

Vol 4 Issue 7 Jan 2015

ISSN No :2231-5063

---

International Multidisciplinary  
Research Journal

Golden Research  
Thoughts

Chief Editor  
Dr.Tukaram Narayan Shinde

---

Publisher  
Mrs.Laxmi Ashok Yakkaldevi

Associate Editor  
Dr.Rajani Dalvi

Honorary  
Mr.Ashok Yakkaldevi

## Welcome to GRT

**RNI MAHMUL/2011/38595**

**ISSN No.2231-5063**

Golden Research Thoughts Journal is a multidisciplinary research journal, published monthly in English, Hindi & Marathi Language. All research papers submitted to the journal will be double - blind peer reviewed referred by members of the editorial board. Readers will include investigator in universities, research institutes government and industry with research interest in the general subjects.

### *International Advisory Board*

Flávio de São Pedro Filho Federal University of Rondonia, Brazil	Mohammad Hailat Dept. of Mathematical Sciences, University of South Carolina Aiken	Hasan Baktir English Language and Literature Department, Kayseri
Kamani Perera Regional Center For Strategic Studies, Sri Lanka	Abdullah Sabbagh Engineering Studies, Sydney	Ghayoor Abbas Chotana Dept of Chemistry, Lahore University of Management Sciences[PK]
Janaki Sinnasamy Librarian, University of Malaya	Ecaterina Patrascu Spiru Haret University, Bucharest	Anna Maria Constantinovici AL. I. Cuza University, Romania
Romona Mihaila Spiru Haret University, Romania	Loredana Bosca Spiru Haret University, Romania	Ilie Pinteau, Spiru Haret University, Romania
Delia Serbescu Spiru Haret University, Bucharest, Romania	Fabricio Moraes de Almeida Federal University of Rondonia, Brazil	Xiaohua Yang PhD, USA
Anurag Misra DBS College, Kanpur	George - Calin SERITAN Faculty of Philosophy and Socio-Political Sciences AL. I. Cuza University, Iasi	.....More
Titus PopPhD, Partium Christian University, Oradea,Romania		

### *Editorial Board*

Pratap Vyamktrao Naikwade ASP College Devrukh,Ratnagiri,MS India	Iresh Swami Ex - VC. Solapur University, Solapur	Rajendra Shendge Director, B.C.U.D. Solapur University, Solapur
R. R. Patil Head Geology Department Solapur University,Solapur	N.S. Dhaygude Ex. Prin. Dayanand College, Solapur	R. R. Yaliker Director Managment Institute, Solapur
Rama Bhosale Prin. and Jt. Director Higher Education, Panvel	Narendra Kadu Jt. Director Higher Education, Pune	Umesh Rajderkar Head Humanities & Social Science YCMOU,Nashik
Salve R. N. Department of Sociology, Shivaji University,Kolhapur	K. M. Bhandarkar Praful Patel College of Education, Gondia	S. R. Pandya Head Education Dept. Mumbai University, Mumbai
Govind P. Shinde Bharati Vidyapeeth School of Distance Education Center, Navi Mumbai	Sonal Singh Vikram University, Ujjain	Alka Darshan Shrivastava Shaskiya Snatkottar Mahavidyalaya, Dhar
Chakane Sanjay Dnyaneshwar Arts, Science & Commerce College, Indapur, Pune	G. P. Patankar S. D. M. Degree College, Honavar, Karnataka	Rahul Shriram Sudke Devi Ahilya Vishwavidyalaya, Indore
Awadhesh Kumar Shirotriya Secretary,Play India Play,Meerut(U.P.)	Maj. S. Bakhtiar Choudhary Director,Hyderabad AP India.	S.KANNAN Annamalai University,TN
	S.Parvathi Devi Ph.D.-University of Allahabad	Satish Kumar Kalhotra Maulana Azad National Urdu University
	Sonal Singh, Vikram University, Ujjain	

**Address:-Ashok Yakkaldevi 258/34, Raviwar Peth, Solapur - 413 005 Maharashtra, India**  
**Cell : 9595 359 435, Ph No: 02172372010 Email: ayisrj@yahoo.in Website: www.aygrt.isrj.org**



## GEOGRAPHICAL APPRAISAL ON HEALTH SITUATION IN JOYNAGAR-I BLOCK

**Biraj Kanti Mondal**

Ph.D. ,School of Sciences, Netaji Subhas Open University, Kolkata.

**Abstract:-**The Health condition of the country is not so good to say since very past. The birth rate, death rate, infant mortality rate was so high in the past in India and the life expectancy rate was too short in comparison to present day. India covers world's 16% population, 18% world's mortality and 20% world's morbidity but covers only 1% health care investment and 2% GDP. The scenario is quite improved after the independence. But the rural and urban scenario was a mess still today. The Joynagar-I block of Sundarban (belongs to the South 24 Parganas district) was compiled by both the rural and urban part in its arena. This is one of the most important blocks of Indian Sundarban so far the levels of development and close location to Kolkata are concerned. The existing health scenario of the block and its various aspects was highlighted in the paper.

**Keywords:**Health condition, HDI, GDI, regional inequality.

### INTRODUCTION

The condition of rural health was not up to the mark in so many states of India and West Bengal is no exception. Moreover, this scenario is become acute in the backward region. Therefore to highlight the real world picture of the block level health scenario, the present study was conducted. Joynagar-I block is very famous and renowned block of South 24 Parganas as well as Sundarban. The block is very popular for its 'Moya Silpo' (moya industry) since very past. The people of the block have a great contribution to India's freedom movement also. The block have 12 Gram Panchayat (GP) and one Municipality. The municipal area is the urban part of the block which is most organised section. This block is very systematic and organised. Still the health scenario of the block is needed to judge in the light of present day of globalisation. To portrait the relation between the health sector and other infrastructure, road and drainage network as well as other features are also putted in the village level map. The location of the Gram Panchayat offices, post offices, police station as well as market areas are also point out to understand the block scenario as a whole. These have a strong impact on the local people and their life style is concern. It has affected the health scenario of the block. The inhabitants of the surrounding blocks is also took the advantage of the health centre, nursing home etc. since very past. It signifies the importance of the block so far the health care facilities are concern.

### OBJECTIVES:

The objectives of the present paper were-

- ❖ To highlight the status of health index in HDI and GDI in the contexts of state level scenario with special reference to West Bengal.
- ❖ To portrait the existing health status of the Joynagar-I block.
- ❖ To find out the determinants of the health scenario of the block.
- ❖ To evaluate the health scenario of the block at micro level.

**METHODOLOGY:**

The present study was conducted with the help of primary and secondary data. Various healths related data was collected from State and District Census Handbook, District Statistical Handbook of South and North 24 Parganas. Field observation and visual interpretation was also helped to analyze the health scenario of the block at a micro level study. To portrait the real intensity circumstances, mapping of the block is used through GIS.

**STUDYAREA:**

Joynagar-I block, which is considered as my study area, is one of the developed block of Sundarban region. The block belongs to South 24 Parganas districts of West Bengal. Jaynagar-I block, is located at 22°14'19"North and 88°26'48"East and Jaynagar-I C.D. block has an area of 126.02 sq. km. As per 2001 census, Jaynagar I block had a total population of 219,009, out of which 113,289 were males and 105,720 were females. Jaynagar I block registered a population growth of 18.21 per cent during the 1991-2001 decade. Scheduled castes at 94,849 formed around one-half the population. As per 2001 census, Jaynagar I block had a total literacy of 65.77 per cent for the 6+ age group. While male literacy was 77.07 per cent female literacy was 53.57 per cent. Certain area of South 24 Parganas district has been identified where ground water is affected by arsenic contamination and this block is no exception.

**LEVEL OF HEALTH SCENARIO:**

**The State-Level Scenario:**

The state level scenario of the health status was also described here to find the real picture at the meso level. The health scenario of West Bengal is calculated to determine the human and gender development indices. Human development in West Bengal presents a mixed picture, and this picture is further complicated by the variations across districts in the state. The values are very differences across districts, such that the HDI ranges from a high of 0.78 for Kolkata, to a low of 0.44 for Malda.

**Table 1: Human Development Indices by district**

<i>Districts</i>	<i>Health Index</i>	<i>Income Index</i>	<i>Education Index</i>	<i>HDI</i>	<i>HDI Rank</i>
Kolkata	0.82	0.73	0.80	0.78	1
South 24 Parganas	0.71	0.4	0.68	0.60	8
North 24 Parganas	0.72	0.49	0.76	0.66	3
<b>West Bengal</b>	<b>0.7</b>	<b>0.43</b>	<b>0.69</b>	<b>0.61</b>	

Data Source: Human Development Report, West Bengal, 2004

Gender discrimination has been an important feature of economic and social progress in West Bengal. It has declined in some respects in the recent past but still it remains very significant. But it is more evident in economic variables and in literacy as it indicates improving health position of women relative to men. This comes out very clearly in the Gender Development Index which is presented in Table 2.

It is worth noting that the rankings of the GDI broadly follow the same pattern as the HDI rankings, in that districts with low HDI also tend to have low GDI. However, some districts such as South and North 24 Parganas tend to have worse ranking in terms of GDI than HDI, suggesting especially acute gender discrimination. The very low 'Income index' component of the GDI essentially reflects the low workforce participation of women in West Bengal. It suggests a combination of greater restrictions on women's economic agency as well as social lack of recognition of women's unpaid work. Both of these indicate a major undercurrent of gender discrimination in society.

**Table 2: Gender Development Indices by district**

<i>Districts</i>	<i>Health Index</i>	<i>Income Index</i>	<i>Education Index</i>	<i>GDI</i>	<i>Rank</i>
Kolkata	0.824	0.320	0.783	0.642	1
South 24 Parganas	0.705	0.192	0.666	0.521	8
North 24 Parganas	0.721	0.219	0.752	0.564	6
<b>West Bengal</b>	<b>0.697</b>	<b>0.270</b>	<b>0.681</b>	<b>0.549</b>	

Data Source: Human Development Report, West Bengal, 2004

**Health Condition of the Joynagar-I block:**

The existing health status of the Joynagar-I block was quite better than those in the remote and peripheral blocks of Sundarban. According to 2001 census, about 50 health sub-centre, two Primary Health Centre (PHC), one hospital and 4 renowned nursing homes have served the population of the region (data source: BMOH). Almost 27 beds exists in Block Primary Health Centre, 5162 child birth, 1078 institutional delivery were recorded in the year of 2000. Moreover, about 3775 children are covered by 6 basic immunization programme and 4097 pregnant women are covered by two Tetanus Vaccination programme in 2001.

**SCENARIO OF JOYNAGAR-IBLOCK**

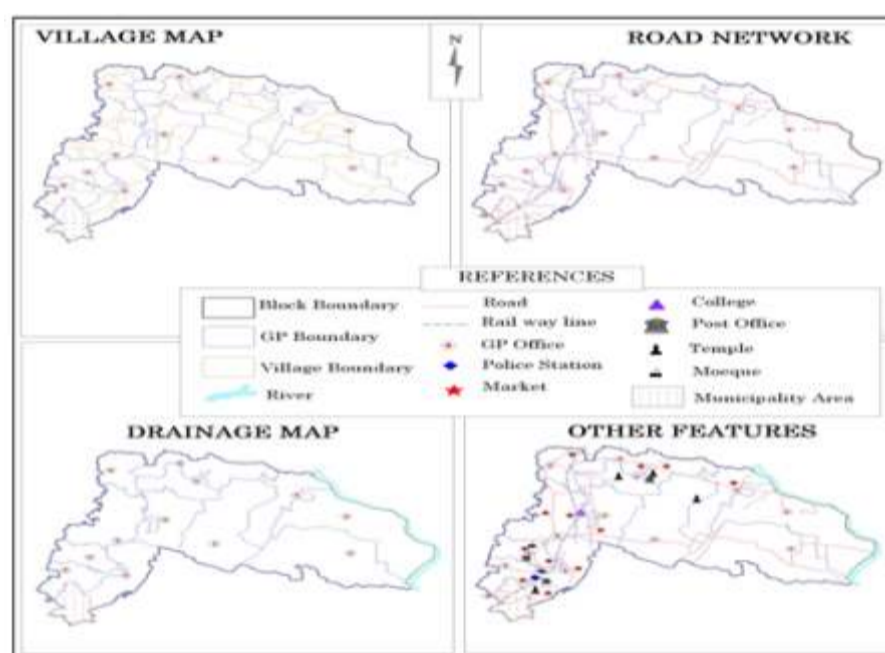


Fig. 1 Source: Prepared by the author (Scale 1 cm. to 10 km.)

In 2009, maximum child birth was recorded in Dakshin Chandaneswar and Bamangachi GP but the institutional delivery rate of these two GPs are quite low which signifies that people still believe in home deliveries and often compelled to do so because of poverty. The ratio of institutional delivery and child birth was good in Dakshin Barasat, Baharu, Uttar Durgapur, Kakurdaha and Narayanitala GPs.

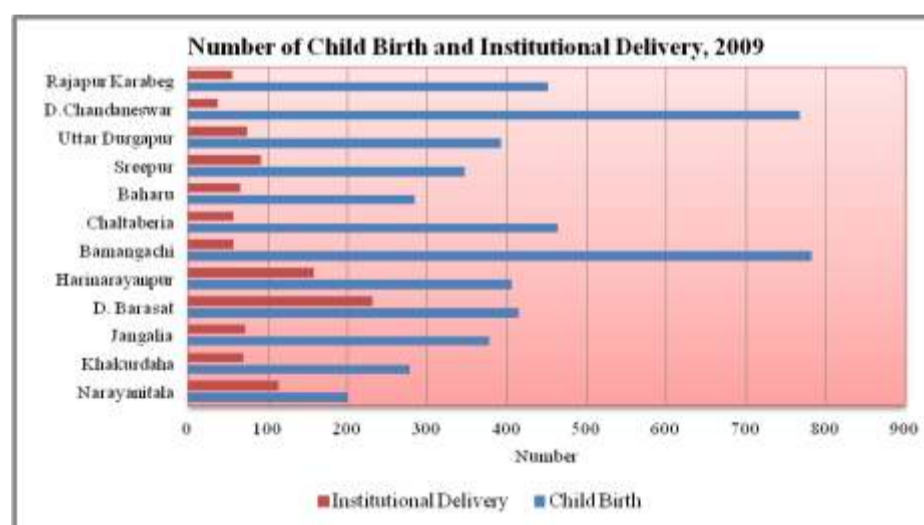


Fig. 2 Data Source: BDO office, Joynagar-I block

The average distance of the mauzas from the nearest Delivery Centre as per the GP record represents that Dakshin Barasat, Narayanitala, Harinarayanpur, Baharu and Sreepur GPs are very closely situated (5 -7 km.). But Dakshin Chandaneswar, Rajapur Karabeg, Chaltaberia and Kakurdaha GPs are not fully dependent on the delivery centres for child birth because of the long distance from the nearest delivery centre.

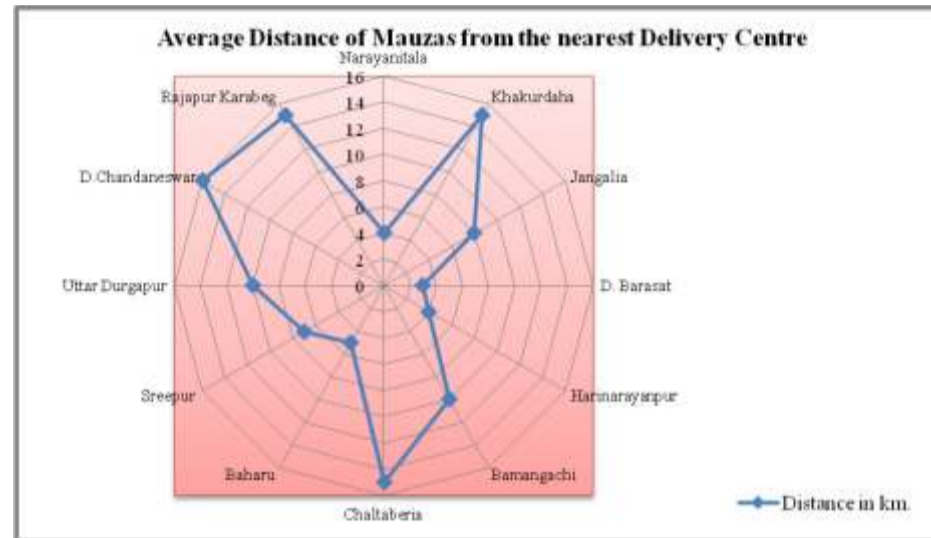


Fig. 3 Data Source: Primary survey in Joynagar-I block, 2014

#### Determinants of the health Scenario in the block:

Health scenario was not only dependent on health care facilities and infrastructural development of the particular field. It has related to some other important aspect of demographic and socio-economic characteristics of the area. These are describe below:

#### Drinking Water:

Almost 570 tube wells were used for the drinking water purpose in the block. The municipality and Panchayat offices organized almost 130 tap wells to serve the safe drinking waters to the inhabitants which covered almost 1976 households in the year of 2001. But the PHE (Public Health and Engineering) officials stated that almost 73 mauzas covering 219090 people of the block are arsenic prone. But still there have not found any arsenic affected person because of the supplied tap water and tube well water are sufficient for their requirement.

#### Demographic Composition:

According to 2001 census data, 71 mauzas are inhabited by about 21, 9090 people in the block which represents 5.83 per cent of the total population of Sundarban. The proportion of male and female population is almost equal in the whole block. Moreover, the proportion of 1-6 year boy and girl child population signifies the better sex ratio in the future too. Almost half of the mauzas of the block have 50 per cent or more concentration of SC and ST population. But in comparison to SC population, the concentration of ST population is very low. Among the 47,868 households about 19,871 households are BPL category which stands almost 42 per cent. The poverty situation of the area was acute particularly because of environmental degradation and atmospheric hazards. During 1998-2001 almost 70 muazas are affected by the storm.

#### Social Composition:

The block exhibits a complicated social network comprising all communities of people from hindu, muslim to christian on the one hand and all minorities on the other. Interestingly economically furnished people are found to be located by the side of the main road or at the place of importance, while the poor and marginal people are mostly located in the remote and less connected areas.

**a. Settlement Pattern:**

The settlement pattern of the block depends on the nature and localization pattern of houses which are mostly pucca or kutcha in nature and located either by the side of pucca or kutcha roads. Most culturally developed areas of the block are by side of the municipality and near to BDO offices most of the houses are pucca by nature. The agricultural community along with other primary economy related activity lives in the kutcha houses. Refugee populations are occupying the squatter by the side of the railway line of the block. The businessmen who are economically rich their impact is noticed in their houses which reflect brick built structure with solid cemented roof.

**b. Household Condition:**

All the GPs have a significant concentration of BPL population. Dakshin Chandaneswar and Dakshin Barasat have the maximum number of household of poor people. Sreepur GP also follows the same. Baharu and Uttar Durgapur have less poor people than the other corresponding GPs. A total of 47868 households are present in the whole block according to 2001 Rural Household Survey and among them about 19871 (almost 42 per cent) is BPL household. About 9396 households spread over the 70 Mauzas are affected by storms during last couple of years.

**CONCENTRATION OF BPL HOUSEHOLDS JOYNAGAR-I BLOCK**

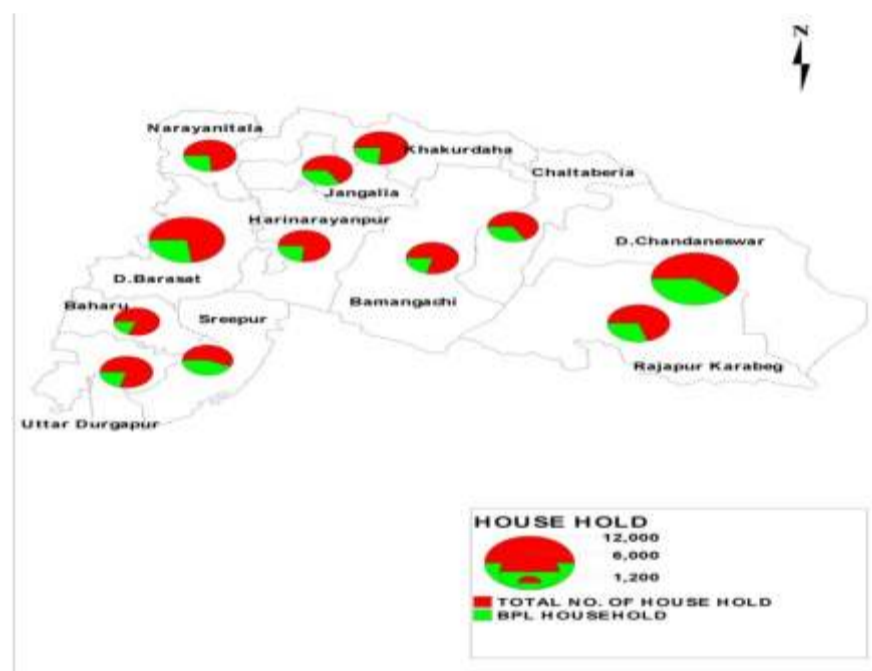


Fig. 4 Data Source: BDO office, Joynagar-I block (Scale 1 cm. to 4 km.)

**Infrastructural Condition:**

**a. Transport:**

A small river flowing from the eastern boundary of the block which separate the block from the Canning-I block. Road density of the block is high against other Sundarban blocks. As rural road has a great impact on the development of the region, high proportion of road in the blocks make it a separate identity among all the blocks of Sundarban. The major portion of the roads are concentrated near the south-western section of the block and thus only municipality of the block existed in that area. About 306.5 km. kuchha road, 371.2 km. semi-pucca road and 84.8 km. pucca road were recorded to exist in the whole block in 2001.

Moreover, about 27 SSKs and 107 Primary Schools, 284 ICDS, 50 Health Sub-Centres, two Primary Health Centre and 11 Banks have all weather road connectivity. All the important government organizations and in offices like Police Station, Post Office etc. along with the major markets are also located on that part of the block. Again about 212 ICDS centers have no drinking water facility, 266 ICDS have no sanitation facility and 270 ICDS have no kitchen cum store room facility in the block. Among the 71 inhabited mauzas of the block only 57 mauzas have the electricity facility which covers almost 18,298 households according to 2001 census. Moreover, only 12 km. road

have the street lightening facilities. Only five mauzas are having banking facilities. But in spite of these constraints, road connectivity and inhabitation are quite significantly related.

**b.Literacy and Infrastructure Development in Education Sector:**

According to 2001 census data, literacy rate of the block is 55.23 per cent with 64.92 male literacy and 44.84 female literacy rate. Educational status of the block is relatively high than other Sundarban blocks. All the GPs of the block share a good number of primary schools. Moreover, in the presence of a very few secondary schools in only two GPs, a good proportion of H.S. schools also serve the children of the block by educational services. Dakshin Barasat has found to occupy the highest number of H.S. Schools and a College. All the students in around the blocks are coming to the College for their higher studies after completing their school education. Only a very few number of students are captured the scope of getting admitted to the colleges of Kolkata for their brilliant results. The college is very famous among the nearby students of the surrounding 4 -5 blocks and a good number of female students get interests for their higher studies only because of the existence of the college. Moreover, most of the people of the block are culturally advanced because of the higher proportion of literacy than the other surrounding blocks.

A total number of 37, 236 children (5 -14 years age) are in schools whereas almost 3018 children of the same age group are not in schools in 2001. But this scenario has improved a lot in 2011 census. Among the total 107 primary schools, 18 have no toilet facility; four have no drinking water facility. Moreover, about 41 schools have less than three primary teachers and 24 schools have less than three classrooms. About 27 SSKs (Sishu Siksha Kendra) are being introduced to improve the primary education, but most of them have been suffering from toilet, drinking water and classroom facilities. About 20 high and higher secondary schools are pressurized by the large number of students. Moreover, almost 22 habitations without any Primary schools, SSKs, MSKs, H.S., Junior High schools within 1-3 km. Five Government supported libraries and two community supported libraries along with 2000 subscriber exists.

**DISTRIBUTION OF EDUCATIONAL INSTITUTIONS JOYNAGAR-I BLOCK**

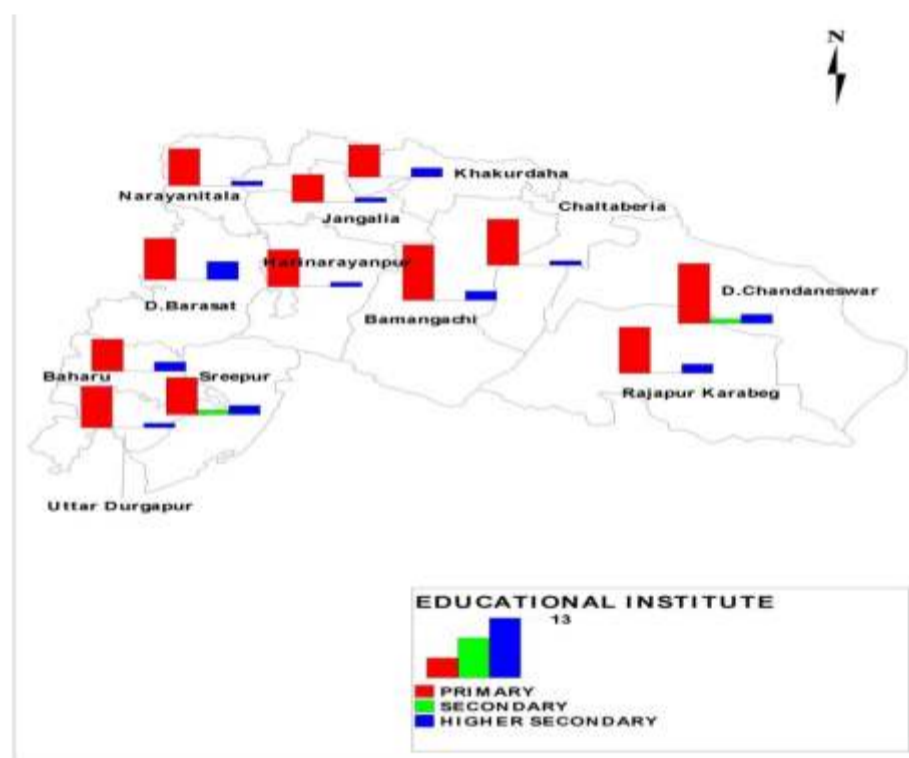


Fig. 5 Data Source: BDO office, Joynagar-I block (Scale 1 cm. to 4 km.)



**RURAL PIPED WATER SUPPLY OF JOYNAGAR-I AND II BLOCK**



Fig. 6 Source: Rural PWSS section, Government of West Bengal

Certain areas of South 24 Parganas district has been identified where ground water is affected by arsenic contamination. High levels of arsenic in ground water were found in twelve blocks of the district. Water samples collected from tube wells in the affected places contained arsenic above the normal level (10 microgram a litre as specified by the World Health Organisation). The Joynagar block was also affected by this problem.

**The situation of the urban part of the block:**

There is a municipal area in the urban part of Joynagar-I block is known as Joynagar Majilpur Municipality. This Municipality constituted with 5.18 sq. km. area and 14 wards. Moreover, a total of 4883 households according to 2001 census are present in the town part of the block. About 23,315 people live in the area, among whom about 4250 are SC and 29 are ST population so far the 2011 block data is concern. The proportion of the backward class of people is low in the town part and that generate a good composition in the social sector. More than two third of the total population of the municipal area are literate. The proportion of male literacy is far better than the female literacy in the area but the female literacy are not very far behind. The high sex ratio of that urban part of the block positively deals with the income sector of the block. The service holders and businessmen are more in proportion in the urban part of the block than the non-urban part. This part is facilitating by the comparatively better health situation than its rest of the part of the block. The close location railway station of the block in this part enrich the connectivity with Kolkata is the root cause for the present scenario of the urban portion of the block.

**RECOMMENDATIONS:**

The present study recommends some insight thoughts and strategies to get better the stipulation to improve the health condition of the block as well as of Sundarban. These are:

- ❖ Proper management techniques should be emphasized to reduce the health hazards.
- ❖ The government should also be careful to improve the existing health situation during their planning for the vulnerable blocks of Sundarban during the hazards in particular.
- ❖ There is an urgent need to switch from piecemeal to holistic approach within and outside the health sector.
- ❖ The facilities regarding the recent health improvements must be superior and extended to the remote region.
- ❖ The proper management technique must be incorporated considering the ground level scenario.
- ❖ The awareness regarding health consciousness should be enhanced and the grass root people should be involved in this regard.

- ❖ The necessity of involvement and engagement with the other community-based organizations, the local panchayats, women's self-help groups, etc. in planning and implementing different programme.
- ❖ A sharp need of a common repository of knowledge and data on the process, output, and outcomes of all NGO initiatives which would help monitor the improvements in the whole region and find out the gaps.
- ❖ The resource potentiality should be used suitably and to extract its facility the connectivity and accessibility of the region must be improved systematically.
- ❖ A well co-ordinate, well framed and well accepted development forum would be the only alternative for such resource rich region of West Bengal which already established its entity in the present day global map.

#### CONCLUSION:

The health scenario of the Joynagar-I block is not good enough but the real scenario is not up to the mark at all. The value of health index in HDI and GDI in the contexts of state level scenario with special reference to West Bengal is better now. But the health and nutrition level of the whole West Bengal is in alarming situation. At the end it may be concluded that several internal and external factors affect the health scenario of the block. Besides, the block is in better situation so far the health scenarios of the nearby blocks are concerned mostly due to the existence of urban area in the block. But, the inter-block and intra-block level inequality was observed regarding health condition and the determinants of it. Only this Joynagar-I block has been facilitated by the municipality among all the 19 blocks of Sundarban area of West Bengal. But the health status of the block yet to be improved particularly at micro level as there are so many determinants to control it. Furthermore, the investments in the health care sector are becoming very important to improve the present situation not only in the block but also in the whole state.

#### REFERENCES:

1. Anand, S., and Sen, A. (2000). Human development and economic sustainability. *World Development*, 28 (12), 2029-2049.
2. Das, G.K. (2006). *The Sundarban*, first edition, Sarat Book Distributors, Kolkata, India.
3. Das, R.B. and Singh, D.P. (1968). *Formulation and Execution of Block Plans (a case study)*, first publication, Oxford and IBH Publishing Co., India.
4. De, Barun. (1994). *West Bengal District Gazetteers: 24-Parganas*. Calcutta: Government of West Bengal.
5. *District Statistical Handbook, South 24 Parganas (2006, 2007)*.
6. Government of India. (2001a). *Report of the working group on decentralized planning and Panchayati Raj institutions*. New Delhi: Ministry of Rural Development.
7. *Groundwater Arsenic contamination in West Bengal-India (19 years study)*. Groundwater arsenic contamination status of North 24-Parganas district, one of the nine arsenic affected districts of West Bengal-India. SOES. Retrieved 2011-09-28.
8. *High arsenic levels in South*". *The Statesman*, 24 June 2007. Archived from the original on 2007-09-29. Retrieved 2011-09-28.
9. Hunter, W.W. (1875[1998]). *A Statistical Account of Bengal, Vol. I, Part-II: Sundarbans*. Calcutta: Government of West Bengal.
10. Kanjilal, Tushar. (1999a). *Ban Kete Basat (Deforestation for Settlement)*. In Pathe Prantare (in Bengali) (pp. 7-14). Calcutta: Projanma.
11. Mandal, Asim Kumar. (2003). *The Sundarbans of India: A Development Analysis*. New Delhi: Indus Publishing Company.
12. Mondal, A.K. (2003). *The Sundarbans of India – A Development Analysis*, Indus Publishing Company, India.
13. *Provisional population totals, West Bengal, Table 4, South Twenty four Parganas District (18)*". Census of India 2001. Census Commission of India. Retrieved 2011-09-24.
14. Singh, Sukumar (2002). *Sundarbaner Itikatha O A Sarkari Unnayan Sangstha (In Bengali)*, Mass Education Production, Kolkata, India.



**Biraj Kanti Mondal**

Ph.D. ,School of Sciences, Netaji Subhas Open University, Kolkata.

# Publish Research Article International Level Multidisciplinary Research Journal For All Subjects

Dear Sir/Mam,

We invite unpublished Research Paper, Summary of Research Project, Theses, Books and Book Review for publication, you will be pleased to know that our journals are

## Associated and Indexed, India

- \* International Scientific Journal Consortium
- \* OPEN J-GATE

## Associated and Indexed, USA

- EBSCO
- Index Copernicus
- Publication Index
- Academic Journal Database
- Contemporary Research Index
- Academic Paper Database
- Digital Journals Database
- Current Index to Scholarly Journals
- Elite Scientific Journal Archive
- Directory Of Academic Resources
- Scholar Journal Index
- Recent Science Index
- Scientific Resources Database
- Directory Of Research Journal Indexing

Golden Research Thoughts  
258/34 Raviwar Peth Solapur-413005, Maharashtra  
Contact-9595359435  
E-Mail-ayisrj@yahoo.in/ayisrj2011@gmail.com  
Website : www.aygrt.isrj.org