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# AN ENQUIRY ON UNEVEN DEVELOPMENT OF RAJPUR-SONARPUR MUNICIPALITY, SOUTH 24 PARGANAS DISTRICT, WEST BENGAL (WITH FOUR WARDS UNDER FOCUS)

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# Abstract

Regional Planning is an important branch of Geography and it includes a sequence of actions which are designed to solve problems in future. The diverse arena under the purview of planning offers the geographers with endless research motives and options, urban development being one of them. Imposition of urban functions causes sprawl of the city engulfing rural settlements- the crux of urban regional development. In this process of city growth, fringe area development is a focal point of research for the planners. Rajpur-Sonarpur is designated as a peri-urban fringe location with a character contrast of dominating urban influences and persisting rural attributes leading to growth variations. Here an attempt has been made to analyze the glaring disparities of Rajpur-Sonarpur municipality (selected ward wise study) in terms of development parameters. This is a humble step to identify and evaluate the pressing threats and opportunities in order to remedy lopsided development.

Keywords- urbanization, sprawl, fringe area, disparity, development.



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**Backdrop Of Study-**The History of Kolkata dates back to 17<sup>th</sup> Century with the arrival of British East India Company. After 1757, Gobindapur was cleared for the construction of new

Fort William and Hastings, a place of temporary residence was created. It was then that residential quarters were shifted to the east of the present Maidan thus leaving the block around Lal Dighi or the present BBD Bagh to offices. During this process of urbanization from the central core there was gradual decentralization of functions to the periphery. However, in view of the modern complexities of city structure delimitation of city boundaries posed as a problem. Thus areas emerged outlying the administrative boundary of Kolkata where gradual socioeconomic transformation was taking place through propagation of urban influences and cultures with pre-existing rural characteristics. Thus, places like Garia, Narendrapur, Sonarpur etc. emerged as peri-urban fringe areas beyond the southernmost limit of Jadavpur.

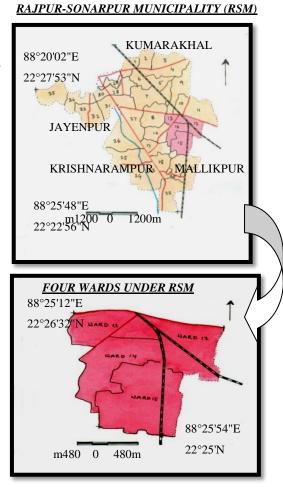
Rural urban fringe area is an area of mixed urban and rural population and landuse which is premature to perform urban functions but accommodates significant number of people, principally dependent on the adjacent urban area for occupation, community and other services.

This is the area where the city and the country side clash and in this process of transition from rural to urban landscape stark dissimilarities are marked in levels of growth and development which is a threat for progressive and balanced development.

# Selection Of The Study Area-

The study area encompasses the Rajpur-Sonarpur municipality (22°22′56"N to 22°27′53"N and 88°20′2"E to 88°25′48"E) of Baruipur subdivision in South 24 Parganas

district ,West Bengal. Being situated at the urban fringe of Kolkata and rural fringe of Caning, there exists diversity and disparity. Rajpur-Sonarpur like any other upcoming growth foci continues to struggle with myriads of social, economic, infrastructural problems and especially with that of lopsided regional development. With this view, a study on the resource distribution and problems of 4 selected wards (12, 13, 14 and 15) has been undertaken with a comparative approach.



SOURCE: RSM

**Objectives-** The present work is undertaken with the following deliverables-

- To study the demographic, land use and infrastructural components of the study area.
- ➤ To identify and evaluate the factors accentuating disparity in distribution of basic services.
- > To analyse the perception of the residents regarding various felt problems of the study area.
- To demarcate the leading and lagging behind regions.
- ➤ To outline feasible suggestions for the rejuvenation of backward and degraded space of today this might become the perspective urban territory of tomorrow.

#### Database And Methods

Data has been drawn from a wide variety of sources including primary and secondary sources.

- > Primary database: Primary data have been collected the through interactions with the residents of wards 12, 13, 14 and 15 and at selected traffic nodes along Garia-Rajpur main road. (random sample survey via Questionnaire schedule and observation).
- Secondary database: Elaborative and expansive secondary data bases have been obtained from Sonarpur-Rajpur Municipality, the governing bodies of 6 schools(each primary and upper primary) and administrative authorities of Satya Rani Memorial Nursing home and Diagnostic Centre (Harashit) And South Star Nursing home (Pradyut). The secondary data on the study area and related aspects were collected from Rajpur-Sonarpur Municipality and Census of India (2011). All the collected data were analyzed (both spatially and temporally) by statistical and cartographic analysis using MS Word, MS Excel, Adode Photoshop 7 and manual portrayal.

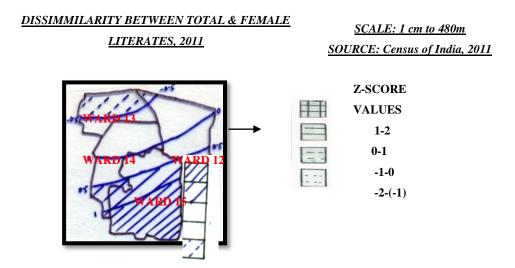
# **Analytical Perspective Of The Study**

Attributes Of The Study Area: During the year 1869, "South Suburban Municipality" was set up, that comprised of Behala and extended up to the extreme southern part of South 24 Parganas. A new municipality was named "Rajpur Municipality" covering an area of about 2sq. miles and consisting of 5 wards on (1<sup>st</sup> April 1876). Thereafter, 26 mouzas were included in it and the newly formed municipality, "Rajpur -Sonarpur Municipality" (49.25 sq.km) with 35 wards (23<sup>rd</sup> DISTRIBUTION OF MALE & FEMALE March, 2009).

- Population projection (2001-2021) —less population growth (wards 12 & 14), explosive trend (15) & declining population in (13).
- The dissimilarity in males and females are varied- in 2001 highest in wards 12 and 15 but in 2011 wards 13 & 15

shows a dissimilar trend.

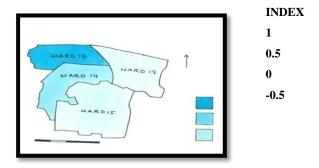
- Occupational Pattern of population (2001 and 2011) in the wards 12 & 15 the total no. of workers (other category) has increased.
- Increasing socio-economic activities has led to a landuse diversion (2001-2011) towards transportation, public-semi-public, commercial and residential orientation.



*Disparity In Basic Utility Services:* Educational status-The surveyed wards 12&13 are in a better off situation with respect to educational opportunity and standards. Only ward no. 15 is comparatively lagging behind although new schools are being established and growth of literacy is on a high.

- The growth rate of literates 4.1%(13),2.7%(12),2.66%(14) and 5.7%(15)
- The student-teacher ratio is higher in ward 13 (47 students/ teacher) and poorer ratio in wards 12 and 15 (with 55 students/ teacher.)

SCALE: 1 cm to 480m
SOURCE: Census of India, 2011



**Health and medication facility-** A discrepancy in health status is found with respect to the location of major hospitals, nursing homes (surveyed) and primary health clinics (mostly concentrated in wards 11 and 12). In 2011 the patient growth in Harashit Nursing home is (14400) compared to Pradyut (10080). Thus Performance & preference wise- Harashit scores over Pradyut (bed availability, services, influence area etc). Due to locational advantage and easy connection to the city centre, outflow of patients are visible to the medically developed region.

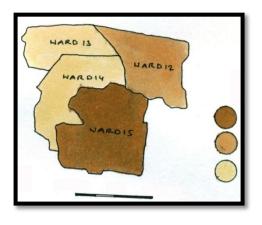
Access to water and drainage facility- Drainage and sewerage holds an important criterion for development. The wards wise comparison indicates wards 13 and 14 to be in a development state compare to wards 12 and 15.

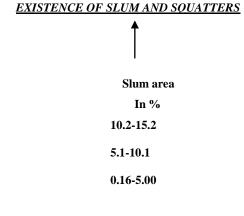
# WATERLOGGING AREA UNDER DIFFERENT WARDS **INDEX** WARD 12 In % WARDIU 0.85-1.25 0.45-0.85 0.05-0.45 **LEGEND** 150 195 DETOUR INDEX SHOWING ACCESSIBILITY SOURCE: RSM, 2011 SOURCE: RSM, m480 0 480m 2011

- Distribution of drainage parameters-65 tube well & 74 stand posts (12) pipelines of 4686 mts. (13).
- Sewerage system- wards 12, 13, 14 (greater length of drains) mostly surface in nature.
- Location & distribution of ponds and water logging- higher concentration in wards 13 and
   14.
- Drainage system and drainage density (2011) improved- the maximum range (13.5 20) in wards 13 & 14 and the minimum range (.5 .7) in ward 15.

*Transport Network And Connectivity:* The transportation has been analyzed depending on road network, accessibility and performance of south-eastern railways.

- Among the wards 15 has the highest density (2.79 km/km2) but least accessible.
- The length of pucca road highest (15) but kuchcha road is also high- Maximum Length of bituminous road (12) and maximum the length of concrete road(13).
- The bifurcation of the south eastern railway line occurs at Sonarpur, fosters connectivity between Kolkata, Sagar Island, Namkhana and Diamond Harbour.
- Apart from few long route trains connecting Lakshmikantapur (48) ,Baruipur(41), Diamond Harbour (53) , Canning (50) trains to Namkhana (4) and extreme south are too less.
- There is a predominance of bikes ,auto routes daily carrying passengers from remote area at surveyed cross roads (Narayanpur - Kheyada , Sonarpur - Aghar Sarani and Sonarpur -Rajpur).





SOURCE: RSM,

m480 0 480m

*Multidimensional Attributes:* The growth & development of a region rests on multidimensional factors such as waste disposal, green coverage, Beautification projects (parks, playground etc.) and existence of slum area. In terms of various amenities there is a disparity in growth depending on the spatial extent of the wards and their land utilization.

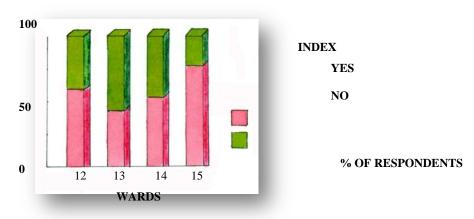
- Garbage clearance is not provided in 918(12), 123(13)800(14)2688(15) families.
- Green Coverage -lowest is in ward 12 (0.09 0.34 %), moderate in wards 13 and 14 (0.341 0.591%) and highest in ward 15 (0.592 0.842 %).

# **Perception Of Households And Its Comparative Analysis**

*Information on Household, Assets and Liabilities-*In terms of literacy, ward 13 (more than 12% post graduate students and minimum illiterates) and 14 (10% post graduate female students) are

better but ward 15 is lagging behind (with few graduates and 24% female illiterates). On municipality tax value, daily chores and transportation, expenditure is maximum in wards 13 and 14 and lowest in 15. The income and expenditure directly culminates to savings. The amount of savings is maximum in ward 13(RS.180000) and is minimum in ward 15(RS.60000) backed by high income groups in wards 13 and 14. Inspite of being advanced educationally, expenditure on education is less in ward 13, this may be due to limited younger folk and contrastingly in ward 15 with rising child population, opportunities for free education is given thereby reducing expenditures.

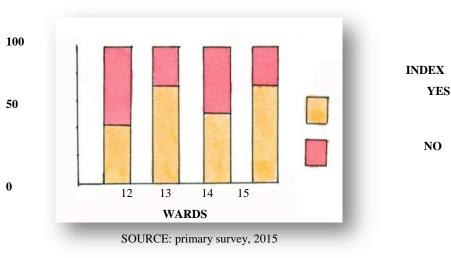
\*\*POLLUTION A MAJOR THREAT\*\*



SOURCE: primary survey, 2015

A view on living conditions-The availability of water (mostly via tube well, pipe line and stand post) is satisfactory in all wards -12(70%), 13(90%), 14(83.3%), 15(56.7%). Roads are mostly Pucca in wards 13 (93.3%) followed by 14 (86.6%). The market accessibility plays an important role, where most of the residents 66.7% (ward 12), 50% (ward 13), 60% (ward 14) and 40% (ward 15) derive the necessary articles within 5 to 10 minutes. Water logging problem is acute in wards 13 (83.3%) and 14 (80%) and it is least in wards 12 (66.7%) and 15 (23.3%) taking a toll on average road condition in all wards. This is due to low lying areas, saucer shaped land, heavy population pressure, improper clearance of rainwater and road maintenance. The persistence of water logging problem is reviewed as mostly for 1-7 days in wards 12 (60%), 13 (12%) aggravating in post monsoons. Thus predominance of ailments are found in ward 15(50%), and 14(33.3%) with popular reliance on health centres and local clinic for medication. Availability of safety and security measures are well off in wards 13 (83.3%) and 14 (86.7%). However, dissatisfaction with security services owe to the ineffective functioning of police patrol and booths.

# SATISFACTION REGARDING DEVELOPMENTAL MEASURES



% OF RESPONDENTS

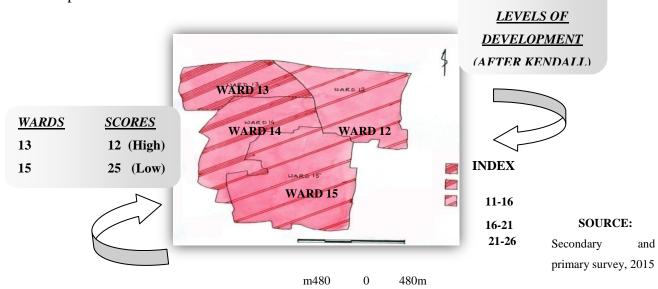
Growth and Development: an Overview-The growth and development of Sonarpur – Rajpur is quite recent but Remarkable. This is due to migration of rural folk to this upcoming urban center which is maximum in ward 15 (closer to village boundary) and minimum in ward 13 (highly urbanized) and there has been a visible transformation in terms of urban land use planning. In this attempt, railways acted as a life line (73%, 83%, 90%, 96% responses in wards 12,13,14,15 respectively). The major parameters of development are transportation (more than 85% respondents in wards 13 & 15) followed by market (ward 12 and 13–96%), drainage system (ward 14–83%), water supply, street lighting etc.

### Findings, Recommendations And Conclusion

The **major findings** from the aforesaid study are enumerated below:

- Demographically, population density and composition (age-sex wise) shows maximum variations with high existing population pressure in wards 13, 14 and high projective growth in ward 15.
- A comparison of landuse pattern rightly potrays increasing transportation and diminishing green coverage.
- Educationally, variability exists in terms of literate personnel/100 persons (worst in ward 15).
- Health and medication is in a sorrow state as the there is large scale disparity in staff allocation and patient growth for the two principal nursing homes.

- The drainage and sewerage system is at stake in all the wards, ward 13 suffering due to water logging problems and clearance of storm water.
- Transport connectivity deserves special as ward 15 has the highest road density (mostly kuchha roads) but poor in accessibility.
- In terms of other development parameters (beautification projects, solid waste management, green coverage, slum area) ward 13 is well served but open spaces still persists in ward 15 with encroaching slum dwellers.
- The ward wise primary analysis brings to light the prosperous condition for 13 and 14 (assets, liabilities, literacy, earnings, civic infrastructure and livelihood conditions).
- Since development and modification go hand in hand, ward 15 bears the highest growth proposals with maximum changes over the last 4 years with railways acting as lifeline for development.



Once the feedbacks from the ward committees and stakeholders received and all the information from secondary and primary sources were available, the technical analysis was being carried out to arrive at the **suggestive measures** and action plans-

- Need for rapid development of better socio-economic life of all the strata of the civic society to cope with the challenges arising out of undulating population spread-out.
- Awareness and empowerment of the slum dwellers to protect the assets created within the slum.

- Better coordination with State Government Hospitals and dispensaries for maintaining an improved referral system with upgradation of educational standards.
- To identify the waterlogged areas and coverage of maximum area under drainage networks.
- To provide scientifically designed pollution free sanitary arrangements with treated waste water discharge.
- To ensure proper traffic flow, road connectivity and to facilitate modernized transportation
- Increased coverage of waste collection mechanism from all households and commercial places.
- Facilitating Institutional, Infrastructural and Regulatory mechanism towards economic development and enhanced livelihood conditions.

A meticulous review on the studies of disparity suggests micro level regional variations in terms of variable attributes. There is an increasing attempt of the **lagging regions** (ward12, 15) to catch up with the leading regions (ward 13, 14), to meet the subsistence requirements and to improve the living standards. With a vision towards a better tomorrow, establishment of responsible, effective and transparent administrative structure becomes necessary to deliver upgraded, equalized services to all the residents including the poor and marginalized.

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