International Journal for Multidisciplinary Research (IJFMR)
E-ISSN: 2582-2160 ● Website: www.ijfmr.com ● Email: editor@ijfmr.com

Future of Sustainable Development in Indian Small Towns: Sustainability in Santipur Town

Md Sahil Khan[1], Mohd Sadiq Khan[2], Nasifa Khatun[3]

[1]Undergraduate Student, MBBT, 7/32, Baigachipara, Santipur Dist- Nadia, West Bengal, Pin-741404
[2]High School Student, 7/32, Baigachipara, Santipur Dist- Nadia, West Bengal, Pin-741404
[3]Post Graduate, 7/32, Baigachipara, Santipur Dist- Nadia, West Bengal, Pin-741404

ABSTRACT:
India is now the most populated country in the world with nearly 18% of human population but it has only just 4% of the world's fresh water resources. It is estimated that more than 2 lakh people die due to lack of access to safe water and in future nearly 60 crore people may face water shortage in India.
According to Global Burden Of Disease study in 2016, the per person disease burden due to unsafe water and sanitation was forty times higher than China and 12 times higher than Sri Lanka for a person living in India.
A total mismanagement of waste water and lack of separate liquid and solid waste management in many small towns is clogging public sanitation in the countryside and has given rise to uncontrolled water borne diseases and now it is exacerbated due to climate change.
Small towns in India are more vulnerable to harm due to climate change, Government negligence, poor administration and bad public sanitation. Most Government measures are limited to only big cities and highly urbanized areas. This harms the development of Indian small towns where both present and future of India lies.
This paper focuses on the difficulties, solutions and initiatives primarily in Indian small towns. The research area which has been chosen is a town in the state of West Bengal, Nadia district, Ranaghat sub-division, named the culturally historical town of Santipur. We will see the current problems, the measures and many initiatives taken along with success and future recommendation.
We will also study how it affects economically and the role of the Government, public and the society as a whole.

KEYWORDS: Sustainability, Diseases, Role of Government, Resource Management, Climate Change

INTRODUCTION:

The United Nations in 2012 at Rio De Janeiro Council approved the Sustainable development goals initiative and was accepted by all its members. It was implemented in 2015 after the success of Millennium development goals which was a 15-year plan.
SDGs (Sustainable Development Goals):
These are the 17 primary development goals or national targets set by United Nations and agreed by all the members for the betterment of the country and human civilization as a whole. It is a group of 17 goals with 169 targets and 304 indicators as proposed by the United Nations general assembly to be achieved by 2030.

The 17 goals are mentioned below:

1. End Poverty in All Its Forms Everywhere.
2. End Hunger, Achieve Food Security And Improve Nutrition And Promote Sustainable Agriculture.
3. Ensure Healthy Lives And Promote Well-Beings for All At All Stages.
4. Ensure Inclusive And Equitable Quality Education And Promote Lifelong Learning Opportunities For All.
5. Achieve Gender Equality And Empower All Women And Girls.
6. Ensure Availability and Sustainable management Of Water and Sanitation for All.
7. Ensure Access To Affordable, Reliable, Sustainable And Modern Energy For All.
8. Promote Sustained, Inclusive and Sustainable Economic Growth, Full and Productive Employment and Decent Work for All.
9. Build Resilient Infrastructure; Promote Inclusive and Sustainable Industrialization and Foster Innovation.
10. Reduce Inequality Within and Among Countries.
11. Make Cities and Human Settlements Inclusive, Safe, Resilient and sustainable.
12. Ensure Sustainable Consumption and Production Pattern.
13. Take Urgent Actions To Combat Climate Change and Its Impact.
14. Conserve and Sustainably Use The Oceans, Seas and Marine Resources.
15. Protect, Restore and Promote Sustainable Use of Terrestrial Ecosystems, Sustainably Managed Forests, Combat Desertification and Halt and Reverse Land Degradation and Halt Biodiversity Laws.
16. Promote Peaceful and Inclusive Societies for Sustainable Development Provide Access to Justice for All and Build Effective, Accountable and Inclusive Institutions At All Levels.
17. Strengthen the Means of Implementation and Revitalize the Global Partnership for Sustainable Development.

Before the implementation of the SDGs, the United Nations adopted in September, 2000, The Millennium Development Goals which are as follows:

1. To Eradicate Extreme Poverty and Hunger.
2. To Achieve Universal Primary Education.
3. To Promote Gender Equality and Empower Women.
4. To Reduce Child Mortality.
5. To Improve Maternal Health.
6. To Combat HIV/AIDS, Malaria and Other Diseases.
7. To Ensure Environmental Sustainability.
8. To Develop a Global Partnership for Development.

Sustainable Millennium Goals achievement by India (ranked as per the number of goals completed in the corresponding fields)

SDG Topic	Rank	Average Rank
Health	**1**	**3.2**
Energy **Climate** **Water**	**2**	**4.0**

Education	**3**	**4.6**
Poverty	**4**	**6.2**
Food	**5**	**7.6**
Economic Growth	**6**	**8.6**
Technology	**7**	**8.8**
Inequality	**8**	**9.2**
Gender Equality	**9**	**10.0**
Hunger	**10**	**10.6**
Justice	**11**	**10.8**
Governance	**12**	**11.6**
Decent Work	**13**	**12.2**
Peace	**14**	**12.4**
Clean Energy	**15**	**12.6**
Life on Land	**16**	**14.4**
Life Below Water	**17**	**15.0**
Social Inclusion	**18**	**16.4**

Courtesy: Byjus

Climate Change in India and Its Implications for Sustainable Development Goals:

The country of India is on the frontlines in fight against climate change. It has taken many initiatives and has seen its fair share of success and failures.

Since the Census of India 1981, the definition of urban-rural settlement has been largely unchanged. Thus, the data publicly available is somewhat contradictory to current ground reality. Thus, the research paper can only provide an average and self-collected data. So, it reduces the scope of research.

India has over 8000 cities and municipalities which has nearly 47 crore people, in them only 600 have a population over 80000. The remaining 7400 small municipalities are the small towns we have determined in our research. Many of them will face climate change in its various forms ranging from reduction in ground water, crop failure, inconsistent monsoon and many more. Thus, they face many barriers to achieve sustainable development goals (SDGs).

According to the Central Pollution Control Board of India (CPCB), sanitation services by public bodies have largely failed and less than 20% of sewage is treated.

But there has been many improvements also ranging from expansion of public services, decentralization of power to local bodies, electrification of public transport, etc.

REVIEW OF LITERATURE:

According to Debojit Dutta, Shristi Gupta (2023) in sustainable mode of transportation, India is already a world leader when it comes to last mile Public transport, especially in three wheelers (E-Rickshaw). The public roadways which were earlier dominated by either commercial vehicles or car owners now have been democratized as now even those from low income households can take the benefit of public transport because of electric rickshaws. They have also contributed for Sustainable environmental development and electrification of public transit. They have also provided blue collar jobs to many people, improving on many sustainable development goals. Now nearly more than 60% of all three wheelers are electric.

In addition to that, the national rail electrification has provided many benefits and helped in achieving sustainable development goals. This has provided people with a clean sustainable and necessary public transport to many towns. According to Chitresh Shrivastava (2018) of Jain University, the Indian Railways by its own estimate will save 41000 crore rupees annually.

In Waste Management, the data given by Ministry of Environment, Forest and Climate Change (2023), India produces 62 million tons waste from which 70% is collected and only 12 million treated, while 31 million tons end up in Landfills. This is set to rise to more than 165 million tons by 2030.

According to Central Pollution Control Board (CPCB) (2023), in waste water management, India also lags behind. Although it produces 72368 million litres per day (MLD), it only treats just 11622 million, not even one-fourth of the total amount. Despite the fact that India has only 31841 MLD capacity for treatment (CPCB).

INDIA'S INITIATIVES FOR SUSTAINABLE DEVELOPMENT GOALS:

India has taken many initiatives to fulfill the non-binding inter-governmental agreement with United Nations to fulfill sustainable development goals. In India, the aim is to achieve it by 2030. The responsibility of SDGs implementation is overseeing by Niti Aayog. The following is a list of the status and implementation measures for each sustainable development goals:

Courtesy: GS SCORE Quick Revision Notes

SDGs	STATUS	IMPLEMENTATION
NO POVERTY	Global Multidimensional Poverty Index, 2018: In India declined from 54.7%(2005-6) to 27.5%(2015-16)	MGNREGS, National Social Assistance Programme, Schemes to improve the lot of Farmers.
ZERO HUNGER	India's rank on Global Hunger Index, 2018: 103	Strengthening of agriculture with numerous schemes like PMBY, Rashtriya Krishi Vikas yojana, infrastructure improves. Ensuring food security (TPDS, NFSA, National Nutrition Mission, etc.).
GOOD HEALTH AND WELL-BEING	Improvements in various mortality rates, reduction in HIV cases but overall infrastructure, remains poor.	National Health Mission, Ayushman Bharat Katops Mission Indradhanush, etc.
QUALITY EDUCATION	100% net enrolment ratio in primary Education, 74% literacy rate but quality of education needs huge improvements	Ongoing sarva shiksha abhiyan, mid-day meal scheme, teacher training, etc.
GENDER EQUALITY	Tremendous Improvements in gender parity in education but	Schemes Ake Beti Bachao Beti Padhao, Sukanya

	problems like low representation in Legislatures, violence against women continues.	Samriddhi Yojana, Jananates Suraksha Yojana, etc.
CLEAN WATER AND SANITATION	Improved water access has reached 90% of households by 2015-16 but sanitation facilities remain low, esp. in rural areas.	Swachh Bharat Abhiyan, Natamam Drinking Water Programme, Namami Gange, etc.
AFFORDABLE AND CLEAN ENERGY	Despite improvements, about 20 crore people still don't have access to electricity. Besides, the growing demand also calls for enhancing capacity in renewable sources of energy.	Interventions in rural electrification, New ultra mega power projects, National Solar Mission, etc.
DECENT WORK AND ECONOMIC GROWTH	Sustained 7% growth levels but jobless growth can compound problems.	National Skill Development Mission, Atal Innovation Mission MGNREGS, National Service Scheme, etc.
INDUSTRY, INNOVATION AND INFRASTRUCTURE	Growth in manufacturing sector is far behind the services sector.	Make in India, Start-up India, Pandit Deen Dayal Upadhyay Shramev Jayate Karyakram, etc.
REDUCED INEQUALITIES	Gini coefficient for income inequality: 36.8% (2010) to 33.6% (2015). But >90% of wealth still with less than 10% people.	Three pronged "JAMM based programmes aim at a comprehensive strategy of inclusion financial empowerment and social security.
SUSTAINABLE CITIES AND COMMUNITIES	Rapid urbanisation, yet 17% in slums urban population lives 68% population live in rural areas.	NUR, AMRU Tops, Pradhan Mantri Awas Yojana
RESPONSIBLE CONSUMPTION	Management of waste and pollutants is weak. The carbon dioxide emission is 3rd highest in world.	India has committed to reduce emissions intensity by 33-351% of its 2005 level by 2030. Omer steps for National Policy on Biofuels and National Clean Energy Fund.

CLIMATE ACTION	India has committed to reduce emissions FES Intensity by 33-35% of its 2005 level by 2030.	Huge emphasis on clean energy like solar mission, etc. in recent years.
LIFE BELOW WATER	Huge coastline provides livelihood to 250 million people. Sustainable use of these resources is posing a problem.	Projects like conservation Sagarmala, National Plan for of aquatic ecosystems, Schemes related to Blue Revolution
LIFE ON LAND	Degradation in Agricultural Land. Forest cover is 21%.	Signing of UNCCD (UN Convention to Combat Desertification), Aichi targets of CBO Implementation of Novorotocol National programs on integrated development of wildlife habitats, etc.
PEACE, JUSTICE AND STRONG INSTITUTIONS	Garaguntan amounts of pending cases in Courts	Government initiatives like Pragati Platform, public Grievance redressal system, development of gram nyayalayas and other infrastructure. However, more needs to be done on a war footing.
PARTNERSHIPS FOR THE GOALS	India has been an important part of this new global partnership.	India is a part of SCO, BRICS, SAARC, etc. and various UN Agencies and program around the world.

CURRENT SCENARIO IN SANTIPUR TOWN:

The town of Santipur is of historical and cultural significance. It has been facing climate change and many other barriers to achieve sustainable development goals (SDGs) and it has both faced problems and provides glimpses into future solutions.

Although Santipur is naturally a very well-endowed place, it has extreme governance problems or lack of it. The crime rates have steadily increased. It has a moderate crime rate with a population of approximately 1 lakh inhabitants and it has in the past few years have improved security measures and maintained law and order resulting in the decrease of crime rate in the recent years. Thus, nowadays Santipur is generally safe.

It has very limited waste water management. There is a lack of public drains. Most waste water is collected in private waste wells in their own residential area. The municipality has over the years pragmatically improved well cleaning, transport services rather than building costly drains. It has now started covering even the poorest of households today.

In waste collection, it is a mixed bag. Although, over the years it has steadily increased the reach of waste collection. Still though, it has not been able to properly dispose the waste.

Most of the waste is filled in open landfills which is just less than 5 km from the city Centre. The people who live near the landfills have increased chances of diseases.

But at the same time, it has been able to achieve great levels of electrification and public transit. Much of this growth is possible due to more and more amount of electric-rickshaw which provides a clean, cheap and sustainable mode of transport which also provides a great number of blue collar jobs. Because of its low cost of maintenance and low cost of travel and availability of FAME SUBSIDY SCHEME.

The train services which uses Santipur has a junction of its own is widely used and serves as a lifeline for its economy. As many use it for reaching required destinations (Indian Railways Wikipedia).

LPG gas connection has improved but many people are still deprived of it due to high cost. The LPG gas supply in Santipur is provided by INDANE Company (PSU- Public Sector Unit). Although many people have benefitted from the LPG connections, there is still rampant use of coal which has proved itself a very strong barrier to further increase gas supply. (Santipur Grameen Vistral- INDANE).

In agriculture, not much advancement has been made. It has been a steady importer of food import.

In case of providing clean and safe drinking water, it has steadily expanded. Now new areas like Baigachipara are added to its water supply change. IT has a facility along riverside to treat river waters taken following initiatives into clean drinking water.

It is also part of in terms of agriculture and food production. Under Ranaghat Sub-division, the following initiatives are taken:

1. To Bring all intending and eligible farmers under K.C.C. umbrella.
2. Dissemination of latest technology through conduction of compact demonstration of paddy under BGREI scheme.
3. Farmer awareness campaign in the light of adoption of modern agricultural technology.
4. 100% seed replacement through HYV, certified seeds.
5. Adoption of hybrid paddy cultivation.
6. Extension of crop coverage through plus and oilseeds.
7. 100% seed treatment coverage.
8. Replacing traditional paddy cultivation through SRI (System of Rice Cultivation)
9. Extension of irrigation potential through distribution of pumps set.
10. Quality seed production through farmers, farmers club, self-help group (SHG), joint liability Group (JLG) etc.
11. Mechanization of Agriculture through subsidizes distribution of modern Argil. Implements.
12. Organic farming through Bio-Village programme with an aim towards sustainable agriculture.
13. Sale of fertilizers within MRP/RP.

INITIATIVES BY CORPORATES IN SANTIPUR IN HELPING REACHING SDGs AND MDGs:
Following initiatives are taken by many corporates in Santipur which has helped in reaching the SDGs and MDGs:

1. E-commerce firms like amazon and Flipkart have partnered with local tant saree producers of Santipur and helped them reach a larger market base.
2. Hooghly motors have increased their production of e-rickshaws to meet ever growing demand of public transport aiding in democratisation of public roadways for people from low-income households.
3. The Santipur Municipality Water Corporation has increased clean water production output for growing demand due to expansion of necessary public services.
4. Companies like bandhan bank, muthoot finance have opened office and thus provides necessary public services related to finance.
5. Pharmacy companies have also set up shop to provide necessary medical services.

Today Santipur has a buzzling business ecosystem but also ambience of traditional life.

CHALLENGES:
Despite its many successes it also faces many challenges, which it needs to overcome to meet its both climate and sustainability goals, following are just a few of many problems faced by Santipur:

1. Dearth of good teachers in town, thus many students have to go out of town to study.
2. Its higher education especially the Santipur College has failed in providing quality education.
3. It has poor infrastructure in many parts.
4. It also has high level of gentrification along religious lines, thus stops it from building a truly inclusive society.
5. It also has a lack of funds due to less authority thus stops effective taxation and governance.
6. Much of its economy is unorganized, thus limits its growth.
7. It also has like many other towns, lack of organized urban planning.
8. Lack of attention in agriculture sector, thus limits its potential.

RECOMMENDATION:
The town of Santipur has fared fairly well and has met many sustainability goals despite its limited resources but it's not even close to its full potential. A good management and workforce training will substantially improve productivity and public trust. Following are some recommendations which are highly feasible under current circumstances in Santipur:

1. **Establishment biogas plant:** It will provide a cheaper local alternative to LPG and contribute to local economy, provide manure to crops and create many jobs and will help in climate change prevention.
2. **Food production program:** Many foods like eggs are produced in phoolia and habbibpur, which can be easily produced in Santipur, thus creating many jobs and driving new business.
3. **Holding regular elections:** Municipal elections have become irregular which erodes public trust and stops effective governance.
4. **Expanding various operations in river:** Santipur is blessed with a great river but still there is just no interest in expanding commercial operation in rivers aside from just mere cross river transportation. It can range from concentrated fish farming, putting watermills to generate electricity, organizing river sports like boat racing, expanding river tourism etc.

These are just some of many feasible in short term, but in the long term it has to invest in education especially higher education, Santipur college has to reinvent itself and provide high quality education, the local government also needs to train teachers for primary education and its people has to aim for high value jobs which is now easier due to internet and work from home.

CONCLUSION:

From this research we can safely sat that Indian small towns are very much neglected but is also much as important for both economy and sustainability goals. The example of Santipur shows just how much potential is there in these towns, they are both a symbol of past and future of our country and important for climate goals. As due to lack of human development much of society is not able to contribute to policy making. But those who are in position to do so can do sustained effort to meet various goals for human upliftment,but, but from an individual perspective we can do many things ranging from stop wasting, holding officials accountable to law and create a human oriented society. From this research we can also draw some standard lessons for small towns in India:

1. Focus on education; we need to increasingly train our skills to keep competitive.
2. Create new industries inside town to drive growth and jobs
3. Create better access to internet.
4. Having a rail link is very important
5. Increase the electric rickshaws in city to achieve various goals.
6. Create biogas plant as they are cheap and very beneficial
7. Create a recycling industry for driving both jobs and sustainability.

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