% of women in Nepal are literate as compared to 83.6% of males (Table 1).

The largest proportion (28.7 %) of the total literate population have completed primary level (class 1 to 5) of education. 82.9 % of adult women have completed primary education, and enrollment gaps into primary school have been almost closed from 64.6 in 2000 to 96.2% of girls in 2016. However, only 30.7% of women have completed a secondary education. Female students tend to drop out earlier than male students because education systems often do not consider the needs of adolescent girls but also because of community social norms that restrict older girls' access to education.

The Constitution of Nepal 2015 has made the right to education an inalienable right for all. Gender equality and social inclusion guidelines have been formulated across all government sectors to make policies, strategies and outcomes gender sensitive. While the gender gap in terms of school enrolment at primary and secondary levels has almost disappeared, instances of gender discrimination can still be observed among Nepalese households both in terms of education quality and expenditure (Shaleen, 2018).

Nepali women ranked second in South Asia and 101st globally as per the Global Gender Gap Report 2020. The Global Gender Gap Index showed that Nepal was ranked high on political empowerment while placed at lower

positions on educational attainment and health and survival. The women's literacy rate of 57.7 percent is lower than that of men by 20 percentage points, the proportion of women with access to property right is only 26 percent, and labour participation of women is 26.3 percent compared to 53.8 percent for men (Krishana, 2021).

5.4 Economic participation

In Nepal, the role of women in the economy has undergone a significant transformation in the past four decades. Census data from different years shows that the economic participation of women in the labour force has increased and the gender gap in labour force participation has decreased.

The percentage of the households with female ownership of both land and housing unit is 11.8 percent. Of the total 23,958,868 population aged 10 years or above, 15,689,777 persons (65.5 percent) are classified as economically active and 8,211,012 persons (34.3 percent) are not economically active while 58,079 persons did not report their status (Fig. 2). Of the total economically active population, 38.5 % males and 26.9 % females are employed. Of the total not economically active population, 40.2% are males and 59.8% are females. Table 3 reveals a large gender disparity in the economic participation towards national development.

The labour force participation rate is the proportion of the population aged 15 and older that is economically active. In Nepal, the labour force participation rate among females is 28.7% and among males is 53.9% in 2023. According to census of 2021, 72 percent of men over the age of ten are economically active, and it stands at 60.4 percent for women. Between 1971 and 2021, the percentage of the female population over the age of ten who are economically active has increased from 29.2 to 60.4 percent (Bijay, 2023). One of the major reasons for the increase in women's economic activity in Nepal is the increase in women literacy rates and the growth of service sector creating more employment opportunities.

There is still a big difference between men and women when it comes to jobs. Only 24.5 percent of employers are female. Out of the total number of employees, 36.2 percent of them were females. Females make up less than one-third of government jobs. Of the population involved in family care, 77.4 percent were females (Bijay, 2023). Women in Nepal are expected to prioritise their household responsibilities over their professional pursuits. In order to achieve gender equality in the workforce, it is necessary to empower women through education and skills development that will result in significant improvements in women's economic participation and

their contribution to the country's economic growth.

Compared to other South Asian countries, Nepal has high rates of female labour force participation. Eighty-five percent of women are in the labour force, though there is still a severe gender wage gap in earned income. In Nepal, women's work in agriculture is mostly informal, insecure, or low-paid. In Nepal, laws and policies that guarantee equal rights are not implemented effectively. There are no laws that mandate equal remuneration for work of equal value, or that mandates non-discrimination based on gender in employment, hiring or promotions. This legal context makes it all the more challenging for women to access high quality jobs and achieve economic empowerment through their participation in the labour force (World Bank Group, 2019).

An analytical report on women in business shows that the share of women workers in any sector is high when the monthly income is small and vice versa. The share of women workers is 58 percent for monthly incomes smaller than Rs. 7,600. In contrast, the share of women workers is only 12.2 percent for monthly incomes of more than Rs.25,000. The Central Bureau of Statistics reports that the biggest pay gap between male and female workers is in the professional category. In this category, if a male

earns Rs.23,800 monthly, a female earns Rs.12,000. The Global Gender Gap Report 2020 shows that women are disproportionately more involved in unpaid housework than men. There are 1.2 million female employees, accounting for 37.7 percent of the workforce while the figure for male employees is 2 million, or 62.3 percent. More women are engaged in human health and social work activities with 56.8 percent as compared to 43.2 percent for men (Krishana, 2021).

Only 22 percent of working-age women are employed in Nepal. The average monthly income of women is Rs. 5,834 less than that of men. Males earn Rs.19,464 on average, while females are being paid Rs.13,630 regardless of their profession (Shrestha, 2024).

The social barriers, education and the gender pay gap are key hindrances for women from participating in different economic activities. Most women quit their careers soon after starting a family. This reduces their participation in higher positions.

5.5 Political empowerment

The Constitution of Nepal, 2015, is hailed as one of the most progressive in the world concerning gender balance and women's empowerment. The new constitution called for increased representation of women in politics,

with mandatory quotas for the number of seats women must fill in government positions. It guarantees 33 per cent of parliamentary seats in both the lower and upper Houses for women and ensures at least one-third of women's representation in the federal parliament and provincial assemblies and 40 per cent in local government.

In Nepalese local election there were total 148,364 candidates contesting in 2017 and 145,011 candidates in 2022. Among them 90,517 (61%) were male candidates and 57,847 (39%) female candidates in 2017. In 2022, the number of male candidates was 89313 (61.6%) and females was 55698 (38.4%) (Fig. 3).

Table 4 shows the number of women contestants in 2022 is lesser than that of 2017, which is a worrying downward trend seen with the second ever local elections happening after adoption of the new constitution (Prasiddhi, et.al., 2022).

The 2017 local government elections resulted in the election of women to 41% of positions (or 14,352 women). This success can be attributed to the principles of equality, equity and non-discrimination and participation that are explicitly included in the 2015 Constitution. There has been a significant increase in the representation of women at local levels of government, although stronger

efforts are needed to promote women's participation in the governance process.

Men, however, continue to hold the majority of positions at all levels of government in Nepal. The newly-elected women do not receive the same level of exposure and training on their roles and have to balance unpaid domestic work with their careers. This makes it challenging for them to understand and fulfill mandates.

Table 5 shows the majority of positions are occupied by men and women's role in governance is very less in 2022 election. While men hold 92.4 % women hold only 7.6% in Mayor position and the proportion is 94.2% and 5.8% for men and women in Chair position respectively. With regard to ward chair and ward member the percentages are much higher as compared to women nominations. The data reveals that though women's political participation has increased, majority of the higher positions are taken over by men due to barriers faced by women. According to a 2019 World Bank gender brief, women in Nepal face systemic barriers in areas such as employment, health, and education.

Table 6 shows the no of female candidates and winners has marginally increased in the 2022 election over 2017 election. Overall the percentage of women winners is very less in both

the elections which shows women's role in governance calls for more stringent policies by the government for the safety, security, awareness and empowerment of women. Among the barriers for women's low participation is the fact that they lack capacity and commitment to take leadership roles. Men dominate political parties and always want to stake their claim when it comes to power position. Women have to face several issues such as balancing time, understanding and fulfilling mandates, maneuvering the socio-cultural environment and infrastructure limitations. Additional efforts are crucial to enhance the participation of women in political life. Women also need exposure on how to mitigate possible backlash towards the new system that ensures their participation. At the Sub National Government level, officials need to be sensitized and trained on how to manage resources that focus on the needs and priorities of women and the marginalized (Asia Foundation, 2018).

The key to attaining gender equality and women's empowerment in Nepal is to challenge patriarchal norms and empower women through awareness, education and self-assurance. The inclusion of provisions in the constitution for promoting women's participation in all decision-making spheres sends a positive signal for establishing gender justice and overcoming discrimination.

5.6. Gender-based violence

Violence against Women and Girls (VAWG) is a global concern. In Nepal, 22% of women between the ages of 15 and 49 have been physically abused, while 7% have ever been sexually abused. Sixty-six percent of women who have experienced physical or sexual abuse have not asked for assistance or spoken with anybody about how to fend off or stop the violence they encounter. Very few women reported seeking help from institutions such as the police, the health system and NGOs. In Nepal, GBV is the leading cause of violence-related deaths. In 2017, 149 people were killed as a result of GBV of which 140 were women. Women who are employed are more likely to experience violence than women who are not employed; over 50 percent of Nepalese women have experienced sexual harassment at work (World Bank Group, 2019).

Table 7 (Fig. 4) shows the types of Gender-based violence against women and girls recorded at the WOREC districts, Nepal, July 2021-June 2022. The table reveals that domestic violence against women is the highest (66.6%) followed by rape, polygamy and sexual abuse. Patriarchal ideology, existing discriminatory socio-cultural practices, poor implementation system, weak security mechanism, lengthy justice system, poor access and

control over resources are some of the major causes of violence. WOREC one of the leading national organizations that works to prevent violence against women, has revealed that a multi-pronged approach is necessary in eliminating the unequal power relations and achieving human rights for all Nepali girls and women. Despite some legislation to address GBV, violence against women continues to be widespread due to issues of weak capacity, inadequate response mechanisms and inconsistent implementation of policies.

6.0 Conclusions and Suggestions

Nepal has made much progress in the reduction of maternal mortality ratio. Life expectancy at birth for females has also shown a positive trend. But Nepal is facing a double burden of malnutrition as the women who are anaemic and obese, both have increased. There has been some notable progress made on literacy but due to issues of equity and access only 69.4% of women in Nepal are literate as compared to 83.6% of males. Due to the existence of widespread patriarchy and socio-cultural norms in Nepal, there is significant gender discrimination in terms of education quality and expenditure. The economic participation of women in the labour force has increased and the gender gap in labour force participation has decreased due to increase in literacy

rate and expansion of employment opportunities in the service sector. But the wage gap between men and women is wider in higher positions as women are drawn to household chores and family care after marriage due to dominant patriarchy. There has been a significant increase in the political representation of women at local levels of government, although stronger efforts are needed to promote women's participation in the governance process. Men hold the majority of high-level government positions and newly-elected women do not receive the same level of exposure and training on their roles and have to balance unpaid domestic work with their careers. Gender based violence is widespread in Nepal due to the prevailing male-dominant attitudes. Women are oppressed and most women do not report the physical and mental abuse and violence and suffer in silence.

To address these issues, it is suggested that among the points that can be emphasized are such as enhancing women's access to public health services; create awareness and provide opportunities for women for higher education; expansion of employment opportunities for women by providing technical and vocational skills; promote equal pay for equal work and give incentives to women for economic participation; and strict legal provisions to reduce discriminatory practices at workplace.

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TABLES

Table 1: Population statistics revealing gender disparities in Nepal			
Sr. #	Indicator	Population (No.)	%
1a	Population, 2021	29,164,578	-
1b	Male population	14,253,551	48.9
1c	Female population	14,911,027	51.1
2	Sex ratio (males per 100 females)	95.6	-
3	Age structure		
3a	Children (<14 years)	8,115,575	27.8
3b	Adults (15-59 years)	18,071,685	62.0
3c	Elderly (60 years and above)	2,977,318	10.2
4a	Total no. of households	6,666,937	-
4b	Female household head	2,103,278	31.6
5	Maternal mortality ratio (mothers per 100,000 live births), 2022	151	-
6a	Literacy rate (aged 5 years and above) Total population	20,377,980	76.2
6b	Male literacy rate	10,830,886	83.6
6c	Female literacy rate	9,547,094	69.4
7a	Ownership in house and land- Total	6,660,841	23.8
7b	Female ownership of house and land	788,917	11.8

Source: Government of Nepal (2021), pp. 58, 72-74, 199

Table 2: Life expectancy at birth in Nepal		
Sr.#	Life expectancy	Life expectancy (Years)
1	Life expectancy at birth- Total (Years)	70
2	Life expectancy at birth- Males	69
3	Life expectancy at birth- Females	72

Source: Population Reference Bureau (2024), p. 14

Table 3: Gender disparities of economically active and non-active population, Nepal, 2021

Sr.#	Economically active and non-active population	#	%
1a	Total population aged 10 years and above	23,958,868	
1b	Economically active population	15,689,777	65.5
1c	Not economically active population	8,211,012	34.3
2a	Economically active males- Employed	6,043,087	38.5
2b	Economically active females- Employed	4,227,360	26.9
3a	Not economically active males	3,297,328	40.2
3b	Not economically active females	4,913,684	59.8

Source: Government of Nepal (2021), p. 528.

Table 4: Gender-wise candidates contesting in elections in Nepal, 2017 and 2022

Gender-wise contesters	2017		2022	
	Number	%	Number	%
Men	90517	61.0	89313	61.6
Women	57847	39.0	55698	38.4
Total	148364	100.0	145011	100.0

Source: Neelam, et. al. (2022)

Table 5: Gender-wise candidates nominated in Nepal Elections, 2022

	Males		Females		Total	
	Number	%	Number	%	Number	%
Mayor	3228	92.4	266	7.6	3494	100.0
Chair	3189	94.2	198	5.8	3387	100.0
Deputy Mayor	607	28.2	1549	71.8	2156	100.0
Vice-Chair	613	25.5	1788	74.5	2401	100.0
Ward Chair	34205	97.0	1050	3.0	35255	100.0
Ward member	52908	95.4	2563	4.6	55471	100.0
Total	94750	62.1	57705	37.9	152455	100.0

Source: Compiled from Sapkota (2022)

Table 6: Number of female candidates and winners in general/ federal elections, Nepal, 2017-2022

Election Year	Number of female candidates	% of female candidates	Number of female winners	% of elected female parliamentarians
2017	146	07.48	6	3.63
2022	224	09.29	9	5.45

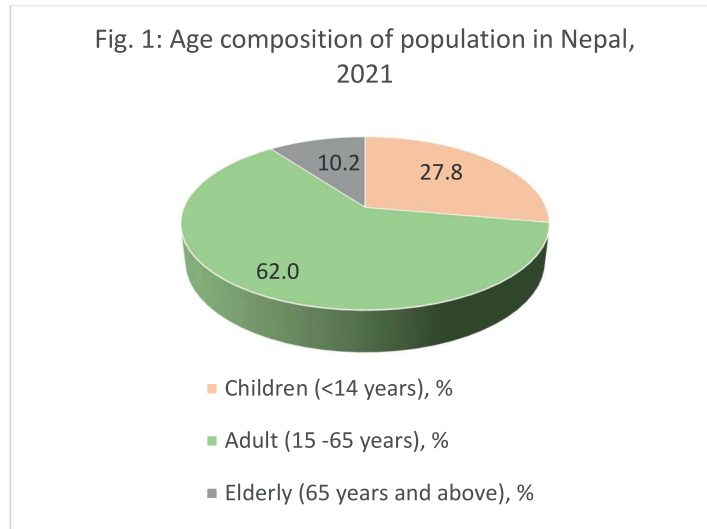
Source: Bijay (2023), p. 3

Table 7: Types of Gender-based violence against women and girls recorded at the working districts of WOREC, Nepal, July 2021-June 2022

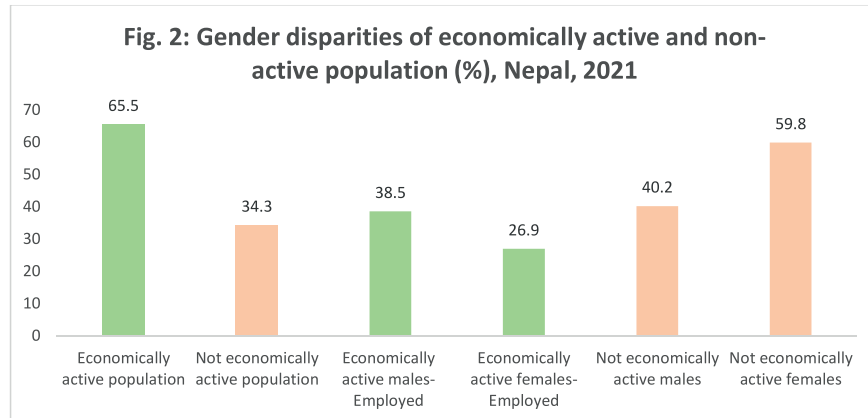
Sr.#	Violence type	Recorded cases (#)	%
1	Domestic violence	1175	66.6
2	Rape	179	10.1
3	Sexual abuse	115	6.5
4	Human trafficking	25	1.4
5	Child marriage	69	3.9
6	Dowry	47	2.7
7	Witchcraft allegations	24	1.4
8	Polygamy	130	7.4
	Total	1764	100.0

Source: WOREC (2022), p.1

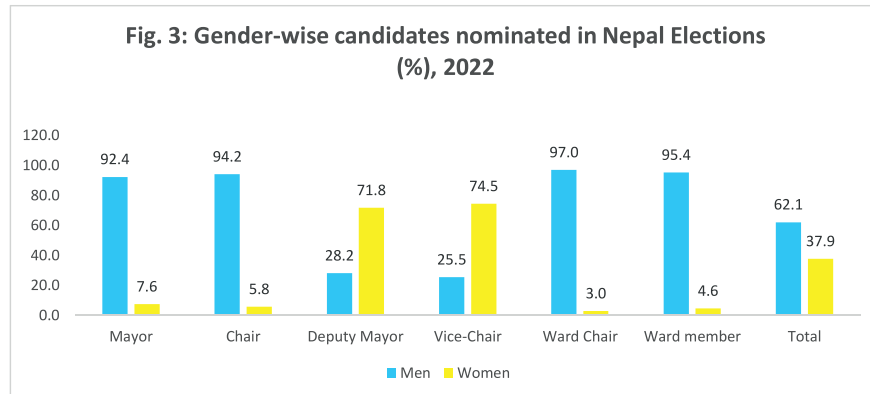
FIGURES



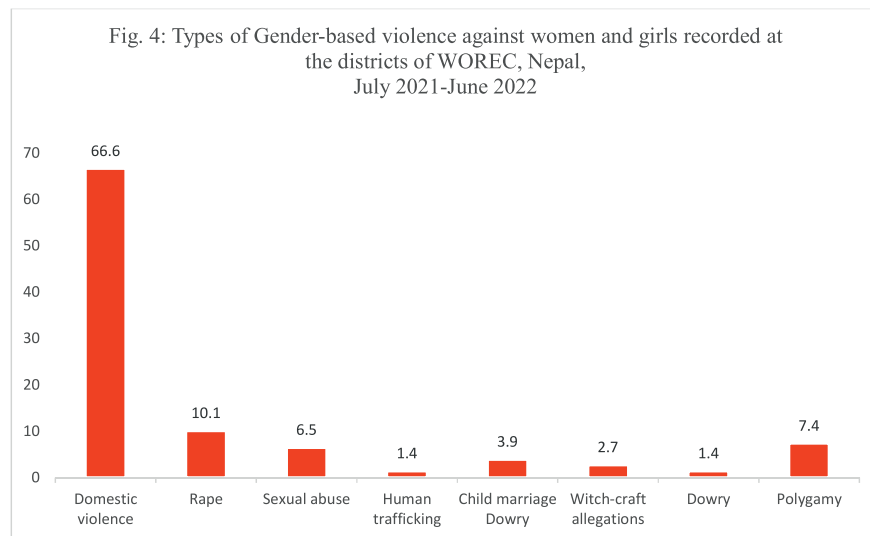
Source: National Population and Housing Census 2021, Nepal.



Source: National Population and Housing Census 2021, Nepal.



Source: Compiled from Election Results, 2022



Source: WOREC Nepal, 2022 - Annual Fact sheet on GBV against Women and Girls – July 2021 to June 2022.

State of Municipal Finance in Uttar Pradesh (A Situational Analysis)

U. B. Singh

INTRODUCTION

Finance enjoys a significant role in public administration. Money is one of the three basic things (3Ms) needed for functioning of any organisation- other two are Man and Material. Personnel (manpower) and materials can be made available only if money is provided. Money thus enjoys its importance in administration since ages. According to Kautilya, “*All undertakings depend upon finance. Hence, foremost attention shall be paid to the treasury*” (Kangle, 2010).

The state of Uttar Pradesh, the most populous state in the country enjoys the status of having the largest net-work of municipalities. There are 762 municipalities consisting of 17 Municipal Corporations (*Nagar Nigam*), 200 Municipal Councils (*Nagar Palika Parishad*) and 545 *Nagar Panchayats* serving about 93 per cent of the urban population, according to 2011 census. The rest is covered by Census Towns (267).

The paper focuses on a critical analysis of revenue (own) income of municipalities in Uttar Pradesh.

SOURCES OF MUNICIPAL INCOME

A municipality in India earns its income mainly from two sources—External and Internal (own). External Sources include grants-in-aid from the State and Central governments, transfer by Finance Commissions (Central and State), externally-aided projects, sponsored schemes and projects, state sector programmes, loan, municipal bond, corporate social responsibility, Local Area Development Funds, etc. The financial availability under external sources is 'capital income', meant mainly for infrastructure creation and development. The Internal Sources of income of municipalities are in the forms of taxes, non-taxes, user charges, fees, etc. These are categorised as 'revenue income'. The

fiscal health of a municipality is assessed on the basis of its revenue income.

The nature of municipal taxes depends on a number of factors, the most fundamental being their suitability to meet the civic obligations. Hence, the municipal taxes should be such that they ensure the smooth discharge of the core municipal functions. Urban local government being a derivative of state government can do so under the provisions made by the state legislature. These provisions stipulate the bases and their rates, exemptions and rebates and concessions and other conditions such as procedures and limits (Chaube, 2003).

TAXATION POWERS

The power and authority to determine municipal revenue base, i.e. tax base, tax rate settings, local tax autonomy, or even the grants-in-aid and any other forms of financial transfers rest with the state government (Mathur, 2006). The 74th Amendment to the Constitution (74thCAA) in Article 243-X also mandates the legislature of a state to make law regarding authorising a municipality to levy taxes, assigning of a tax, and providing grants-in-aid from the Consolidated Fund of the State.

Municipal bodies in the country require a considerable amount of

financial resources and financial autonomy to efficiently execute all of the functions assigned to them. Ironically, there is a mismatch between the assigned duties to the municipalities and the rights that they have on various resources. Most municipalities are unable to generate adequate funds from their internal resources (Aijaz, 2006). Consequently, they have to largely depend on external finance mainly awards from the finance commissions.

CATEGORIES OF RECEIPTS

The receipts in case of an urban local body may broadly be categorised as:

- (a) Tax Revenue Receipts from (i) its own taxes, (ii) assigned taxes and (iii) shared taxes;
- (b) Non-Tax Revenue Receipts: (i) property income in terms of rent, royalty, interest, and profits/dividends, (ii) user charges for public utility services such as water, solid waste; and (iii) fees (like license fees), sanction of building plan, fines and penalties;
- (c) Grants: (i) in lieu of withdrawn taxes, (ii) in aid of revenue to meet the shortfall in revenue (general grant) or in aid of certain desirable activities (from the Central Finance Commission); devolution from State Finance Commission; and

(d) Loans: for particular project or for any purpose; and issue of municipal bond.

STATE OF MUNICIPAL TAXES IN UTTAR PRADESH

The Uttar Pradesh Municipal Corporation Act, 1959 (section 172 and

573A) and the Uttar Pradesh Municipalities Act, 1916 (sections 128, 293-A and 293-B) provide a range of taxes, non-taxes and user charges to be levied by the municipalities. This comes under the domain of the state government to authorise the municipalities to levy taxes and non-taxes compiled in Table-1.

Table-1: TAXES LEVIED BY MUNICIPALITIES

Municipal Corporation			Municipal Council/Nagar Panchayat		
Taxes		Non-Taxes	Taxes		Non-Taxes
Compulsory	Optional		Compulsory	Optional	
Property Taxes (22-32%) (i)General Tax (10-15%) (ii)Water Tax (7.5-12.5%) (iii)Drainage Tax (2.5-5%) (iv)Conservancy Tax (not>2%)*	Tax on callings and on holding a public or private appointment*	Water Charge/Value	House Tax (not>10%)	Tax on trades and callings*	Water Charge/Value
Tax on non-mechanised vehicles	Tax on dogs	Rent	Water Tax (not less>7.5%)	Tax on trades, callings and vocations*	Rent
Tax on helicopters or planes*	Betterment Tax	Trade License fee	Drainage Tax (not less>2.5%)	Theatre Tax	Trade License fee
Tax on trades and professions*	Tax on advertisements	Parking Fee	Conservancy Tax*	Tax on dogs	Parking Fee
Tax on deeds of transfer of immovable property	Theatre Tax	Levy		Scavenging Tax	Fines
Tax on vacant land		Fines		Tax on deeds of transfer of immovable properties	Fees
		Fees		Tax on advertisements	
				Tax on vehicles	
				Betterment Tax	
User Charge	Water supply, Drainage, Sewerage*; Solid waste management; Parking of vehicles; Using of public path ways, footpaths and public lands*; Stacking of materials or rubbish on public street*; Management of urban infrastructure and civic amenities*; Construction and maintenance of roads, bridges, flyovers and subways*; Construction, operation and management of sewage treatment plants*; Construction, maintenance and management of slaughter houses, carcass utilisation plants, meat and fish markets, etc*; Any other specific service rendered or infrastructure created or facility or amenity provided				

*not levied

• In parentheses rates are mentioned

Source: State Municipal Acts

A perusal of the taxation provisions in the state laws reveals that while power to impose and collect certain taxes is vested with the municipalities, the rates and revision thereof, procedure of collection, ceilings and floors, method of assessment, exemptions and concessions, abolishing or altering a tax etc. are reserved with government to be declared through notification.

TAXATION METHOD

Property Tax or generally known as House Tax is the mainstay of municipalities. In view of its importance in municipal revenue, the method adopted for levying this tax is discussed. According to conventional wisdom, there are three basic forms of property taxation. The Property Tax may be levied on the basis of 'annual rental value' of the property; 'capital value' of the land, and improvements or the 'site value' of the land. The 'annual value form' of property taxation may be seen as an attempt to tax the yearly income from property, whereas the 'capital value' and 'site value' forms are partial Wealth Taxes. As per toolkit prepared by the Ministry of Housing & Urban Affairs, different practices are being followed by the states. The common feature of 'annual value system' is property valuation according to some estimates of 'rental value' or 'net rent'. 'Rental value' assessment scheme is criticised on ground that it

ignores variations in the quality of rented premises (Singh, 2003).

In Uttar Pradesh, earlier residential buildings were evaluated on 'rental annual value' system, and non-residential buildings were assessed by using 'capital value' method. On the directions issued by the Supreme Court for improvements in the taxation methodology, the Government of India in the erstwhile Ministry of Urban Development (present Ministry of Housing & Urban Affairs) formulated and circulated the Guidelines for Property Tax Reforms, in 1998. As a result, the Uttar Pradesh government amended both the municipal laws and switched over to the traditional 'Area Rental Value' based assessment. The system of 'capital valuation' of non-residential properties was replaced by 'annual rental valuation'. Consequently, the Uttar Pradesh Municipal Corporations (Property Taxes) Rules, 2000 and the Uttar Pradesh Municipality (Tax on Annual Value of Buildings or Lands or Both) Rules, 2024 (for Municipal Councils and Nagar Panchayats) were framed and notified.

Under the new system, evaluation of a property situated in urban areas is done on the basis of (a) Location, (b) Type of Construction, and (c) Purpose of Use. For the purpose, each ward in a city/town is divided into three categories (in Municipal Corporation

cities) four categories (in other towns) on the basis of width of roads therein as (i) width less than 12 metres (in cities), and less than 9 metres (in towns), (ii) width between 9 metres to 12 metres (iii) width between 12 metres to 24 metres, and (iv) width more than 24 metres. After location, every property is classified according to type of its construction into (a) 'Pakka' building with R.C.C. roof or R.B. roof, (b) any other 'Pakka' building, or (c) 'Kachcha' building, i.e. all other buildings not covered in clauses (a) and (b). The Municipal Commissioner/Executive Officer accordingly arranges all buildings and vacant plots of land in a ward in the groups.

As per municipal laws and rules, the Municipal Commissioner/Executive Officer has to, once in every two years, fix the minimum monthly rate of rent per unit area (square foot) of the carpet area for every group of buildings within a ward or the applicable minimum monthly rate or rent per unit area (square foot) of the area for every group of land as the case may be having regard to (a) the circle rate fixed by the collector for purpose of the Indian Stamp Act, 1899; and (b) the current minimum rate of rent in the area for such building or land.

This practice has miserably failed as none of the Municipal Commissioners/Executive Officers in the state could determine such rates

after the envisaged period of two years. This periodicity seems impractical as lot of exercise is involved in the process. It would be a practical approach if the periodicity is fixed as five years in place of existing two years. That would ease the way of determining the most crucial factor of unit rate of rent in the process of deriving the annual rental value in an objective manner.

Moreover, the Municipal Commissioners/ Executive Officers make every attempt to play safe while fixing unit rental rate. The unit rate is always fixed as low as possible, probably in order to either protect interest of their elected representatives or to avoid any public disinterest. Unit rate should invariably be based on paying capacity of people and also beneficial to the municipal organisation.

Both the Municipal Acts provide identical provision for deriving carpet area for the purpose of calculating annual rental value. It is as under:

- i Rooms- full measurement of internal dimensions,
- ii Covered Verandah- full measurement of internal dimensions,
- iii Balcony, Corridor, Kitchen and Store- 50 per cent measurement of internal dimensions,
- iv Garage- one-fourth measurement of internal dimensions,

-
- v Area covered by bathroom, latrines, portico and staircase- not part of the carpet area.

In the case of non-residential buildings and land, the monthly rate of rent per unit of area of covered area and the land is multiple of the monthly rate for residential properties as fixed, from time to time.

Unfortunately, there is not a single municipality in the state which can claim bringing all the properties situated within its municipal limit in the property tax/house tax net-work. This lapse exists in large scale in the municipal corporation cities and other large towns. Even smaller towns are not exception in this regard. The identification of base (target) necessary for imposing property tax is purely an administrative function, and is not done properly. Even the GIS survey also has failed in enumerating all the properties because of non-cooperation of staff or any other reasons. This has resulted into many properties in any town remaining beyond the tax liability.

The exercise for fixation of monthly rental rate is not completed within the prescribed time-limit. Further, field level lower municipal staff, sometimes, play truant in calculating carpet area. The delay in determining monthly rate and incorrect calculation of carpet area causes delay in deriving correct annual value of properties.

SELF-ASSESSMENT

The person (owner or occupier) who holds the responsibility primarily for payment of tax on the annual value of a building or land or both may himself determine the property tax in accordance with the provisions of the Acts and deposit the property tax so assessed by him in the notified bank together with a statement of self-assessment furnished in a form prescribed by the municipality.

The Municipal Commissioner /Executive Officer would arrange for random enquiry of at least ten per cent of statements of self-assessment. In case of any false detail, he calls upon the person to explain. A person failing to submit the return or providing incorrect statement without proper reasons may be penalised. Further, in case of returns not submitted within time fixed, at the time of preparing assessment list, carpet area rates proposed under is used in addition to the penalty.

It is a matter of satisfaction that self-assessment scheme has been gaining momentum every passing year, although awareness in public at large in most cities/towns is missing and the municipalities also seem not interested in making the public aware about the self-assessment.

STATE OF MUNICIPAL OWN REVENUE

Urban local government, a creation of the Constitution, is a state subject and it, thus, enjoys limited financial and legislative autonomy. Municipalities have been allotted a number of tax and non-tax sources to earn their own revenue, enumerated in Table-1. However a number of taxes are still not levied.

With this in mind, an attempt has been made in succeeding paragraphs to analyse the municipal own financial resources on many parameters. The data taken into consideration for the analysis purposes belong to the Directorate of Urban Local Bodies (Urban Development Department). This is the only official source to get the

municipal data in public domain. In addition, the published data from Economic and Statistics Division of the State Planning Institute have been relied upon.

CONTRIBUTION TO STATE GSDP

It was thought pertinent to analyse the contribution of municipalities to the state GSDP. The picture is not very rosy (Table-2). However, it is encouraging that the same reflects an increasing trend. The contribution of Property Tax is also not very far from satisfaction; however, there is lot of scope left for putting sincere efforts in getting optimum out of it.

Table-2: MUNICIPAL CONTRIBUTION TO STATE GSDP

(per cent)

Municipalities	2011-12			2018-19		
	Total Revenue	Tax Revenue	Property Tax	Total Revenue	Tax Revenue	Property Tax
Municipal Corporation	17.40	07.85	04.80	16.90	11.57	08.82
Municipal Council	03.70	02.80	0.80	03.13	01.49	0.88
<i>Nagar Panchayat</i>	01.01	0.40	0.10	01.11	0.32	0.14
State	15.45	10.33	05.71	21.14	13.38	09.83

Source: *Author Calculation*

- *State GSDP at constant prices, accessed updes.up.nic.in*
- *Municipal data taken from Urban Development Department Booklet 'Nagar Vikas Vibhag ka Karya-Vivaran' (compiled by the Directorate of urban Local Bodies) for 2012-13 and 2019-20*

Property Tax includes House (General) Tax and Water Tax

DECENTRALISATION RATIO

Decentralisation ratio is a function that measures the proportion of an asset's value that comes from decentralised sources. Urban local government is a decentralised

(local/grassroot) government in the state. In absence of GDP data related to urban areas in a district, the decentralisation ratio in respect of select Municipal Corporations is derived on the basis of GDP of the district within which the Municipal

Corporation is situated. The ratio between 'Income from Own Sources (Tax and Non-tax)' and estimates of 'Gross District Product' is derived as

decentralised ratio. This reflects the proportion of respective Municipal Corporation in the GDP of the district concerned (Table-3).

Table-3: DECENTRALISATION RATIO (per cent)

Municipal Corporation	Kanpur	Agra	Varanasi	Prayagraj	Lucknow	Ghaziabad	Meerut	Jhansi
2017-18	06.07	03.29	06.79	01.90	13.35	04.65	02.62	02.27
2018-19	06.47	02.90	04.39	01.34	12.01	03.86	0.96	02.24

Source: Gross District Product Estimates (at Current Prices), UP, updes.up.nic.in
Municipal data taken from Urban Development Department Booklet 'Nagar Vikas Vibhag ka Karya-Vivaran'

TAX EFFORT OF MUNICIPALITIES

Tax Effort of a municipality is derived as ratio of average per capita own tax revenue over three years and per capita GSDP of the city over years. Here, for purpose of the study, per capita revenue income (tax and non-tax) has been taken into account. Further, GSDP of a particular city area is not available, hence, that of the district in which the municipality is situated has been considered. Although, this may not present absolutely accurate position, a probable trend may come out. The income of the district concerned has been taken on the current prices. The contribution of 'per-capita own revenue' to the 'per-capita income of the district', in which the Municipal Corporation is situated, is miniscule. It

has been found ranging between one and two per cent. It is an irony that the cities are known as 'engines of economic growth', as they function as centres of economic activities (contributing most to the national/state economy), however, such cities are facing financial crunch to such extent. This happens only when the economic activities carried out in urban areas are not subjected to part with a part of their income to the urban local governments, which are meant for regulating those economic activities. The municipalities should strive hard to enumerate those economic activities and bring them into municipal tax network. Every effort should be made by municipalities to raise their own income and in turn their contribution to district economy. They can accomplish this mission only by optimising their financial resources.

Table-4: TAX EFFORT BY SELECT MUNICIPALITIES*(per cent)*

Municipal Corporation	2016-17			2017-18			2018-19		
	A	B	C	A	B	C	A	B	C
	(Rs)	(Rs)	(%)	(Rs)	(Rs)	(%)	(Rs)	(Rs)	(%)
Kanpur	54,853	758	01.4	60,392	847	01.4	62,406	977	01.6
Agra	59,729	371	00.6	70,240	894	01.3	71,806	863	01.2
Varanasi	38,407	990	02.6	37,202	1,127	03.0	40,323	826	02.0
Prayagraj	45,685	515	01.1	47,048	661	01.4	50,223	519	01.0
Lucknow	60,102	1,969	03.3	67,496	2,013	03.0	72,117	1,990	02.8
Ghaziabad	55,647	366	00.7	65,914	957	01.5	61,908	807	01.3

Source: Author calculation

A-Per Capita Income of the District (on current prices)

B-Per Capita Revenue Income

C- Tax Effort Ratio of the Municipality

Income on current prices taken from the Statistical Diary, Uttar Pradesh, 2020

Note: Population projection @ 2.5 per cent annually

MUNICIPAL INCOME FROM DIFFERENT SOURCES

Income from own sources is basically revenue income. The extent of fiscal and administrative autonomy of a municipality depends upon the extent of its revenue income. Unfortunately, even after three decades of promulgation of

the Constitution (seventy four) Amendment Act, 1992, the urban local government units in the state are mostly dependent on receipts from the government. Most of the municipalities are not even capable to meet out their establishment cost by themselves. Their income from different sources is compiled in Table-5.

Table-5: EXTENT OF INCOME FROM DIFFERENT SOURCES*(per cent)*

Years	Proportion of Income from Different Sources in Total Income								
	Municipal Corporation			Municipal Council			Nagar Panchayat		
	Own Income		Receipts from Govt. *	Own Income		Receipts from Govt. *	Own Income		Receipts from Govt.*
	Tax	Non-Tax		Tax	Non-Tax		Tax	Non-Tax	
2015-16	23.81	08.34	67.85	05.90	05.04	89.06	02.29	04.03	93.68
2016-17	22.22	10.53	67.25	06.03	04.98	88.99	02.38	03.32	94.30
2017-18	18.15	12.34	69.51	05.99	04.49	89.52	02.54	03.56	93.90
2018-19	21.29	09.80	68.91	04.30	04.75	90.95	01.69	04.18	94.13
State	21.04	10.44	68.52	05.54	04.81	89.65	02.22	03.78	94.00

Source: Nagar Vikas Vibhag ka Karya-Vivaran for the respective year

Author calculation

*Receipts from Government includes SFC devolution, CFC grant, Development programmes (central/state), and loan from Revolving fund/bank/market/other sources

REVENUE INCOME

The urban local bodies are responsible for imposing the entrusted taxes and collecting them. Being an autonomous institution, municipalities are supposed to meet their expenses out

of their own earnings. The infrastructure development is ensured by the government. However, the municipal administration fails to optimise its revenue income. Many a time it shows even a declining trend (Table-6).

Table-6: VARIATION IN REVENUE INCOME

(per cent)

Urban Local Bodies	Annual Variation			
	2015-16	2016-17	2017-18	2018-19
Municipal Corporations	49.20	12.99	28.56	(-) 04.33
Municipal Councils	02.02	07.62	(-)01.39	(-) 13.96
<i>Nagar Panchayats</i>	08.83	(-)08.91	02.20	05.96
State	10.25	09.44	21.11	05.42

Source: Nagar Vikas Vibhag ka Karya Vivaran for the respective year
Author Calculation

INCOME FROM PROPERTY TAX

Property Tax is the principal tax source of municipalities. As discussed, it consists of a number of taxes. However, only two constituent taxes—House Tax (General Tax) and

Water Tax are levied by the municipalities. There is a statutory flaw in levying water tax and cost of the water consumed. Income from taxes on property shows a great variation (Table-7).

Table-7: VARIATION IN INCOME FROM PROPERTY TAX

(per cent)

Urban Local Bodies	Annual Variation			
	2015-16	2016-17	2017-18	2018-19
Municipal Corporations	11.52	02.79	04.95	32.07
Municipal Councils	03.44	03.45	08.93	17.61
<i>Nagar Panchayats</i>	06.21	(-)03.75	28.26	12.04
State	10.51	06.72	05.60	30.19

Source: Nagar Vikas Vibhag ka Karya Vivaran for the respective year
Author calculation

INCOME FROM OTHER TAXES

The analysis (Table-8) clearly depicts the need to pay more attention towards optimising all the financial resources by the municipalities. All these tax sources have potential to yield more revenue. Though not very significant, these sources add icing on the revenue income. Surprisingly, in

the present era of role and importance of advertisement, the yield from this source has been declining. It shows the slackness of municipal administration. So is the case with other taxes. Every passing day, a good number of vehicles (non-mechanised) are found plying on city roads, but proceeds from vehicle tax show decreasing trend. This is nothing but administrative apathy.

Table-8: VARIATION IN INCOME FROM 'OTHER TAXES'

(per cent)

Years	Advertisement Tax	Theatre Tax	Animal Tax	Vehicle Tax	Other Taxes
Municipal Corporation					
2015-16	19.13	(-)02.80	180.92	(-) 76.87	62.31
2016-17	08.27	22.96	(-)64.95	54.13	21.06
2017-18	(-)11.21	(-)23.02	(-)12.21	(-) 02.73	09.04
2018-19	(-)04.08	32.26	603.53	(-) 97.74	154.37
Municipal Council					
2015-16	29.75	50.41	(-)13.58	17.55	20.10
2016-17	01.15	(-)52.58	(-)09.11	(-)07.21	04.76
2017-18	25.60	299.09	131.68	01.90	50.02
2018-19	21.46	(-)73.28	(-)26.18	20.60	(-)31.52
Nagar Panchayat					
2015-16	(-)04.39	(-)53.21	(-)74.85	81.56	17.78
2016-17	11.04	(-)27.42	466.67	(-)11.30	24.19
2017-18	(-)31.28	(-)31.11	(-)19.33	(-)05.00	(-)27.77
2018-19	150.73	104.84	(-)78.65	(-)17.35	(-)08.76

Source: Nagar Vikas Vibhag kakarya Vivaran for the respective year

Author calculation

VARIATION IN INCOME FROM TAXES

The revenue income to municipalities comes from two sources-- tax and non-tax. The municipalities, in general, rely on tax sources. There seems no upward increase in the yield from taxes. The variation indicates that the tax

collection is dependent on the effort of person at the helm of affairs, coupled with constant monitoring by higher-ups. The extent of decrease (more than one-fourth of the income) in income in case of Municipal Councils and Nagar Panchayts in same year warrants thorough investigation, and concurrent difficulty may be removed. The revenue personnel responsible for

collecting proceeds must be penalised, if found guilty. Slackness on the part of personnel should not be tolerated at any cost.

Table-9: VARIATION IN TAX INCOME

(per cent)

Urban Local Bodies	Annual Variation			
	2015-16	2016-17	2017-18	2018-19
Municipal Corporations	26.34	03.52	12.82	10.04
Municipal Councils	16.51	09.26	02.90	(-)28.48
Nagar Panchayats	24.48	05.03	01.74	(-)26.61
State	24.55	04.52	10.71	02.67

Source: Nagar Vikas Vibhas ka Karya Vivaran for the respective year
Author calculation

INCOME FROM HOUSE TAX

House Tax is the mainstay of municipalities. It is one of the compulsory taxes levied by municipalities. After abolition of octroi, Property Tax has gained important momentum. General Tax or House Tax is the major constituent of the Property Tax. In general practice, House Tax is synonymous to Property Tax. This is a tax imposed on buildings and lands situated within the municipal limits. Its contribution to municipal

income is shown in Table-10. The result found is not satisfactory; particularly in case of Municipal Corporations. The decreasing trend in yield of the principal tax is not praiseworthy. Limited contribution (meagre one-third) of House tax to revenue income of the corporations is not a healthy sign. It should not be less than half of the same. The meagre or negligible contribution to total income, in case of Municipal Councils and Nagar Panchayats, fails to qualify House Tax as their principal tax source.

Table-10: SHARE OF HOUSE TAX IN OWN AND TOTAL INCOME

(per cent)

Years	Municipal Corporation		Municipal Council		Nagar Panchayat	
	Own Revenue Income	Total Income	Own Revenue Income	Total Income	Own Revenue Income	Total Income
2015-16	34.71	11.16	11.67	01.28	08.17	0.52
2016-17	33.14	10.86	21.16	01.21	08.59	0.49
2017-18	29.12	08.88	12.32	01.29	10.55	0.64
2018-19	36.98	11.50	15.68	01.42	11.05	0.65
State	66.84	21.04	61.41	05.54	36.97	02.22

Source: Nagar Vikas Vibhag ka Karya Vivaran for the respective year Author calculation

VARIATION IN INCOME FROM HOUSE TAX

Although, House Tax has become the main source of income for municipality after abolition of Octroi, its yield has not increased proportionately. The absence of increasing trend in income from this major tax-source of urban local

government, undoubtedly, reflects the serious slackness on the part of municipal administrations towards optimising yield from House Tax. Despite expansion in municipal areas and also constant increase in number of houses and development of plots (lands), proportionate growth in the yield is not noted (Table-11). A declining trend is a matter of concern.

Table-11: VARIATION IN INCOME FROM HOUSE TAX
(per cent)

Urban Local Bodies	Annual Variation			
	2015-16	2016-17	2017-18	2018-19
Municipal Corporations	11.04	07.88	12.95	21.50
Municipal Councils	05.73	01.10	10.84	09.49
<i>Nagar Panchayats</i>	06.75	04.34	25.51	10.96
State	04.23	13.50	01.30	20.36

Source: *Nagar Vikas Vibhag ka Karya Vivaran for the respective year* Author calculation

PER CAPITA INCOME FROM HOUSE TAX

The analysis (Table-12) is not very rosy. Such a low per capita income from the principal tax is sufficient enough to indicate the financial position of urban local government in the state. Although it shows an increasing trend, per capita income from tax is much lower in comparison to that of municipalities in other states. There is a need to have a re-look on monthly rate of rent. Concerned officials should keep in mind the growing income of the house-owners and fix the rate keeping in view the paying capacity of the inhabitants living in the area. It needs upward

revision. The low rate of rent, lack of universal coverage of properties, and slackness in realising the House Tax proceeds are probably the factors responsible for such a low per capita income. The municipal authorities should make a churning afresh and every attempt should be made to take per-capita income to a respectable level and at par with other states.

The potential of property tax needs to be fully leveraged by extending coverage, regular revision of tax rates, upward revision of monthly rental (unit) rates, improving the assessment system and raising efficiency in tax administration. For the smaller municipalities, lack of institutional

Table-12: PER CAPITA INCOME FROM HOUSE TAX*(Rs.)*

	2015-16	2016-17	2017-18	2018-19
Municipal Corporations	238	250	262	369
Municipal Councils	25	25	27	34
<i>Nagar Panchayats</i>	12	12	14	18
State	115	120	129	178

Source: Nagar Vikas Vibhag ka Karya Vivaran for the respective year Author calculation
 Note: Population projection @2.5 per cent annual

capacity to undertake these reforms constitutes the main challenge, and assistance from the state governments in this regard may be helpful. For the larger municipalities, it is vital that the expansion of tax-base and increase in efficiency of tax collection are achieved through the use of technologies such as satellite photography and geo-coding of data (RBI, 2022).

NON-TAX SOURCES OF INCOME

Non-tax income sources are related directly to any service provided by

municipalities. Among own revenue sources, over-reliance by municipalities on property tax has constrained exploiting other avenues, such as trade licences, entertainment taxes, taxes from mobile towers, solid waste user charges, water charges, and value capture financing. The income from trade licence is not commensurate to ever-increasing economic activities in the urban areas. Numerous economic activities have been mushrooming even in residential areas, but municipal officials seem totally indifferent to this situation. This is clear from our analysis (Table-13).

Table13: VARIATION IN INCOME FROM NON-TAXES*(per cent)*

Years	<i>Water Charge</i>	<i>Rent, etc</i>	<i>Tehbazari (Market)</i>	<i>Slaughter House</i>	<i>Licence</i>	<i>Others</i>
	Municipal Corporation					
2015-16	06.12	(-) 25.60	01.78	(-) 30.78	16.28	(-) 28.97
2016-17	(-)26.39	(-) 57.81	(-)75.99	(-) 34.40	(-)62.65	72.05
2017-18	146.30	48.95	343.30	01.94	161.55	56.37
2018-19	51.27	28.52	(-)80.31	00.01	112.59	(-) 37.79

Years	Water Charge	Rent, etc	Tehbazari (Market)	Slaughter House	Licence	Others
	Municipal Council					
2015-16	06.65	09.46	25.73	(-)0.16	25.49	107.93
2016-17	12.41	(-)22.12	(-)09.64	(-)0.39	12.99	02.26
2017-18	00.07	(-)00.07	39.83	(-)33.24	18.37	(-)16.64
2018-19	03.19	15.34	40.40	(-)62.59	16.13	(-)04.49
Nagar Panchayat						
2015-16	03.39	120.37	(-)22.64	(-)18.56	(-)28.20	19.08
2016-17	01.42	(-)34.28	(-)17.71	(-)73.39	(-)18.64	(-)16.56
2017-18	07.26	(-)07.10	14.90	(-)46.83	54.35	00.02
2018-19	04.49	07.22	08.46	(-)21.90	(-)15.48	41.20

Source: Nagar Vikas Vibhag ka Karya Vivaran for the respective year Author calculation

INCOME FROM ADDITIONAL STAMPDUTY

Both the Municipal Acts mandate the charging of additional stamp duty on the transfer of immovable private properties within the municipal limits. However, in the cities having Development Authority their power for levying this tax in the cities and towns has been restrained; in view of additional stamp duty presently charged under the provision of the Urban Planning and Development Act, 1973. However, municipalities are entitled to get a share out of it. Wherever these

bodies (Development Authority and Housing and Development Board) are not in existence, the municipalities have to frame their own bye-laws under the authority of their respective law and should start levying the additional stamp duty. Municipalities falling in the Development Areas also have to frame bye-laws to enable to get their share. Irrespective of their law-framing, the registration authority has been collecting this additional amount and the government transfers a part on demand. However, municipalities have no clue as to how many such transactions in their area have taken

Table-14: CONTRIBUTION OF STAMP DUTY TO MUNICIPAL INCOME
(per cent)

Years	Municipal Corporation		Municipal Council		Nagar Panchayat	
	Own Income	Total Income	Own Income	Total Income	Own Income	Total Income
2015-16	19.91 (80.15)	06.40	28.17 (27.90)	03.08	22.22 (30.94)	01.41
2016-17	15.98 (-)09.33)	05.23	30.10 (15.01)	03.31	26.09 (06.95)	01.49
2017-18	17.32 (39.34)	05.28	28.46(-)06.76)	02.98	25.05(-)01.88)	01.53
2018-19	06.63 (-)08.44)	02.06	13.92(-)57.92)	01.26	12.36(-)47.73)	00.73
State	14.54	04.58	25.54	02.64	21.29	01.28

Source: Nagar Vikas Vibhag ka Karya Vivaran for the respective year Author calculation
Figure in parentheses denote variation in income

place and how much is their share. Most of them fail to reconcile and remain happy with whatever amount is transferred by the government, without making much effort. The decline in income from this ever-growing source shows a glaring example of administrative laxity (Table-14).

PER CAPITA REVENUE INCOME

The analysis in this regard (Table-15) presents a gloomy picture. It

requires hard work and sincere efforts by municipal authorities to optimise their financial resources. In comparison to other states having almost similar population content but higher urbanisation level, the state of Uttar Pradesh in respect of per capita income stands much lower. With such a low per capita income from its own sources (Revenue Income), the urban local governments in the state find it difficult even to meet their establishment expenditure.

Table-15: PER CAPITA REVENUE INCOME

(Rs.)

	Own Income				Tax Income				Non-Tax Income			
	NN	NPP	NP	State	NN	NPP	NP	State	NN	NPP	NP	State
2015-16	685	215	154	407	507	117	154	274	178	99	55	133
2016-17	755	225	217	412	512	123	136	279	243	102	57	159
2017-18	898	136	132	504	535	124	132	294	363	93	55	210
2018-19	998	214	160	550	683	102	46	348	315	113	114	202

NN- Nagar Nigam (Municipal Corporation); NPP-Nagar Palika Parishad (Municipal Council)

NP-Nagar Panchayat

Source: Nagar Vikas Vibhag ka Karya Vivaran for the respective year Author calculation

Note: Population projection @2.5 per cent annual

Municipalities in India are amongst the weakest globally in terms of fiscal autonomy with elaborate state government controls on their authority to levy taxes and user charges, setting of rates, granting of exemptions, and borrowing of funds as well as on the design, quantum and timing of inter-governmental transfers (Ahluwalia et. al., 2019). The absence of buoyant revenue handles and excessive reliance on grants from the Central and State governments have weakened the ability of municipalities to discharge their obligations. Poor enforcement

mechanisms, coupled with multiple outdated exemptions, dated property rolls and databases, sub-optimal tax rates, property under-valuation and weak tax administration have resulted in significant under-recoveries in the majority of the Indian cities (Awasthi and Nagarajan, 2020). The state of Uttar Pradesh also falls in this category.

CONCLUSION

The foregone analysis reiterates and confirms the dependency of municipalities in the state on grants

received from the government (external sources), albeit the dependency has been found decreasing every succeeding year. This is reflective of the inculcation of self-dependence, of course, at a slow pace, in the urban local government in the state. In spite of this decline in dependency on the government grant, municipalities in general, are not able even to meet their non-plan obligations. The dependency increases more in Municipal Councils and the most in Nagar Panchayats. Such a situation even after three decades of promulgation of the 74th CAA warrants some stern measures by the government for reforming the municipal taxation process in the state.

To sum up, the state government should direct the municipalities to implement the requisite reforms with a purpose to universalise tax coverage; rationalise unit rates and tax rates; revisit the concessions and exemptions; optimise tax proceeds; mobilise their financial resources; and thus aspire to join the ranks of Revenue Plus municipalities.

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Women's Human Rights and Gender Equality – From Theory to Practice

Jiwan Devi, Deep Kumar

Gender is a social construct, not a biological one, and discrimination on this basis is consequently difficult to assess and address. Distinctions based on biological sex can be measured statistically, whereas gender differentials entail more subtle distinctions in male and female roles. Gender equality between women and men refers to equal rights, responsibilities, and opportunities for women and men and girls and boys. Gender equity denotes an element of interpretation of social justice, usually based on tradition, custom, religion, or culture, which is most often to the detriment of women. The human rights protection and promotion of gender equality require more than numerical equilibrium, it also requires conceptual equilibrium and a conscientious effort to redress inequality, as it exists. The ultimate goal of gender equality is to ensure that women and men have equitable access and benefit from society's resources, opportunities, and rewards. Human rights include the right

to live free from violence, no discrimination, to be educated, to own property, the right to vote and to earn a fair and equal wage. The Human Rights Council regularly holds special panels relating to women's rights and the integration of a gender perspective.

This paper is an attempt to understand the Universal Declaration of Human Rights and the Indian Constitution provide guarantees for Women's Human Rights and Gender Equality.

Keywords: Gender Equality, Human rights, Council, Social Justice, etc.

Women's Human Rights and Gender Equality- From Theory to Practice

Recognition of the inherent dignity and the equal and inalienable rights of all members of the human family is the foundation of freedom, justice, and peace in the world.

Preamble (Universal Declaration of Human Rights)

The concept of Human Rights is as old as human civilization. Since human beings started to lead an organized life the issue of human rights caught the fancy of those at the helm of affairs. All societies and cultures have developed some conception of rights and duties for their members. The struggle for recognition of some basic rights of the individual against political, social, economic, and cultural oppression, injustice, and inequalities has been an integral part of the history of all human societies. The recognition that every individual is entitled to enjoy certain basic rights merely by the worth of a human being born into the human species has evolved through this struggle.¹ The attainment of equality between women and men, and the elimination of all forms of discrimination against women are fundamental human rights and United Nations values. Despite this, women around the world regularly suffer violations of their human rights throughout their life cycle, and the realization of women's human rights has not always been accorded priority attention. Achieving equality between women and men requires a comprehensive understanding of how women experience discrimination and are denied equality. This understanding facilitates the development of appropriate strategies

for the elimination of such discrimination and measures for the achievement of equality between women and men.² The United Nations has a long history of addressing women's human rights and much progress has been made in securing women's rights across the world in the past decades. All rights adopted in 1945, the Charter of the United Nations set out the goal 'to reaffirm faith in fundamental human rights in the dignity and worth of the human person, in the equal rights of men and women'. Since its founding, women's equal rights have been included among the most fundamental guarantees of human rights.³ Every day, whole around the world receive reports of violence against women, intimate-partner, and gender-motivated killings, including so-called 'honor crimes' sexual and gender-based violence, forced marriages, acid attacks, so-called 'corrective' trafficking of young women, physical and psychological abuse of migrant and domestic workers, torture in detention, forced sterilization, these are just some examples. Violence against women comes in many different forms. Violence against women and girls harms families and communities and is a major cause of death and disability.⁴ To promote gender equality and women empowerment International Day for the Elimination of Violence Against Women is commemorated on 25 November each year, setting off 16

days of activism on this issue and leading up to International Human Rights Day on 10 December, the date on which the Universal Declaration of Human Rights was adopted in 1948. The Universal Declaration of Human Rights (UDHR) is a milestone document in the history of human rights.⁵ The Universal Declaration of Human Rights (1948) consists of 30 articles that emphasize the equality of all human beings without distinction of any kind of the basis of race color, sex, language, religion, national or social origin, etc.⁶ We are all equally entitled to our human rights without discrimination. These rights are all interrelated, interdependent, and indivisible.⁷ So gender equality is at the very heart of human rights and United Nations values. A fundamental principle of the United Nations Charter adopted by world leaders in 1945 is same rights of men and women and protecting and promoting women's human rights is the responsibility of all States.⁸ Women's rights have been at the heart of a series of international conferences that have produced significant political commitments to women's human rights and equality. Starting in 1975, which was also International Women's Year, Mexico City hosted the World Conference on the International Women's Year, which resulted in the world plan of action and the designation of 1975–1985 as the United Nations Decade for women.⁹ In 1993, the World Conference on Human

Rights was held in Vienna. To understand the Women's rights activists mobilized to ensure that women's human rights were fully on the agenda of the international community under the rallying cry 'Women's Rights are Human Rights', particularly around the issue of violence against women, civil society, etc... So non-discrimination and equality between women and men are central principles of human rights law. Both the International Covenant on civil and political rights and the International covenant on economic, social, and cultural rights prohibit discrimination based on sex and guarantee women and men equality in the enjoyment of the rights covered by the covenants. The fourth world conference on women, held in Beijing in September 1995, further highlighted the concept of 'Equality' and obtained a commitment from nations not only to reduce gender inequalities and inadequacies in all spheres but also to ensure that gender perspective is reflected in all policies and programs. The Indian delegation not only played a leading role in drafting the declaration and platform for action but also earned the distinction of being the first to endorse them without reservation.¹⁰

Universal Declaration of Human Rights (Article 1 to 30)

Proclaims this Universal Declaration of Human Rights as a

common standard of achievement for all peoples and all nations, to the end that every individual and every organ of society, keeping this Declaration constantly in mind, shall strive by teaching and education to promote respect for these rights and freedoms and by progressive measures, national and international, to secure their universal and effective recognition and observance, both among the peoples of Member States themselves and among the peoples of territories under their jurisdiction.

Article 1

All human beings are born free and equal in dignity and rights. They are endowed with reason and conscience and should act towards one another in a spirit of brotherhood.

Article 2

Everyone is entitled to all the rights and freedoms outlined in this Declaration, without distinction of any kind, such as race, color, sex, language, religion, political or other opinions, national or social origin, property, birth, or another status. Furthermore, no distinction shall be made based on the political, jurisdictional, or international status of the country or territory to which a person belongs, whether it be independent, trust, non-self-governing, or under any other limitation of sovereignty.

Article 3

Everyone has the right to life, liberty, and security of person.

Article 4

No one shall be held in slavery or servitude; slavery and the slave trade shall be prohibited in all their forms.

Article 5

No one shall be subjected to torture or cruel, inhuman, or degrading treatment or punishment.

Article 6

Everyone has the right to recognition everywhere as a person before the law.

Article 7

All are equal before the law and are entitled without any discrimination to equal protection of the law. All are entitled to equal protection against any discrimination in violation of this Declaration and any incitement to such discrimination.

Article 8

Everyone has the right to an effective remedy by the competent national tribunals for acts violating the fundamental rights granted him by the constitution or by law.

Article 9

No one shall be subjected to arbitrary arrest, detention, or exile.

Article 10

Everyone is entitled in full equality to a fair and public hearing by an independent and impartial tribunal, in the determination of his rights and obligations and any criminal charge against him.

Article 11

1. Everyone charged with a penal offense has the right to be presumed innocent until proven guilty according to the law in a public trial at which he has had all the guarantees necessary for his defense.
2. No one shall be held guilty of any penal offense on account of any act or omission which did not constitute a penal offense, under national or international law, at the time when it was committed. Nor shall a heavier penalty be imposed than the one that was applicable at the time the penal offense was committed.

Article 12

No one shall be subjected to arbitrary interference with his privacy, family, home, or correspondence, or

attacks upon his honor and reputation. Everyone has the right to the protection of the law against such interference or attacks.

Article 13

1. Everyone has the right to freedom of movement and residence within the borders of each State.
2. Everyone has the right to leave any country, including his own, and to return to his country.

Article 14

1. Everyone has the right to seek and enjoy in other countries asylum from persecution
2. This right may not be invoked in the case of prosecutions genuinely arising from non-political crimes or acts contrary to the purposes and principles of the United Nations.

Article 15

1. Everyone has the right to nationality.
2. No one shall be arbitrarily deprived of his nationality nor denied the right to change his nationality.

Article 16

1. Men and women of full age, without any limitation due to race, nationality, or religion, have the

right to marry and find a family. They are entitled to equal rights as to marriage, during the marriage, and at its dissolution.

2. Marriage shall be entered into only with the free and full consent of the intending spouses.
3. The family is the natural and fundamental group unit of society and is entitled to protection by society and the State.

Article 17

1. Everyone has the right to own property alone as well as in association with others.
2. No one shall be arbitrarily deprived of his property.

Article 18

Everyone has the right to freedom of thought, conscience, and religion; this right includes freedom to change his religion or belief, and freedom, either alone or in community with others and in public or private, to manifest his religion or belief in teaching, practice, worship, and observance.

Article 19

Everyone has the right to freedom of opinion and expression; this right includes freedom to hold opinions without interference and to seek,

receive and impart information and ideas through any media and regardless of frontiers.

Article 20

1. Everyone has the right to freedom of peaceful assembly and association.
2. No one may be compelled to belong to an association.

Article 21

1. Everyone has the right to take part in the government of his country, directly or through freely chosen representatives.
2. Everyone has the right to equal access to public service in his country.
3. The will of the people shall be the basis of the authority of government; this will shall be expressed in periodic and genuine elections which shall be by universal and equal suffrage and shall be held by secret vote or by equivalent free voting procedures.

Article 22

Everyone, as a member of society, has the right to social security and is entitled to realization, through national effort and international cooperation and under the organization and resources of each State, of the

economic, social, and cultural rights indispensable for his dignity and the free development of his personality.

Article 23

1. Everyone has the right to work, to free choice of employment, to just and favorable conditions of work, and to protection against unemployment.
2. Everyone, without any discrimination, has the right to equal pay for equal work.
3. Everyone who works has the right to just and favorable remuneration ensuring for himself and his family an existence worthy of human dignity, and supplemented, if necessary, by other means of social protection.
4. Everyone has the right to form and join trade unions for the protection of his interests.

Article 24

Everyone has the right to rest and leisure, including reasonable limitation of working hours and periodic holidays with pay.

Article 25

1. Everyone has the right to a standard of living adequate for the health and well-being of himself and of his family, including food,

clothing, housing, medical care, and necessary social services, and the right to security in the event of unemployment, sickness, disability, widowhood, old age or other lack of livelihood in circumstances beyond his control.

2. Motherhood and childhood are entitled to special care and assistance. All children, whether born in or out of wedlock, shall enjoy the same social protection.

Article 26

1. Everyone has the right to education. Education shall be free, at least in the elementary and fundamental stages. Elementary education shall be compulsory. Technical and professional education shall be made generally available and higher education shall be equally accessible to all based on merit.
2. Education shall be directed to the full development of the human personality and the strengthening of respect for human rights and fundamental freedoms. It shall promote understanding, tolerance, and friendship among all nations, racial or religious groups, and shall further the activities of the United Nations for the maintenance of peace.
3. Parents have a prior right to choose the kind of education that shall be given to their children.

Article 27

1. Everyone has the right freely to participate in the cultural life of the community, enjoy the arts, and share in scientific advancement and its benefits.
2. Everyone has the right to the protection of the moral and material interests resulting from any scientific, literary or artistic production of which he is the author.

Article 28

Everyone is entitled to a social and international order in which the rights and freedoms outlined in this Declaration can be fully realized.

Article 29

1. Everyone has duties to the community in which alone the free and full development of his personality is possible.
2. In the exercise of his rights and freedoms, everyone shall be subject only to such limitations as are determined by law solely to secure due recognition and respect for the rights and freedoms of others and of meeting the just requirements of morality, public order, and the general welfare in a democratic society.

3. These rights and freedoms may in no case be exercised contrary to the purposes and principles of the United Nations.

Article 30

Nothing in this Declaration may be interpreted as implying for any State, group, or person any right to engage in any activity or to perform any act aimed at the destruction of any of the rights and freedoms set forth herein.¹¹

Violation of Human Rights in India

The human rights movement has become a matter of serious concern. Although the world community is geared towards its protection, violation of human rights is also a global phenomenon. In India, despite various constitutional safeguards violation of human rights takes place every day in a variety of forms. These violations include breach of civil and political rights, and discrimination against minorities, women, and weaker sections of society.¹²

Women around the world continue to experience discrimination

- Laws and policies prohibit women from equal access to land, property, and housing
- Economic and social discrimination results in fewer and poorer life choices for women,

rendering them vulnerable to trafficking

- Gender-based violence affects at least 30% of women globally
- Women are denied their sexual and reproductive health rights
- Women human rights defenders are ostracized by their communities and seen as a threat to religion, honor, or culture
- Women's crucial role in peace and security is often overlooked, as are the particular risks they face in conflict situations.¹³

Indian Constitution provides guarantees for Gender Equality

India is a signatory to major International Human Instruments viz Universal Declaration of Human Rights, International Covenant on economic, social and cultural rights, International Covenant on civil and political rights, International Covenant on the elimination of all forms of racial discrimination, etc. A comparison of UDHR and the Indian Constitution reveals that these rights have been included in our Constitution in Part-III and Part-IV in the form of Fundamental Rights and Directive Principles of State Policy. The Preamble of the Indian Constitution Fundamental Rights and Directive Principles together reflect the basic

principles of UDHR and the covenants on civil and political rights and social and economic rights. The fundamental rights envisaged in our Constitution - Right to Equality, Right to Freedom, Right Against Exploitation, Right to Freedom of Religion, Cultural and Education Rights, and Right to Constitutional Remedies indicative of the acceptance of the basic principles of UDHR. Civil and political rights have been also covered by the Indian constitution.¹⁴

Article 14- equal rights and opportunities for men and women in the political, economic, and social sphere

Article 15- prohibition of discrimination on the grounds of sex, religion, caste, etc

Article 15(3)- empowers the State to take affirmative measures for women

Article 16- provides for equality of opportunities in the matter of public appointments

Article 39- states to provide an adequate means of livelihood to men and women and Equal pay for equal work

Article 42- State to ensure the provision for the just and humane condition of work and maternity relief

Article 51(A) – The fundamental duty of every citizen is to renounce the practices derogatory to the dignity of women

Gender equality through education

The State undertakes a heavy burden in determining that education should be compulsory, as compelling attendance implies that education will be in the child's best interest. Female education is a catch-all term for a complex set of issues and debates surrounding education (primary education, secondary education, tertiary education, and health education in particular) for girls and women. It includes areas of gender equality and access to education and its connection to the alleviation of poverty. Also involved are the issues of single-sex education and religious education, in that the division of education along gender lines as well as religious teachings on education have been traditionally dominant and are still highly relevant in contemporary discussions of educating females as a global consideration. The education systems are varying in administration, curriculum, and personnel, but all influence the students that they serve. As women have gained rights, formal education has become a symbol of progress and a step toward gender equity. For true gender equity to exist, a holistic approach needs to be taken. The 86th Constitutional Amendment

Act, of 2001, has been a path-breaking step toward the growth of education, especially for females. According to this Act, elementary education is a fundamental right and duty for children between the ages of 6 and 14. The government has undertaken to provide this education free of cost and make it compulsory for those in that age group. This undertaking is more widely known as Sarva Shiksha Abhiyan (SSA).¹⁵

Gender-based violence

A further issue that reflects the crucial role of the recognition dimension concerns gender-based violence, which is shockingly pervasive throughout the world. Legislation criminalizing assault, murder, and other forms of violence against the person are standard across states. But its pervasive lack of application to gender-based violence reflects a deep-seated negation of women as persons, the antithesis of recognition. This in turn both stems from and reinforces gendered power relations in society. The international treaty bodies have robustly endorsed this dimension of equality in their expectation that State parties enact legislation specifically dealing with domestic and other gender-based violence, prohibiting such vicious practices as female genital mutilation (FGM), acid throwing, stove burning, honor killing, sexual violence, and rape.

Role of unpaid work

It is not only paid work but also unpaid work that is highlighted by the distributive dimension of substantive equality. The Committee on the Elimination of Discrimination against Women (CEDAW) has drawn attention to the problem of unpaid work of women in family enterprises in rural and urban settings. It has also noted the need to measure and value the unpaid domestic work that women provide all over the world. This is made particularly clear by the special rapporteur on water, who makes specific reference to the 'distributional dimensions of inequality' as part of the principles of non-discrimination, equality, and equity within the framework for advancing these rights. The crucial importance of recognizing the role of unpaid caring work to advance substantive equality for women has been most vividly highlighted in the 2013 report of the Special Rapporteur on extreme poverty (UN General Assembly 2013). She shows how the 'heavy and unequal responsibility for unpaid care is a barrier to women's greater involvement in the labor market'. Moreover, 'the amount, intensity and drudgery of unpaid care work increase with poverty and social exclusion.

Two Types of Public Policies for Unpaid Work

- Specific or direct policies are explicitly aimed at unpaid work.

They might be recognizing it or making it more visible, influencing the quantity of unpaid work done in society, or changing the distribution of unpaid work among different groups in society.

- Indirect or 'mainstreamed' policies are not designed and implemented to affect unpaid work as a primary policy objective, but they have implicit effects on unpaid work. Sometimes influencing unpaid work is included as an explicit secondary objective of a policy. Mostly, however, mainstream socio-economic policies have implicit effects on unpaid work

Unpaid work and gender equality policy

Modern gender equality policy-making in the field of work and employment is based on the assumption that women's empowerment requires their economic independence and relief of domestic drudgery.

- Promoting a more equal sharing of unpaid work between women and men
- Introducing changes in the organization of paid employment, to facilitate the individual combination of paid and unpaid work both by women and by men
- The provision of public services, such as childcare

-
- The commercialization of domestic labor

Violence against Women

Violence against women is a global phenomenon and involves a spectrum of physical, sexual, and psychological acts of control, threat, aggression, abuse, and assault. Violence against women takes many forms, such as female infanticide, (girl) child abuse, incest, rape, sexual harassment, intimate partner violence (IPV), and abuse and neglect of older women. The Declaration on the Elimination of Violence against Women defines violence against women as any act of gender-based violence that results in, or is likely to result in, physical, sexual or psychological harm or suffering to women, including threats of such acts, coercion or arbitrary deprivation of liberty, whether occurring in public or in private life. Since the beginning of the 1990s, violence against women has gained much attention in the human rights discourse.¹⁶

Rape and Sexual Harassment

Although rape is a gender-neutral crime, most rape victims are women and most rapists are men.¹⁷ Women are most often the victims of rape, which is usually perpetrated by men known to them. The rate of reporting, prosecution, and convictions for rape varies considerably in different jurisdictions and reflects some extent the society's attitudes to such crimes. It

is considered the most underreported violent crime. The rape victim may face violence or threats of violence from the rapist, in many cultures, from the victim's own family and relatives. The violence or intimidation of the victim may be perpetrated by the rapist or by friends and relatives of the rapist, as a way of preventing the victims from reporting the rape, punishing them for reporting it, forcing them to withdraw the complaint, or it may be perpetrated by the relatives of the victim as a punishment for 'bringing shame' to the family. This is especially the case in cultures where female virginity is highly valued and considered mandatory before marriage, in extreme cases, rape victims are killed in honor killings. Victims may also be forced by their families to marry the rapist to restore the family's 'honor'.¹⁸ Another problem women face in society is sexual harassment that is abusive, uninvited, and unwelcome behavior of a sexual nature, typically in the work/studying place, which may include intimidation, bullying, or coercion of a sexual nature or the inappropriate promise of rewards in exchange for sexual favors. It can be verbal or physical, and it is often perpetrated by a person in a position of authority against a subordinate.

Human trafficking and forced prostitution

In society, women face human trafficking which refers to the acquisition of persons by improper

means such as force, fraud, or deception, to exploit them. Trafficking in persons shall mean the recruitment, transportation, transfer, harboring, or receipt of persons, through the threat or use of force or other forms of coercion, abduction, fraud, deception, the abuse of power or of a position of power or the giving or receiving of payments or benefits to achieve the consent of a person having control over another person, for exploitation. Exploitation shall include, at a minimum, the exploitation of the prostitution of others or other forms of sexual exploitation, forced labor or services, slavery or practices similar to slavery, servitude, or the removal of organs. In India, the trafficking of persons for commercial sexual exploitation, forced labor, forced marriages, and domestic servitude is considered an organized crime. The Government of India applies the newly enacted *Bhartiya Nyaya Sanhita (BNS)* in December 2023, which came into effect on July 1, 2024.¹⁹ So, *Bhartiya Nyaya Sanhita (BNS)*, which defines human trafficking and 'provides stringent punishment for human trafficking, trafficking of children for exploitation in any form including physical exploitation, or any form of sexual exploitation, slavery, servitude or the forced removal of organs. Additionally, a Regional Task Force implements the SAARC Convention on the prevention of trafficking in women and children.²⁰

Violence against immigrant and refugee women

Immigrant and refugee women often face violence, both in the private sphere (by partners and other family members) and in the public sphere (by the police and other authorities). These women are often in a vulnerable position they do not speak the language of the country they are in, they do not know its laws and sometimes they are in a legal position where they may be deported if they make contact with the authorities.²¹ Women who seek protection from armed conflict in their countries of origin often face more violence while traveling to the destination country or when they arrive there.

Conclusion

The Universal Declaration of Human Rights 1948 maintains: All human beings are born free and equal in dignity and rights. They are endowed with reason and conscience and should act towards one another in a spirit of brotherhood. Human Rights are not only rights rather they are the ideals based on the demand of humanity regarding dignity, respect, justice, freedom, and protection. Thus they should be enjoyed by every member of human society without discrimination of caste, creed, race, gender, religion, nationality, or another status. So under the concept of gender

equality sometimes women's rights are violated. Women assume various roles and responsibilities as wives, mothers, and daughters and in these contexts hold multiple identities as single women, adolescents, pregnant and young mothers, women in polygamous or monogamous marriages, elderly women, and widows. The gender equality is the vision that men and women should be treated equally in terms of human rights, especially women's rights, and economic development. Gender equality, also known as sexual equality or equality of the sexes, is the state of equal ease of access to resources and opportunities regardless of gender, including economic participation and decision-making, a state of valuing different behaviors, aspirations, and needs equally, regardless of gender. On a global scale, achieving gender equality also requires eliminating harmful practices against women and girls, including sex trafficking, femicide, wartime sexual violence, the gender wage gap, and other oppressive tactics. Gender equality is only possible when worldwide, women and girls have full access to their rights – from social, economic, political, and equal pay, land ownership rights, access to education, maternal health rights, etc.

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Reviewing Blue-Green Infrastructure in Amritsar City

Amitoj Kaur, Sakshi Sahni

Overview: Blue Green Infrastructure

The escalating threat from climate hazards has prompted numerous global cities to modify their urban planning and design strategies, integrating cost-effective nature-based solutions as alternatives to traditional infrastructure. This approach utilises blue infrastructure elements, including seas, rivers, lakes, ponds, wetlands, and water utilities, in conjunction with green elements such as trees, parks, gardens, playgrounds, open green spaces, and forests.

According to Brears (2018), blue-green infrastructure is understood as a mix of urban green spaces, and urban blue infrastructure, related to aquatic ecosystems, as a strategically planned network that runs through the city. Since blue and green infrastructures are strongly intertwined, they are often referred to as blue-green infrastructure (Eyink & Heck, 2017). This blue-green infrastructure (BGI) can consist of

natural and artificial elements. BGI is an important tool for urban flood attenuation (Ghofrani et al., 2017). Making use of its ecosystem services, stormwater quality and quantity are managed by infiltration, detention, storage, and the filtering of pollutants (Liao et al., 2017). Therefore, BGI addresses both, the rainwater and the stormwater runoff.

BGI provides a practicable, cost-effective, and valuable solution for the areas that are grappling with the two challenges of climate change. Additionally, it contributes to the provision of overall benefits that surpass the initial investment. The incorporation of BGI is being emphasised to meet the requirement of mobilising Sustainable Cities and Communities in accordance with the Sustainable Development Goals. It implies that the integration of blue and green elements is a valuable and effective method of addressing urban and climatic challenges through

sustainable natural solutions. Vegetation with waterbody will assist with air pollution removal, stormwater management, and heat island effect.

Study Area

Amritsar is a border city of Punjab. It is located in the northern Indian state of Punjab and is a busy city with a lot of religious, historical, and cultural significance. As per the census 2011, the population of Amritsar is 11,69,637 persons with a male population of 621672 persons (53.15%), a female population of 5,47,965 persons (46.85%). The population of Amritsar Municipal Corporation grew from 605884 persons in 1981 to 11,69,637 persons in 2011, which comes out to be 1.9 times within a period of 3 decades. The city is known for the Golden Temple, which is the greatest place in Sikhism and where millions of people come to pray. The Jallianwala Bagh is another important feature of Amritsar. It is a historical place where a massacre took place, more than 100 years ago, during India's fight for freedom. The city's economy is made up of many different sectors, such as textiles, clothing, tourists, and arts. Amritsar is easy to get to by car, train, or plane, and it has an international airport and a strong transportation system. The city also has a few schools and a well-developed system for health care. Overall, Amritsar is a busy city that has a mix of history, culture, and modern life. This makes it a popular place for

tourists, travelers, and companies. (Amritsar Draft Master Plan, 2010 - 2030). As climate dangers become more prevalent around the globe, cities throughout the world are adapting their urban planning and design to integrate cost-effective nature-based solutions. These solutions as a contrast to traditional infrastructure techniques by utilising blue components (Seas, rivers, lakes, ponds, wetlands, and water utilities) alongside the green components (Forests, parks, gardens, playgrounds, open green areas, and trees).

Need of the Study

In Punjab, the groundwater level is declining by 70 cm annually. The Central Groundwater Board has warned that if the exploitation of underground water resources continues unchecked, Punjab could turn into a desert within the next 25 years. This stark warning highlights the severe consequences of over-extraction of groundwater, which is largely driven by agricultural activities and increasing water demand from a growing population.

According to a report from the Cross Dependency Initiative in 2023, Punjab is among the nine Indian states most vulnerable to climate change. The state's susceptibility is exacerbated by rising temperatures and shifting weather patterns, which intensify water scarcity and threaten agricultural

productivity. The report underscores the urgent need for adaptive measures to mitigate climate impacts and ensure sustainable water management practices.

A 2019 article in the Times of India reported that the minimum temperature in Amritsar has increased by 1.5 degrees Celsius over the past 50 years. This temperature rise is attributed to changes in cropping patterns and unplanned urbanization, both of which contribute to the urban heat island effect and reduced green cover. These changes not only affect the local climate but also increase the water demand, further straining the already depleted groundwater resources.

Amritsar, like many other metropolitan areas, has experienced unprecedented heat waves in recent years. The city witnessed temperatures soaring to 48 degrees Celsius, a record high that underscores the severity of extreme weather events linked to climate change. Since 2010, a series of heat waves have repeatedly impacted Amritsar, posing serious health risks to the population and stressing the urban infrastructure.

The combined effects of depleting groundwater, rising temperatures, and increased frequency of heat waves present a formidable challenge for Punjab. Immediate and concerted efforts are required to promote sustainable water use, enhance urban

planning, and develop climate-resilient agricultural practices to safeguard the state's future.

Objectives

The following are the objectives of the study:

- To investigate the present scenario of blue and green infrastructure Spaces in the city.
- To discover the reasons behind the phenomenon of increased land surface temperature, air pollution, water pollution, and reduced groundwater levels in the city over the decades.

Methodology

The study begins with an introduction to the concept of Blue-Green Infrastructure (BGI) and its relevance within the context of the selected study area. A brief overview of the city profile sets the stage for understanding the specific environmental challenges and opportunities present. The aim and objectives of the study are established in alignment with the identified needs, focusing on addressing key issues through the lens of BGI.

The prioritization of areas guides the focus of interventions, identifying key thrust areas for targeted action. Data collection encompasses both primary and secondary sources,

including surveys, field observations, government records, research papers, and satellite imagery.

The subsequent phase involves data compilation and analysis, wherein collected data is sorted, categorized, and subjected to quantitative and qualitative analysis. This process aims to identify existing infrastructure gaps and assess the needs of the local population.

Introduction to Study Area

Amritsar, the city of the Golden Temple, signifies the divine heritage of spirituality and cultural richness of Punjab, India. This city is not just a place on the map but a vibrant narrative of faith, resilience, and history. The impressive stories of the Harmandir Sahib or the Golden Temple and the tragic yet heroic tales of Jallianwala Bagh have etched Amritsar's name indelibly in the annals of our nation's history. These landmarks serve as poignant reminders of the city's profound impact on India's struggle for freedom and its enduring spiritual legacy. Amritsar has developed as a significant center of trade and commerce, facilitating economic growth and connectivity in the region. It is also a splendid and glorious seat of learning and literature, nurturing intellectual pursuits and cultural development. As one of the ancient and oldest of holy Sikh places, Amritsar

holds unparalleled religious significance. The city is the highest center of Sikh politics, where major decisions and movements have shaped the faith's direction. Strategically, it is the strongest post on the country's northwestern frontier, symbolizing strength and resilience. Amritsar city is more than just a geographical entity; it is a living legacy, the most valued and respected legacy of our Gurus. Its spiritual, cultural, and historical importance styles it a beacon of Punjab's heritage and a testament to the enduring spirit of its people. (Amritsar Draft Master Plan, 2010 -2030)

Physical Growth

Amritsar has grown physically because of its thriving economy, rich history, and cultural legacy. The city's population has grown steadily over time, from around 200,000 in the early 1900s to more than 1.2 million now. There are several stages to the city's development. The Golden Temple, which still serves as the city's center, was the center of the community's early development. The old city district is distinguished by its winding streets, conventional bazaars, and antique structures like temples and havelis. The Green Revolution and the strengthening of the industrial sector contributed significantly to Amritsar's post-independence growth. New residential neighborhoods, business districts, and industrial estates were

created as the city grew eastward and westward. The city's expansion was further aided by the 1960s founding of the Guru Nanak Dev University, which drew academics and students from across the nation.

The location of Amritsar district is in Punjab in the North West direction and Amritsar city is located at latitude 31° 37' 59.52" north and 74° 52' 22.08" east longitude, which cut each other through the middle of the city. (Refer to figure 1)

Figure 1 : Location Of Amritsar



Source: Maps of India and ArcGIS computation by the author

Built-up Area

For any type of development, there doesn't seem to be a patch available, and the main region is nearly all covered. The city features a unique planning scheme with areas designated as Katras. The self-styled dwelling units in the Katras region provide a distinctive defensive system. The bustling, dusty old city is southeast of the railway station. It is made up of a mix of residential and commercial buildings situated along its narrow, winding lanes. The walls of the Maharaja Ranjit Singh era have been removed to create a ring road around the city, and the Golden Temple is located in the center of the ancient city. The built-up area increased from 5269 ha. to 8122 ha, i.e., 64.87 % within a period of thirty-two years from 1991 to

2022. The built-up area in 1991 was 5269 ha., in 1999 (5827 ha.), in 2009 (6522 ha.), in 2018(7644 ha.), and in 2022 (8122 ha). Major developments of the city in the north, south, and east direction. With the increase in built-up area, the green cover has drastically decreased.

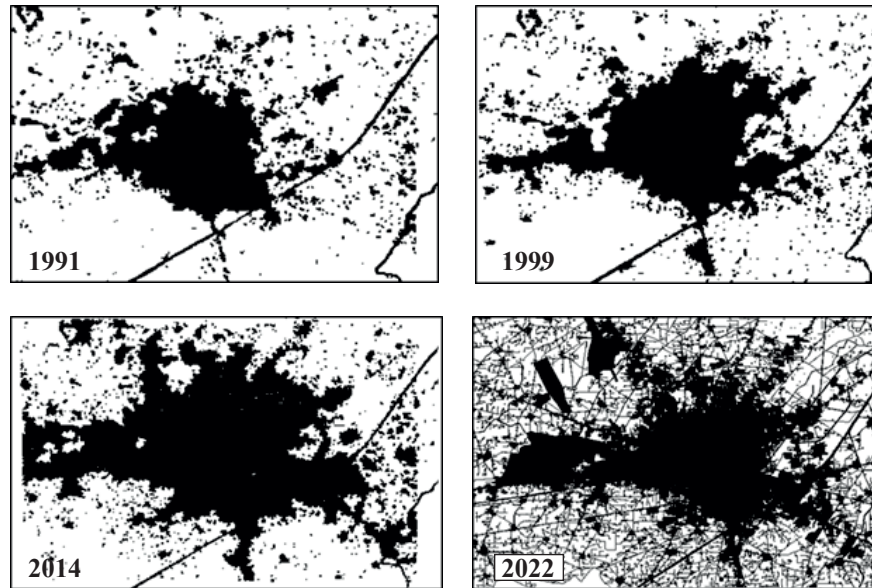
Change in Land Use

The total Municipal Corporation area of Amritsar City is 10409.72 ha and as per the 1991 municipal area i.e., 2826.00 ha. Municipal limits in 2011 have increased 2.5 times over the limits in 1991. There is an increase in total built-up areas including residential, commercial, and circulation areas although the organized open spaces or green spaces have not increased like the other land uses. The recreational

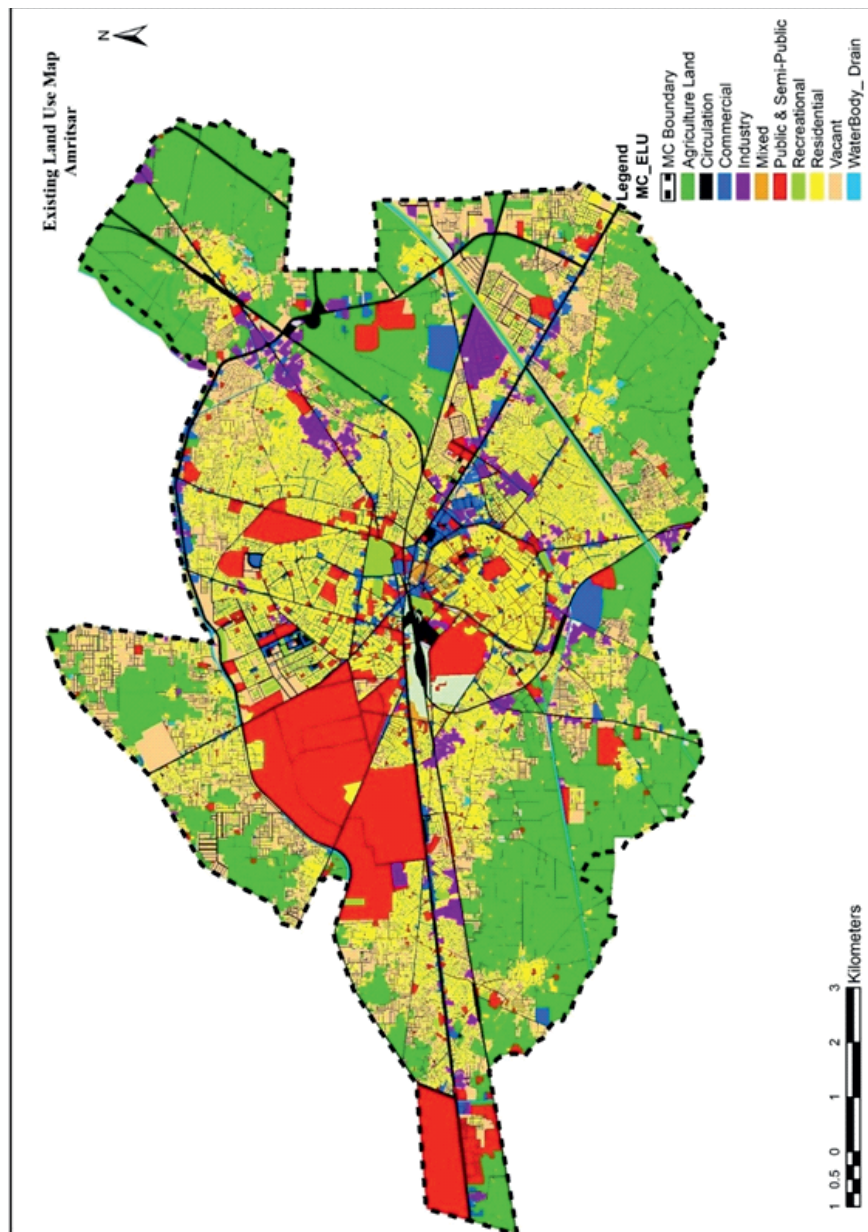
areas or open spaces in the city have only 159.81 ha i.e., only 1.54% of the total developed areas of the city. This area is not meeting the minimum requirements of the URDPFI Standards. Between 2001 and 2011, the population density grew from 71 to

82 PPH. The city's green space area is 124.89 ha, falling short of URDPFI criteria. Additionally, the city's water body area has dropped from 2010 to 2020. Data between 2010 and 2020 show the extent of submerged territory in the Municipal Corporation.

Figure 2: Increase in Built up since 1991 to 2022



Map 1 : Existing Land Use Map



Area decreased from 153.71 hectares (equivalent to 1.09% of the total area) to 118.28 hectares (equivalent to 0.84% of the total area). It has been

encroached upon by the development as a result of the lack of rejuvenation of the water bodies in the area.

Table 1 : Change in Landuse over the years

Land Use	% of Built-up Area, 1991	% of Built-up Area, 2001	% of Built-up Area, 2011
Residential	48.43	43.99	50.94
Commercial	3.77	3.03	4.7
Industrial	8.97	6.6	5.35
Circulation	13.1	11.5	16.6
Public/Semi-Public	8.75	6.73	8.86
Recreational	1.11	0.74	1.5
Governmental Land	15.88	27.41	10.58
Total	100	100	100

Source: <https://weatherspark.com/>

Demography

Municipal Corporation, Amritsar is the most urbanized settlement of the Local Planning Authority (L.P.A) comprising 61% of its population. Municipal Corporation, Amritsar constitutes 91.5% of the urban population of the Amritsar district. Amritsar, the second biggest city in Punjab, with a population of 10,16,079 people (including outgrowth) and ranks 33rd out of 35 metropolitan cities according to the 2001 census and the world's top 1000 urban settlements (2005). The overall sex ratio for the Amritsar M.C. stands at 865 which is less than the district and state figure of

872 and 876 females/1000 males respectively.

Population Growth of Amritsar City

The largest percentage of Punjab's urban population was reported by Amritsar City (13.03%) in 1981, followed by Amritsar district (91.47%) in 2001, and a little lower rate of 87.64% in 2011. Punjab's decadal growth rate rose from 28.95% to 37.58% between 1981 and 2001 and then dropped to 26.12% in 2011. In the same vein, the Amritsar district's growth rate rose from 18.32% to 43.27% between 1991 and 2001 before falling to 9.10% in 2011. The decadal

population growth rate in Amritsar city increased sharply from 17.62% in 1991 to 42.57% in 2001 and then dropped to 15.11% in 2011. (refer to Table: 2).

Table 2 : Population of Amritsar City and District

Year	Punjab		Amritsar District			Amritsar City (M.C. + O.G. + Cant.)			
	Urban Population	Decadal Growth Rate (%)	Urban Population	Decadal Growth Rate (%)		Total Population	Decadal Growth Rate (%)	%age of the Total Urban Population of	
								Punjab	Amritsar District
1981	4647757	-	721629	-	-	605884	-	13.03	83.96
1991	5993220	28.95	853831	18.32	18.32	712667	17.62	11.89	83.47
2001	8245566	37.58	1223275	43.27	-	1016079	42.57	12.32	83.06
Amritsar after Division in June 2006			1110811	-	30.1			-	91.47
2011	10399146	26.12	1334611	9.1	20.15	1169637	15.11	11.25	87.64

Source: Census 1981, 991, 2001, 2011

Population Density

The population density in Amritsar L.P.A was of the order of 1,190 persons/square kilometers in 2001 whereas the density in the rural area stood at 481 persons/square kilometer. In comparison to that, the population density of Amritsar City was 7,137 persons per sq. km, which is six times

higher than L.P.A. Taking into consideration the ward-wise density in Amritsar, the highest density is observed in the 12 wards which fall within the walled city having a density of more than 300 persons per hectare (PPH) whereas 7 wards falling outside the walled city also have a density in the range of 300 persons per hectare and above. (refer to Table: 3)

Table 3 : Population Density

Year	Population	Area Master Plan 2031		Density	
		(in sq km)	(in Hectares)	PP Sq Km	PPH
2001	10,16,079	142.37	14237	7137	71
2011	11,69,637	142.37	14237	8215	82

(Source: Amritsar Draft Master Plan, 2010 -2030)

CITYLEVELSTUDY

Land Surface Temperature

During the Middle Ages, the city's growth was restricted to the walled region; with time, however, the city expanded outward, as evidenced by the expansion of residential neighborhoods inside the city as well as along the connecting roadways. The interesting thing to observe is that the city's air and land surface temperatures have increased as the built-up area has

grown. High population density areas with little to no greenery or bodies of water have warmer land surface temperatures., the maximum air temperature has increased from 34.22°C to 39.54°C. The India Metrological Department classifies a temperature as being in a heat wave when it is higher than 40°C. March saw a maximum temperature that was almost forty degrees Celsius. March has seen a rise in average temperature from 26.01°C to 34.5°C. (refer to Table: 4)

Table 4 : Climate over the decades

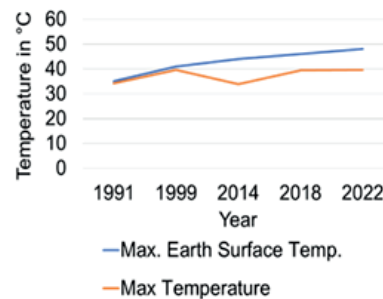
Category	Mar-91	Mar-99	Mar-14	Mar-18	Mar-22
Max Temperature	34.22	39.59	33.87	39.45	39.54
Avg. Temperature	26.01	27.06	33.25	34.08	34.5
Max. Earth Surface Temp.	21-35	23-41	25-44	26-46	28-48
Precipitation (Avg. Yearly)	0.95	0.91	2.12	2.32	0.34

Source: <https://weatherspark.com/>

The land surface temperature was calculated with the help of LST images which were downloaded from the USGS website. The minimum land surface temperature has increased from 21°C to 28°C. These readings are also taken from the month of March. The minimum temperature in green areas in the city in 1991 i.e., 21°C and it has increased to 28°C in 2022. The Maximum Land surface temperature has increased from 35°C to 48°C. (Refer to figure 3). The maximum temperature from the dumping site is in the south direction along the railway

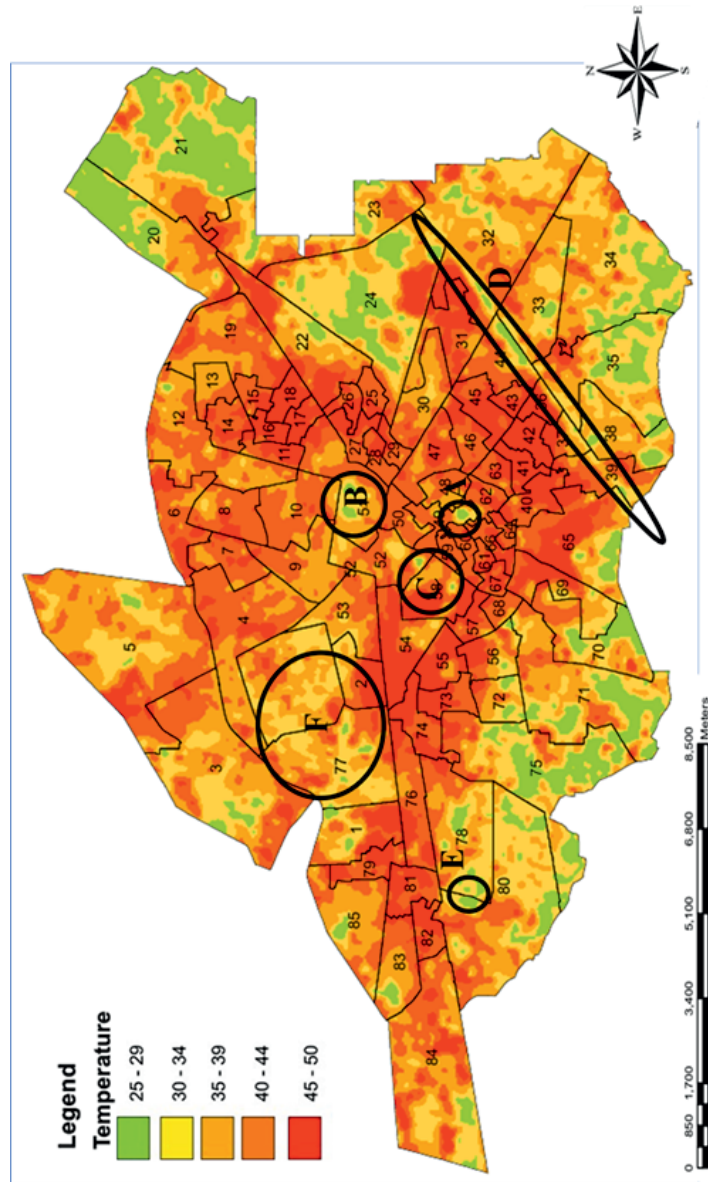
line and this dumping site is close to the residential areas.

Figure 3 : Temperature change over the decades



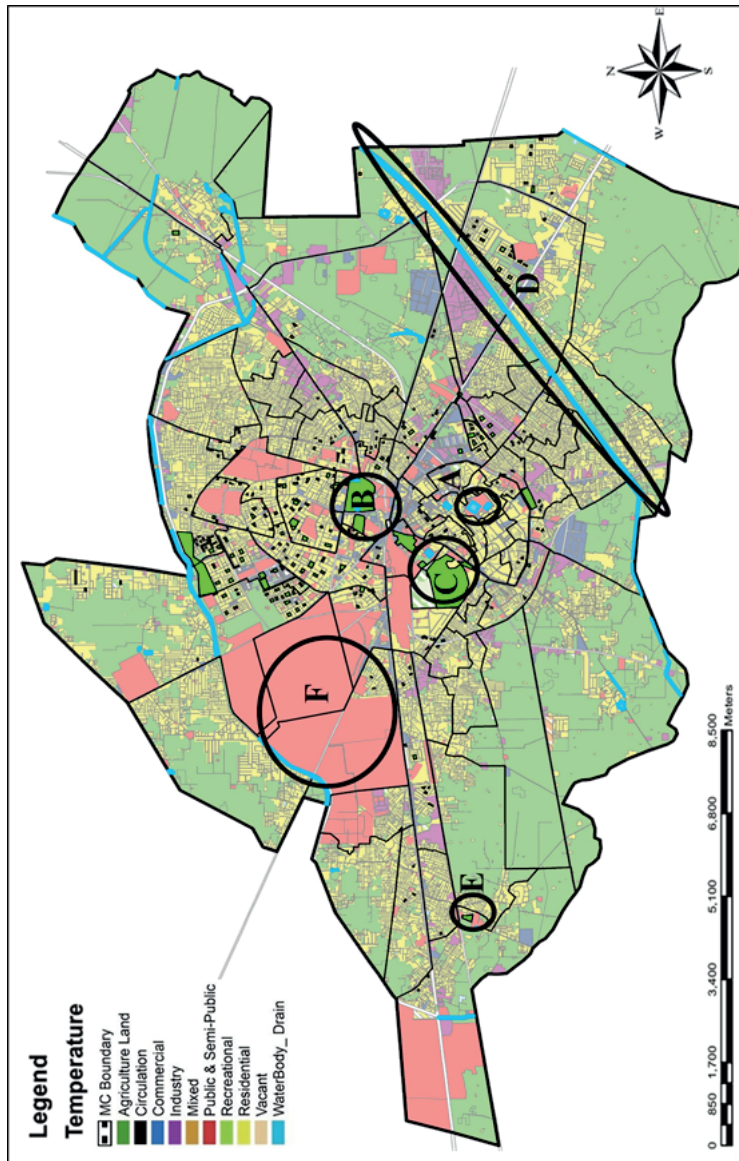
Source: Author Computed

Map 2 : Land Surface Temperature, 2023



Source: Author Computed

Map 3 : Canals and Parks of Amritsar



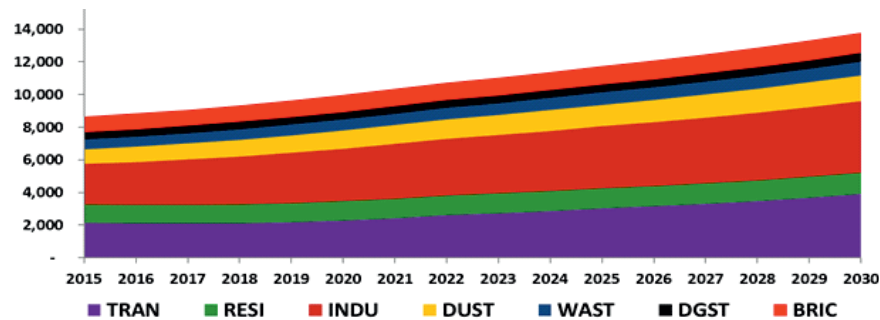
Source: Author Computed

In map 2 & 3, a comparison is shown between Land Surface Temperature map of Amritsar and the highlighted parks and blue spaces. After the comparison it was observed that the areas around the blue and green spaces had the significantly lower temperature as compared to rest of the space.

A is Golden Temple which has Sarovar at the centre, B is Company Bagh, which has a huge diversity of trees as well as pond at the centre. C is Durgiana Mandir Sarovar and Ram

Bagh Park area, D is Upper Bari Doa Canal Area, E is Chheharta Sahib Gurudwara Sarovar and F is Guru Nanak Dev University and Khalsa College Area. In all these places it can be observed that at the center of the marked area, the temperature there is 25 to 29 degree Celsius, but as we move away from it, it keeps increasing to 30-35-39 degree Celsius.. However, biomass and coal burning to provide warmth in the winter will still be an issue. The vehicle exhaust emissions are expected to remain constant.

Figure 4 : Projected total emissions (tons/year) from 2015 to 2030



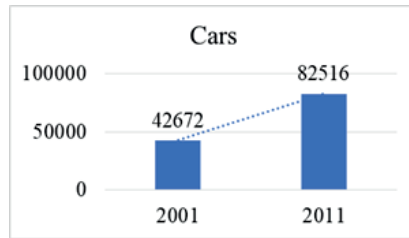
Causes of Increased Pollution Rates

i. Vehicular Growth

One of the major areas of environmental concern in Amritsar city is that of rising air pollution levels which is the result of increasing personalized modes of transport and intermediate modes of transport. During recent decades, due to the growth of population, there are more

and more vehicles on the road. These increased vehicular densities lead to reduced journey speed, jamming conditions, etc and also roads have become accident-prone because of the high volume of traffic and poor geometry of important intersections. An increase in the number of all types of vehicles in Amritsar city has created parking problems too. This leads to problems like traffic congestion, reduced traffic speed, and scarcity of

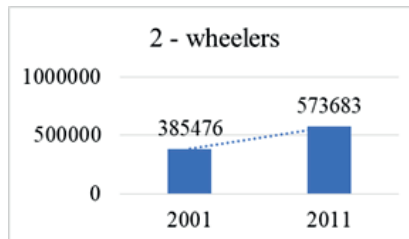
Figure 5 : Increase in 4-wheeler ownership



Source: District Transport Office, Amritsar

land for parking which in turn have a significant impact on the environment through carbon and lead emissions causing severe diseases like breathing problems, cancer, bronchitis, skin reactions, eye sores, stress, mental imbalances, high blood pressure etc.

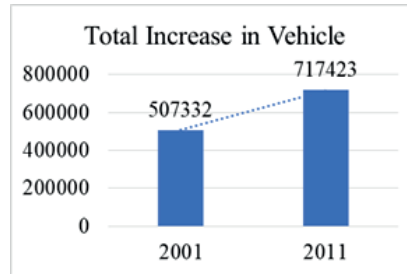
Figure 6 : Increase in 2-wheeler ownership



Source: District Transport Office, Amritsar

The vehicular growth in Amritsar city has shown a significant increase with an average growth of 50% during the period 2006 to 2020 (Refer to figure5). The ownership of two-

Figure 7 : Total Increase in Vehicle



Source: District Transport Office, Amritsar

wheelers has doubled from 2006 to 2020 and their number is expected to grow up to 3 times till 2035. (Refer to Figure: 6). The growth of cars has also doubled from 2006 to 2020. (Refer to figure: 7) The personalized modes of vehicles such as two-wheelers and cars together hold approximately 99% of the total passenger vehicles with an average annual growth rate of 7%. Another important issue is the increasing number of autorickshaws and their unregulated movement on all major/minor roads of Amritsar city. The number of auto rickshaws in Amritsar rose from 12149 in year 2003-04 to 15176 in year 2007-08.

The government of Punjab launched a Bus Rapid Transportation (BRT) system in Amritsar in the year 2014 in an attempt to boost the mass transit system in the city. The BRT has however largely been termed as a “failure” by the people of the city. The other scheme was the phasing out of diesel auto-rickshaws and switching to

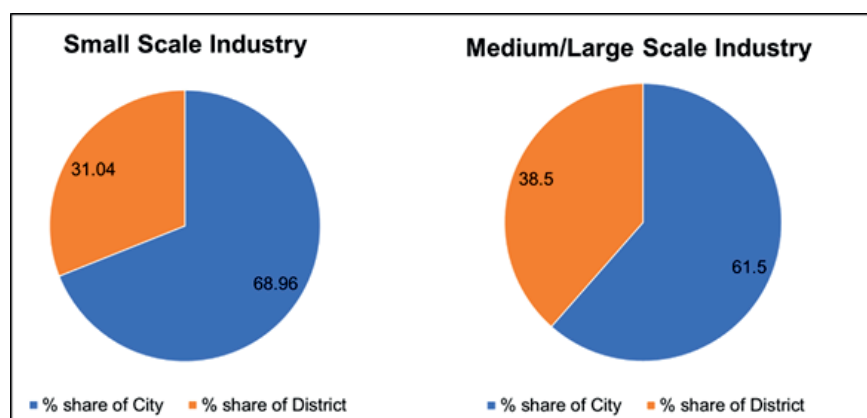
electric auto-rickshaws. Power in Punjab is largely generated in coal-based thermal power plants. The share of renewable energy is relatively low in the state. Therefore, shifting to e-auto rickshaws would simply mean shifting from one fossil-fuel-based energy to another. According to Punjab State Power Corporation Limited (PSPCL), thermal power plants are not able to generate power to their full capacity (India Today, 2022). Punjab is currently getting 4336 MW of power, including 1145 MW from state-owned thermal power plants, 2680 MW from private thermal power plants, and 358 MW from hydropower plants, besides 153 MW from other sources. The switch to EVs makes sense if the state in question produces its electricity from renewable sources of energy like solar, hydro, and wind. But Punjab still relies heavily on fossil fuel-based

energy. This means more than 60% of the power in Punjab is generated using thermal energy (coal-based). For the E-vehicle schemes to be 'cleaner' or effective, the source of electricity should be a renewable one. However, in Punjab, this is not the case. The charging infrastructure that is being developed should be solar or wind-powered. (Gandhi et al, 2024, p.151)

ii. Industrial Growth

Industrialization plays a crucial role in the economic development of any region and has a direct impact on its environment. The main industries of the city are wool, cotton & textile mills as well as dairy & light engineering works. 69% of the total industries in the district lie within the city limits. (Refer to figure 8) Dye and Rubber industries present in and around the walled city

Figure 8 : %age share of industries in the city



Source: Amritsar Master Plan, 2010-2031

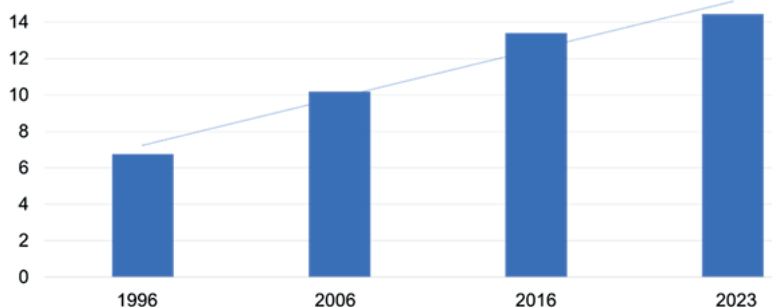
release pollutants like Sulphur dioxide and hydrogen sulfide which are very harmful for the heritage buildings.

The higher SPM (Suspended Particulate Matter) levels have also been recorded in the industrial areas of the city a permissible level of $360\mu\text{g}/\text{m}^3$. Industries are scattered all over which creates problems of non-compatibility as well as pollution in the city. No consideration to wind

direction in the location has been given. Most of the small & medium scale industries release their liquid wastes & solid waste in the drains which causes blockage of drains & frequent water logging. With the increasing use of fossil fuel by industrial units' large amounts of gases, vapors, dust & excessive amounts of CO_2 are substantially increasing.

Groundwater

Figure 9 : Average Decadal groundwater level data meters below ground level (mbgl)



Source: Water Supply and Sanitation Department, Punjab

Quantity

According to the Amritsar Master Plan, over the past decade, water levels have decreased at a rate of 0.27 to 0.75 m/year. As illustrated in the figure, groundwater levels continue to decline at a concerning and alarming rate each decade. In 1996, the level was recorded at 6.75 mbgl (metres below ground level), while in 2023, it has been noted at 14.45 mbgl, which represents more

than a twofold increase over 27 years. (Refer to Figure 9) The primary factors contributing to this decline include the rapid pace of urbanization, characterized by an increasing rate of built-up areas over the years, and the insufficient practice of rainwater harvesting or artificial recharge of groundwater levels in both urban and rural regions of Punjab. Groundwater serves as the principal source of water supply in the city, supplemented by a

limited number of surface water sources. The heightened reliance on groundwater, driven by swift urbanization, industrial demands, and agricultural practices, has made its exploitation unavoidable in Amritsar. Currently, the adoption of Rainwater Harvesting technology is not widespread among residents due to a lack of awareness, despite the Municipal Corporation of Amritsar offering incentives of Rs. 20,000 to households that implement Rainwater Harvesting, which is deducted from the deposit required for mandatory Rainwater Harvesting in Building Permissions. At this time, rainwater harvesting has only been implemented in a few government buildings and within the premises of the Golden Temple and institutions such as Guru Nanak Dev University.

Quality

According to a report by PPCB, to study groundwater pollution in Amritsar City, 27 water samples were collected from shallow aquifers and 23 groundwater samples from deeper aquifers. Two water samples were also collected from the effluents of the Municipal Corporation. The Hydro-chemical studies have indicated that electrical conductivity, sulfate, nitrate, and fluoride concentration in shallow groundwater is higher as compared to the deeper aquifers. The pollution in the form of nitrates at shallow depths is

due to sewage effluent. The heavy metals (copper, lead, manganese, and iron) in shallow groundwater are more than the desirable limit, whereas in deeper levels the concentration of heavy metals is comparatively low. In general, the shallow groundwater is comparatively more polluted than the deeper aquifers due to industrial pollution.

Surface water

In Amritsar, the surface water would encompass–

Canals

A. Upper Bari Doab Canal

Upper Bari Doab Canal (UBDC) flows through the Local Planning Area into the city through the western side. This water body carries freshwater mainly to be used for irrigation purposes, but the portion of it flowing from the city area downstream faces severe impacts from solid waste and other domestic refuse disposal, causing deterioration in water characteristics. Based on visual observation and certain physical parameters, it has been observed that the water characteristics may be in the tolerant limit of the class A to B of surface water. Similar phenomena have also been observed in all surface water sources flowing especially along

the populated abadi areas within the Local Planning Area (Amritsar Master Plan, 2010-2030).

B. Ganda Nallah, Tungdhab Drain

Ganda Nallah flows towards the South of the city from the northeast. Gandha Nallah at present not only carries untreated industrial and domestic effluents but also dense weeds, shrubs, dumped industrial ash/soils, polythene bags, plastics, other domestic refuse, hazardous waste, biomedical waste, heavy silts, mud, cow dung, etc. The number of residential colonies developed along the nallah face the problem of foul smell and have developed mosquito zones up to 1000 meters from it. Apart from these, there are several industrial units which exist along the Gandha Nallah and discharge their untreated industrial effluents into the nallah (Amritsar Master Plan, 2010-2030).

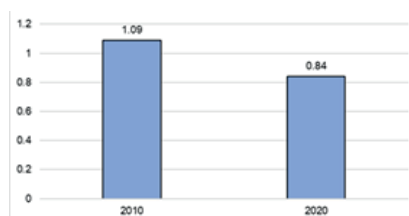
Ponds

This would include the sarovars of Gurudwaras of Amritsar, such as Golden Temple Sarovar, Chheharta Sahib Sarovar, Durgiana Mandir Sarovar, other many more. This also includes the Golbagh Pond where every day boating is done for recreational purposes

Water Quality

Rapidly increasing urbanization and industrialization of Amritsar has not only adversely impacted the quality of ambient air in the city but also affected the city's water resources. The reason behind the reduced submerged area under water bodies is that the

Figure 10 : % of Area Under Water Bodies



channels were ploughed by farmers during the past years. The canal water used for irrigation of agriculture fields has been unfocused in the Majha area due to the introduction of electric motors to fetch groundwater. There is the discharge of untreated industrial and domestic effluents, and solid and biomedical waste into nallahs, drains, and low-lying areas of the city.

Industrial units discharge their untreated industrial effluents into the nallah. Untreated sewage being disposed of into surface sources of Ganda Nallah, not only causes a high degree of environmental pollution but also seeps into groundwater and contaminates it. Water is polluted due

to untreated industrial effluents disposed of into the nallah.

Blue Green Infrastructure Index

Blue Green Infrastructure Index can be defined as the weighted average of blue and green proportion of respective districts of the whole state. It is derived as -

$$\frac{W1X1 + W2X2}{W1 + W2}$$

Where,

W1 is the Weightage of Water available

W2 is the Weightage of Green coverage available

X1 is Actual Water on site

X2 is Actual Green coverage on site.

A BGI index of 0 indicates minimal or no integration or effectiveness of blue-green infrastructure. A BGI index of 1 represents the optimal integration and effectiveness of blue-green infrastructure in managing water and enhancing environmental quality. The BGI index is a way to measure how well a city or area uses natural features like parks, wetlands, or green spaces to manage water and create a healthier environment. (Das et al, 2022, p.83)

According to the table, in the case of Amritsar, the BGI Index is 0.01, which is extremely low. This shows that the blue and green infrastructure present in Amritsar city is not enough for the city to have a healthy living

environment. As per the URDPFI standards, the area under recreation or green spaces should be 20-25% but presently only 1.5% of the area is under green spaces which is negligible as compared to the standards.

Also, it is visible in the Normalized Difference Vegetation Index (NDVI) that the green cover of Amritsar city has decreased tremendously over the last 20 years. This directly affects the Blue-green infrastructure index. NDVI is a remote sensing technique used to quantify vegetation greenness to assess the health of vegetation and is useful in understanding vegetation density. The map illustrates a significant change in the NDVI values over the years. In 2001, the NDVI ranged from 0.5 to -0.3, whereas in 2022, it varied from 0.5 to -0.05. This indicates a notable decline in the vegetation index over this period which means the vegetation index decreased. (Refer Map : 4)

According to data from 2010 & 2020, the extent of submerged land in the Municipal Corporation area decreased from 153.71 Ha (equivalent to 1.09% of the total area) to 118.28 Ha (equivalent to 0.84% of the total).

Stormwater Runoff

As observed the groundwater table is declining at the rate of 0.27 - 0.75 m every year. The main reason behind this is the lack of green spaces to percolate the water to the ground and

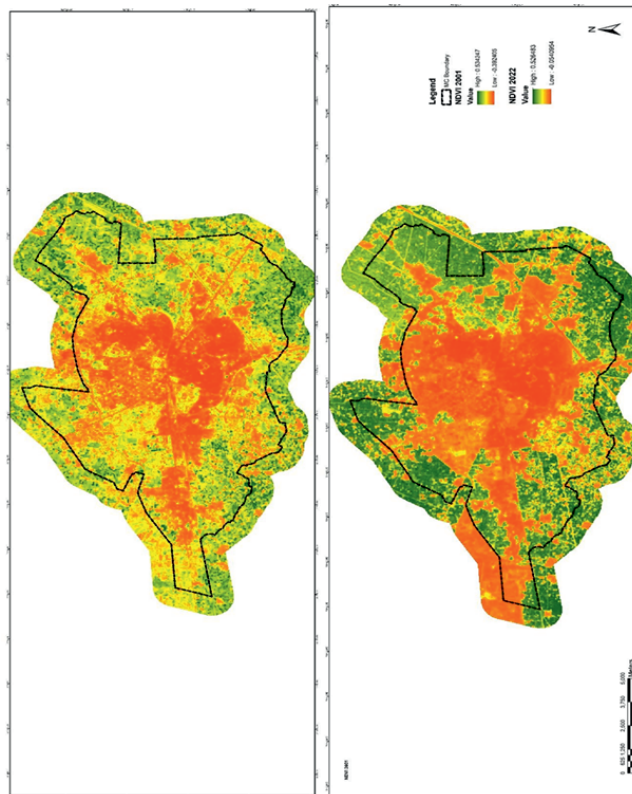
the lack of rainwater harvesting. The situation worsened between the year 2006 and 2016. One of the main reasons behind it is the construction of the BRTS corridor.

Stormwater runoff from all the BRTS Corridors

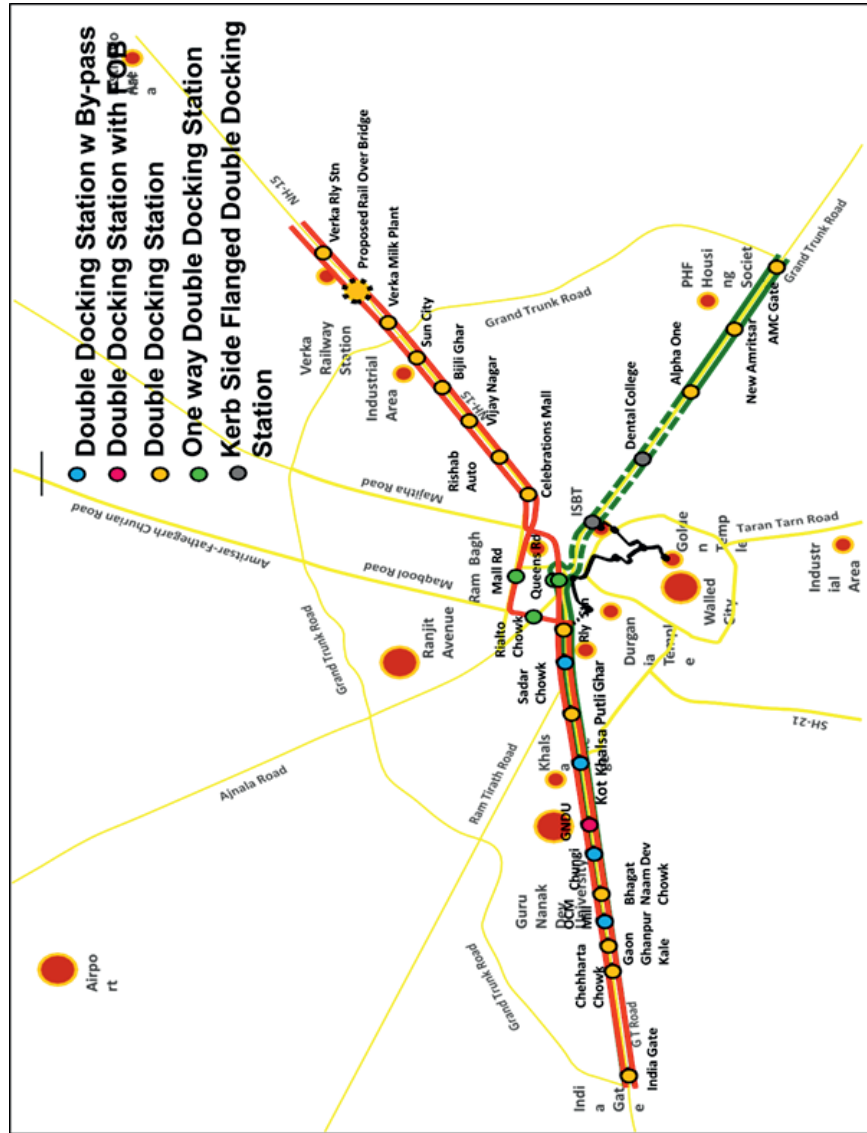
If we have to divide the BRTS Corridor into further sub-parts, it could majorly be divided into 4 corridors (Refer Map :5), which are as follows:

- BRTS Corridor - 1 (Atari Road – India Gate, Chheharta, GNDU, Railway Station)
- BRTS Corridor - 2 (Rialto Chowk, Mall Road, Celebration Mall)
- BRTS Corridor - 3 (Celebration Mall, Bijli Ghar, Verka Railway Station)
- BRTS Corridor - 4 (ISBT, Alpha One, Golden Gate, Amritsar)

Map 4: NDVI



Map 5 : BRTS Corridors and Stations



These four corridors covered the open spaces that existed before on the road and covered it with a metalled road. If we calculate the amount of

stormwater runoff created by each corridor, it would be 191494.80 m3 each year in total, which is shown in the table 5.

Table 5 : Stormwater runoff from 4 BRTS Corridors

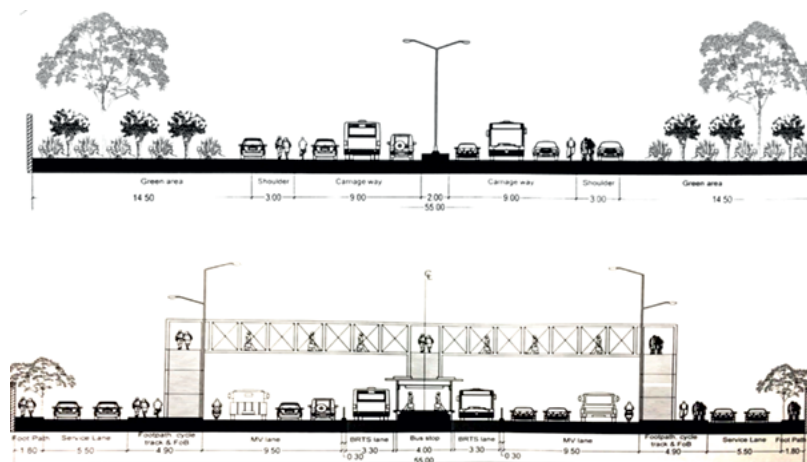
Rainfall (mm/yr)	Area Name	Area (sqm)	Runoff Coefficient	Runoff m3/yr
541.9	BRTS Corridor - 1 (Atari Road – India Gate, Chheharta, GNDU, Railway Station)	467500	0.7	175871.18
541.9	BRTS Corridor - 2 (Rialto Chowk, Mall Road, Celebration Mall)	42329.62	0.7	15924.19
541.9	BRTS Corridor - 3 (Celebration Mall, Bijli Ghar, Verka Railway Station)	50979.09	0.7	19178.08
541.9	BRTS Corridor - 4 (ISBT, Alpha One, Golden Gate, Amritsar)	145721.92	0.7	54819.86
Total Runoff				265793.32

Source: Author Computed

Before the BRTS Corridor - 1 was built, 52 % of the cross-section was under open and green spaces including the sides and the median (Refer figure).

But after the reconstruction of the road, the cross-section consists of only 0.01 % of green space which are small trees on the footpath of the road on both

Figure 11 : Corridor 1 before and after BRTS construction



sides(refer figure). Due to the lack of stormwater management in the city, the issue of water logging is increasing in the city, especially at corridor 1, as there is no space for water to percolate so it stays on the surface of the metaled road during peak monsoon days causing congestion and difficulty to not only the ongoing traffic but also the shopkeepers whose shops are on the main road. Despite having a stormwater drainage system in the BRTS corridor the issue of water logging is persisting. The main reason behind this is that the borewells installed alongside the BRTS lane are not functioning properly. Because no government agency has desilted stormwater drains alongside the bus corridor in the past. They got blocked during the construction and no effort was made to desilt them, therefore they are of no use presently.

Existing Green Infrastructure

According to the Master Plan Amritsar, 2011, the total area designated for recreational use in the city amounts to only 1.5% (124.89 hectares) of the

developed area. This is significantly below the recommended standard of 20-25%, highlighting a severe deficiency in recreational spaces that urgently needs to be addressed. The city primarily boasts four main recreational spaces: Ram Bagh Garden in the north, Gol Bagh and Saktri Bagh in the south, and Rose Garden in Ranjit Avenue. Additionally, there is a stadium known as Gandhi Ground situated on M.M. Malviya Road. Beyond these prominent areas, there are smaller parks and playgrounds scattered within the planned residential colonies of the city. However, these are insufficient to meet the recreational needs of the population.

Moreover, during the extensive construction phase of the Bus Rapid Transit System (BRTS) project, a significant number of trees were lost. Specifically, a total of 512 trees, which had stood for decades and formed an integral part of the local ecosystem, were felled to facilitate infrastructure development and road expansion. This loss has further diminished the city's green cover and exacerbated the scarcity of recreational spaces.

Table 6 : Stormwater from four major parks

Rainfall (mm/yr)	Area Name	Area (sqm)	Runoff Coefficient	Runoff m3/yr
541.9	Gol Bagh	114,520.77	0.25	15386.48047
541.9	Company Bagh	346594.08	0.25	101572.6599
541.9	Shastri Bagh	42486.63	0.25	5708.306905
541.9	Rose Garden	40544.94	0.25	5447.430455
Total Runoff				128114.8777

Source: Author Computed

Furthermore, the city lacks initiatives for rainwater harvesting in its parks and open spaces as in table it can be observed large amounts of stormwater go to waste annually. Currently, no rainwater harvesting projects are being implemented, resulting in the wastage of valuable rainwater through sewage systems or evapotranspiration. This not only represents a missed opportunity for water conservation but also underscores the need for sustainable practices in urban planning.

Conclusion

As we can see from above facts figures and study, Amritsar has experienced reduction in green areas as well as water bodies. There is a dire need in the city to build and implement solutions for blue and green infrastructure at both local and community level like rainwater harvesting methods at city level parks and also on the city flyovers. The components of the rainwater harvesting system will include a catchment area, gutters and downspouts, storage tanks, filtration units, and a distribution system. The flyover surface will act as the primary catchment area. Gutters and downspouts are needed to channel rainwater from the flyover surface to storage units. Storage Tanks are underground tanks with sufficient capacity to store the collected rainwater. Filtration units help filter the

stormwater. In our case, the sidewalk and walkways at BRTS Station can be replaced with Pervious Pavements to increase the groundwater level. This could also be used in existing and new parks for walking areas. These will immensely increase the surface area through which water can percolate into the ground. Installation of green roofs at various BRTS bus stops, introduction of bio swales, green terracing at community buildings, planting of more trees to impact the micro climate could be undertaken. These are some of the recommendations for Urban Local Bodies and Municipal Corporations for Blue Green Infrastructure

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- Those contributions which are found to be as per the 'Guidelines for Authors' would be provided to some member/s on our panel for 'Peer-review'. In case found necessary, the feedback of the panel member/s could be provided to the concerned author for any modifications he/she may like to make based on the feedback and resubmit the work.
- The publisher reserves the right to publish.

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Report Review

Annual Report 2024-25 of the Ministry of Housing and Urban Affairs, Government of India.

Read the full report here:

<https://mohua.gov.in/upload/uploadfiles/files/722HUA-English-version.pdf>

The Ministry of Housing and Urban Affairs (MoHUA) has recently released its Annual Report for the Year 2024-25. This document contains narration and implementation progress of the various schemes of this ministry during the year.

The Introduction states that although there has been rapid pace in urbanisation and the growth of cities, the growth in amenities including housing has not been commensurate. It then goes on to describe the role and various functions of the MoHUA and lists the various offices, PSUs, statutory bodies/autonomous bodies, etc. attached to the ministry. Some initiatives launched by the ministry such as 'AAINA' and 'City Beauty Competition' are also described.

The next Chapter (Chapter 2) is titled Administration and Organisation. Under one of the sections here is the

Budget Section. Here the document gives the Budget Revised Estimates for 2024-25 as approximately Rs 32000 crores Revenues expenditure and approximately Rs 33000 crores Capital expenditure totaling Rs 65000 crore. Against this the actual expenditure upto 31st December 2024 is approximately Rs 40000 crores. An interesting insight is the efforts taken to promote the use of official language Hindi. These include observances of Hindi Day and Hindi Fortnight, and organising of Hindi Workshops.

Chapter 4 is devoted to the flagship programme Swachh Bharat Mission (SBM). It notes that SBM-U has completed a decade of on-ground action where people from every corner of the country have participated enthusiastically and there has been a marked change in the behavioural trends of people. The Mission now moves ahead and goes beyond access to sanitation and covers scientific handling of waste and its processing. SBM-U 2.0 now moves towards the objective of 'Garbage-Free Cities' by 2026. Thereafter is described the various policy interventions of the ministry. These include clean rivers and water bodies, waste segregation, composting of wet waste, waste to electricity, Safai Mitra Suraksha for the well-being of sanitation workers among others. In this chapter there is a section on Digital Interventions for SBM-U. Here various actions taken by the ministry such as the Swachhatam

Portal, Swachhata App, and Swachhata Startup Challenge are described. Here two paragraphs describing the Women-led Swachhata and Youth Engagement are particularly interesting.

Chapter 5 is devoted to Atal Mission for Rejuvenation and Urban Transformation (AMRUT). This Mission covers 500 cities which includes 60 percent of the urban population of the country. This Mission has a total outlay of Rs 100,000 crores with Rs 50,000 crores coming from the centre and the rest from states and ULBs. The thrust areas of the Mission are water supply, sewerage & septage management, storm water drainage, green spaces & parks, non-motorized urban transport, reforms management & support and capacity building. The priority areas are universal water supply coverage and sewerage management. The Annual Report provides the progress against each element of these areas in a lucid reader-friendly manner. Municipal bonds issuance by ULBs is also a part of the reforms under the mission. Progress under AMRUT 2.0 is also covered in great detail. This part of the Mission aims to carry forward the impetus gained so far under AMRUT in the spirit of 'Transformation to Saturation'. It aims to make households in 4900+ urban households water secure while also targeting universal coverage of sewage and septage management in all AMRUT cities. The outlay for this leg of the Mission in Rs 2,77,000 crores

with Central share at Rs 76,760 crores. The Annual report documents reports progress on various projects and initiatives under AMRUT-2.

Chapter 6 deals with SMART CITIES MISSION another flagship intervention of the Government of India. The objectives of the Mission are described in detail. The Central Government outlay for the scheme is Rs 48,000 crores of which the Centre has released over Rs 47,000 crores of which Rs 44,745 crores have been utilised. There is a matching outlay for the States and UTs. The Report throws light on the selection process that was used to select the 500 cities and the thereafter the physical and financial progress under the Mission. This progress is well depicted using tables, graphs and pie-charts.

Chapter 7 covers the Deendayal Antyodaya Yojana – National Urban Livelihoods Mission (DAY-NULM). This is centrally sponsored scheme for reducing the poverty and vulnerability of urban poor with the Mission period ending on 30th September 2024. This Annual Report provides the physical and financial progress under the Mission from 01.04.2024 upto 31.12.2024. It provides the key initiative including workshops, training programmes conducted under the Mission.

Chapter 8 is devoted to Housing. This chapter deals with two broad

subjects, namely Pradhan Mantri Awas Yojana – Urban 2. Or PMAY-U 2.0 Housing for All, and Real Estate (Regulation and Development) Act 2016 (RERA).

The section on PMAY-U 2.0 gives the background to the launch of the scheme and states that it will be implemented through four verticals namely, Beneficiary-Led Construction (BLC), Affordable Housing in Partnership (AHP), Affordable Rental Housing (ARH), and Interest Subsidy Scheme (ISS). It describes the funding pattern under PMAY-U 2.0. Workshops were conducted to disseminate scheme implementation details. It describes the Dashboard that has been created for PMAY-U 2.0 to provide details on the financial and physical progress of the Mission in an effective manner. Details of this progress has been provided in tables bar charts and graphs. There are pictures of several houses constructed under the Mission. Developments with respect to RERA are described in the paragraphs that follow.

Chapter 9 is titled Urban Transport covering this very crucial and key determinant of quality of life in our cities. With its efforts to increase the share of public transport in urban mobility mix, Metro Rail System, Regional Rapid Transit System and city bus system to fulfil the aspirations of smaller towns and cities. The Report

describes the National Urban Transport Policy (NUTP) 2006, Metro Rail Policy 2017. Thereafter, the Annual report describes the progress on many metro projects in the country including Delhi, Bangalore, Chennai, Nagpur, Kochi, Mumbai, Ahmedabad, Lucknow, Surat, Pune Noida, Bhopal, Indore Patna, Agra, and Kanpur. There are sections describing the various innovations and new technologies applied in the course of these works and for the promotion of Make in India through greater local content.

Further chapters are devoted to various other activities and initiatives of the ministry including International Cooperation and Central Vista. Thereafter there are several chapters each devoted to Attached Offices, Subordinate Offices, Public Sector Undertakings, and Autonomous and Statutory Bodies. The rest of the pages are devoted to Appendices which give statistical information on various aspects of the functioning of the ministry.

Given that urbanisation is one the defining trends in the current times and is having a significant impact on the landscape of the country, this Annual report of the Ministry of Housing and Urban Affairs will be of much interest to urbanists, students, researchers and many others.

V. Vijaykumar



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OBJECTIVES

The main emphasis of the Institute's work is to see that the local bodies can contribute more effectively to the development process and provide the citizens with better living conditions by meeting their aspirations in terms of required amenities, infrastructure and better environmental conditions, thus contributing to social and economic development of the society as a whole by better management of the human settlements. While these are the long-term objectives, the immediate ones are:

- ❖ To advance knowledge of the principles and practices of Local Government by conducting research and by organising training courses and programmes at various centres in India for officials and elected representatives in the local bodies.
- ❖ To strengthen and improve Local Government Institutions by improving their performance through education, orientation and bringing them together for common endeavor by organising specialised conferences, conventions and seminars.
- ❖ To make available a platform for members of local bodies and officials for exchange of views and ideas related to urban development and administration.
- ❖ To represent the views of local authorities supported by research work to the concerned higher authorities from time to time.
- ❖ To publish bibliographies, articles, books and other literature on matters of interest to local bodies.
- ❖ To publish journals, bulletins and other literature on different aspects of Local Government and on the working of Local bodies in different states.
- ❖ To undertake research studies in public administration, problems of local bodies and also in related topics of urban and environmental factors and arrange for their publication etc.
- ❖ To establish and maintain an information-cum-documentation service for local bodies.
- ❖ To undertake consultancy assignments in various areas of urban development and problems of local bodies with a view to improve and develop organisational, managerial and operational efficiency.

In view of the above, the Institute has been collaborating with the relevant government departments, Central and State, Universities, Organisations and Research Institutions. The work of the Institute covers several aspects involving a multi-disciplinary teamwork.

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