CHAPTER - 8

ENVIRONMENTAL VULNERABILITY OF RANIGANJ POLICE STATION AND VIABILITY OF MANGALPUR SATELLITE TOWNSHIP - A CASE STUDY

8.1. INTRODUCTION :

The present chapter is an attempt to analyse the conditions and problems of Raniganj P.S. and consequent prospect of Mangalpur Satellite Township growing in the eastern part of Raniganj P.S. From an intensive study it has been revealed that although Raniganj is a prosperous coal-mining area, it is also suffering from acute problem of subsidence, environmental pollution and some other associated problems. Raniganj is a famous town in the history of coal-mining in India. Plunder of coal reserve from beneath the earth through excavation of underground galleries and encroachment of open cast mines on agricultural land and greeneries have led to the hazards like subsidence of land, underground fire, acute scarcity of drinking water due to alteration of water table and aesthetic injury on the landscape to such an extent that the very existence of the Raniganj P.S. (Fig 8.1) has become vulnerable. Moreover the habitat and social environment of Raniganj made the quality of life so deplorable that Government adopted a plan to create a new satellite township 5 kms. Away from Raniganj towards east (Fig 8.1).

8.2 PROBLEMS IN RANIGANJ POLICE STATION :

Raniganj P.S. is riddled with a large number of problems. Before going into details about the problems of Raniganj we should discuss about its urban character, economic activities and occupational pattern etc.

8.2.1 RANIGANJ, ITS URBAN CHARACTER :

Raniganj is a very old town as well as important coal-mining centre of India (Fig. 8.2). For analysing the evolution and growth of Mangalpur Satellite Township, the contemporary socio-economic status of Raniganj should first be assessed. It owes its importance to the development of the coal industry since its inception in the very earlier periods. The region is located in between two giant urban-industrial complexes of Asansol-Bumpur-Kulti in its west and Durgapur in its east and it itself contains a large number of industries like paper, potteries, aluminium, stone crushing, oil mills, brick kils etc.

8.2.2 ECONOMIC ACTIVIES AND OCCUPATIONAL PATTERN :

Raniganj area has the reputation for its mining activity which led to the growth urban centerses where more people are engaged in secondary and tertiary activities than primary activity. It is estimated that about 55% of the total population is literate. A large part of the total population
Fig. 8.2
is engaged in trade and commerce, transport and communication, construction and in services. Besides 2.7% in household industry and only 3.3% are engaged in agricultural activities in the form of cultivators and agricultural labourers. Such occupational polarisation i.e. very high percentage of population is in favour of tertiary sector and very low percentage in primary sector, exhibits a conspicuous picture of urbanisation in Raniganj. Raniganj area is traversed by a fair communication network. The Grand Trunk Road (NH 2), running from west to east, connects the area with Kolkata, Burdwan, Howrah and other urban industrial markets, through which this National Highway passes. The Eastern Railway (Main line) which runs roughly parallel to G.T. Road adds further mobility to the people and commodities that move in and out of the region.

8.2.3 MINING HAZARDS AND RELATED ISSUES:

By far the most important and most widespread hazard associated with mining activity in Raniganj is subsidence. Inadequate narrow pillarine to support the mine roofs as well as lack of stowing or unscientific stowing of the abandon mines are the main problems for causing subsidence. Raniganj and neighbouring areas have suffered from aggravated problems of pollution of land, air and water and also from the menace of noise. Dumping of overburden from the mines and dumping of other solid wastes are converting lands into waste lands. Big scars on the surface are gradually creating a great injury to land and these make the land unsuitable for other land oriented uses in future. Suspended materials like coal dust, dust from stone crushing, open air coal burning— all these cause acute air pollution in the surveyed area. Pumping out of water from underground for mining of coal cause alteration of water table and also shortening of ground supply of moisture. Often intermixing of some toxic chemicals from over burden contribute to water pollution. Continuous noise emission from diesel generators due to prolonged power shortage in the area, blasting of coal seams, electric horns from automobiles etc. are great hazards. Sudden drying up of pond due to water intrusion to hollow spaces where from coal is dug out, falling of watertable, contamination of water near open pit mines etc led to acute crisis of drinking water in the mining areas. In the coal belt fire gets inflame resulting into combustion of good quality coal deposits. Such a fire may spread anytime bringing in hazards to mankind. Past reports have shown a number of incidents of underground mine fire in Raniganj area. Occupational hazards to the miners is no more to obliterate. Occupational hazards include both disease proneness as well as the chances of mining accidents.

8.2.4 INFRASTRUCTURAL PROBLEMS:

Raniganj area has grown in an unplanned and haphazard fashion over the years as a result of which infrastructural facilities such as roads, water supply, drainage and electrical distribution system have been over utilised or misutilised. Due to various favourable factors the region is fast expanding. The infrastructural facilities are, however, far short of the minimum requirement for the existing needs. The worst problem is that there is very little scope for improvement and expansion of these facilities as those practically outlived their lives and needs total renovation and augmentation.

8.2.5 POPULATION CONGESTION:

Population of Raniganj P.S. of Asansol Subdivision is increasing so rapidly (Table 8.1, Fig. 8.3) that it itself has become an environmental problem.
### Yearly Total Population and Decadal Variation in Raniganj P.S. (1951-2001)

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Population</th>
<th>Decadal Variation of Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>1951</td>
<td>180,000</td>
<td>-20,000</td>
</tr>
<tr>
<td>1961</td>
<td>160,000</td>
<td>0</td>
</tr>
<tr>
<td>1971</td>
<td>140,000</td>
<td>20,000</td>
</tr>
<tr>
<td>1981</td>
<td>120,000</td>
<td>40,000</td>
</tr>
<tr>
<td>1991</td>
<td>100,000</td>
<td>60,000</td>
</tr>
</tbody>
</table>

**Fig. 8.3:** Population increase in Raniganj P.S. (1951-2001).
Fig. 8.4: Variation of rural and urban population in Raniganj P.S. (1951–2001)
Table 8.1: Changing size of population, Raniganj P.S. (1951 – 2001)

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Population</th>
<th>Decadal Variation of Population</th>
<th>Percentage of Decadal Variation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1951</td>
<td>71,495</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>1961</td>
<td>92,026</td>
<td>20,531</td>
<td>28.72%</td>
</tr>
<tr>
<td>1971</td>
<td>1,21,044</td>
<td>24,018</td>
<td>31.53%</td>
</tr>
<tr>
<td>1981</td>
<td>1,52,598</td>
<td>31,554</td>
<td>26.07%</td>
</tr>
<tr>
<td>1991</td>
<td>1,27,813</td>
<td>-24,785</td>
<td>-16.24%</td>
</tr>
<tr>
<td>2001</td>
<td>1,01,678</td>
<td>-26,135</td>
<td>-20.45%</td>
</tr>
</tbody>
</table>

Source: District Census Hand Book, (1951 – 2001)

The growth of urban population in Raniganj P.S. is quite high and in the year of 1971 the growth rate of urban population has surpassed the growth of the rural population (Table 8.2, Fig. 8.4)

Table 8.2: Variation of rural and urban population, Raniganj P.S. (1951 - 2001)

<table>
<thead>
<tr>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Rural Population</td>
<td>45,556</td>
<td>61,913</td>
<td>74,507</td>
<td>1,05,139</td>
<td>40119</td>
<td>24372</td>
</tr>
<tr>
<td>Growth rate of Rural Population</td>
<td>—</td>
<td>35.91 %</td>
<td>20.34 %</td>
<td>41.11 %</td>
<td>(-) 61.89</td>
<td>(-) 30.25</td>
</tr>
<tr>
<td>Total Urban Population</td>
<td>25,930</td>
<td>35.91</td>
<td>46,531</td>
<td>47,459</td>
<td>87,694</td>
<td>77,306</td>
</tr>
<tr>
<td>Growth rate of Urban Population</td>
<td>—</td>
<td>16.13 %</td>
<td>54.52 %</td>
<td>1.99 %</td>
<td>84.78%</td>
<td>(-) 11.85</td>
</tr>
</tbody>
</table>

Source: District Census Hand Book (1951 - 2001)

So far the most important consequence felt in this P.S. is the urban agglomeration. Industrial emission, heavy traffic movement, deterioration of quality of water, health risk etc. are the very basic problems which result from urban agglomeration. Moreover, the urban centres in this P.S. are growing up in an unplanned, congregated and haphazard way resulting in infrastructural problems like problems in roadways, water supply, drainage system, power supply and other basic requirements of the human life. Coal remains locked under major settlements–both villages and towns. More and more land have shifted from agricultural to non-agricultural purposes, especially for building the residential houses. Thus population congestion in Raniganj is creating a large number of problems. The number of total scheduled caste (S.C.) and scheduled tribe (ST) people occupies a considerable part of population and their number is increasing continuously (Table 8.3, Fig 8.5).
Fig. 8.5: Changing composition of population, Raniganj P. S. (1961–1991).
Fig. 8.6: Sex composition of population in Raniganj P. S. (1951–2001).

<table>
<thead>
<tr>
<th>Year</th>
<th>Total population</th>
<th>Total S.C. and S.T.</th>
<th>Total non-scheduled people</th>
</tr>
</thead>
<tbody>
<tr>
<td>1961</td>
<td>92,026</td>
<td>32,260</td>
<td>59,766</td>
</tr>
<tr>
<td>1971</td>
<td>1,21,044</td>
<td>35,625</td>
<td>35,419</td>
</tr>
<tr>
<td>1981</td>
<td>1,52,598</td>
<td>46,268</td>
<td>1,06,330</td>
</tr>
<tr>
<td>1991</td>
<td>1,27,813</td>
<td>50,844</td>
<td>76,969</td>
</tr>
</tbody>
</table>


The number of male out of the total population is much higher than the number of female population (Table 8.4, Fig 8.6), the reason behind it being that most probably the male leave back their counter parts when they come to this area in search of employment.

Table 8.4: Population Composition, Raniganj P.S., 1951-2001

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>71,495</td>
<td>92,026</td>
<td>1,21,044</td>
<td>1,52,598</td>
<td>1,27,813</td>
<td>1,01,678</td>
</tr>
<tr>
<td>Male</td>
<td>40,471</td>
<td>54,544</td>
<td>71,396</td>
<td>86,782</td>
<td>71,542</td>
<td>55,160</td>
</tr>
<tr>
<td>Female</td>
<td>31,024</td>
<td>37,482</td>
<td>49,648</td>
<td>65,816</td>
<td>56,271</td>
<td>46,518</td>
</tr>
</tbody>
</table>


8.2.4. VALUATION OF LAND: Despite degradation of land to an acute level and vulnerability of land to subsidence and related hazards, the land value of Raniganj is escalating due to the following factors:

a) Locational importance of Raniganj is an important cause of price escalation of land value. The region is located in between two giant industrial and commercial centres of Durgapur in the east and Asansol in the west.

b) Flourishment of the business of real estate in the backdrop of growing industrial sickness.

c) Squeezing of habitable space due to expansion of population, open pit mining and enhancement of waste land in the mining belt.

The valuation of land near the communication artery is much higher than elsewhere.

8.3. THE GROWTH OF NEW SATELLITE TOWNSHIP

Raniganj township is now riddled with numerous problems which should be solved as soon as possible to retain its past reputation and to revive its resource potential. The growth of a new township is thus acutely felt from the following point of views:

i) Since Raniganj is prone to subsidence, there remains a chance of toll of a huge number of people inhabiting in the region. So, they must be shifted to a nearby, to a comparatively safe place.
ii) The land value are increasing radically day by day due to its population pressure by internal population growth and immigration as well as due to expansion of urban industrial complex within the limited space of Raniganj Municipal area. So for at least residential purpose cheap lands are required within reasonable accessibility which can only be possible by the growth of a new satellite township nearby.

iii) Extreme population congestion causes an all round evil in physical, economical and socio-cultural spheres of Raniganj. Such pressure of population can be reduced, to some extent, by the development of a new township nearby.

iv) Infrastructural problem, which is recently faced very badly causes human life of Raniganj really hazardous. Transport bottleneck, scarcity of water, lack of accessibility in remote corners, ineffective welfare system - all make human life problematic which need an immediate salvation by growing a new township where such facilities will be available easily.

v) Raniganj town has already been declared unsafe zone by Director General Mines and Safety because of the problems of subsidence.

Due to the above mentioned problems as found in the Raniganj P.S. ADDA has proposed the growth of a new township at Mouza Mangalpur, adjacent to the Raniganj Municipality(Fig 8.1). Considering the present state of condition of the P.S., safety of the people and expected future growth, it was decided to develop Mangalpur area as satellite township of Raniganj in a planned way with all infrastructural facilities.

Fortunately, in the mean time ADDA has received about 48 sq. km. of vested land from the Government in the Mangalpur Mouza of Raniganj P.S. within 5 km. from the existing Raniganj town for the proposed Mangalpur Satellite Township (Fig 8.1)

8.3.1 LOCATION ASPECT OF THE PROPOSED TOWNSHIP: PRESENT LOCATION:

Mangalpur is situated in the eastern part of Raniganj township. The site of proposed satellite township is located on both sides of the G.T. Road and about 5 kms. from the existing Raniganj town at one side and about 5 kms from Andal urban area on the other side. The area is envisaged for immediate development is bounded by G.T.Road in the north-east, existing road to Raniganj in the north-west, Eastern Coalfield Limited’s (ECL) open cast project (OCP) in the south-east and Raniganj village settlement to the south-west. Another chunk of acquired land is on the other side of G.T.Road.

8.3.2. REGIONAL IMPORTANCE OF LOCATION OF THE TOWNSHIP:

The proposed Mangalpur township has got a regional importance as far as the location of Asansol and Durgapur, which have very rich industrial heritage in West Bengal, on its both sides are concerned. If modernization process starts in Durgapur Steel Plant at Durgapur, a major chunk of acquired land at Mangalpur in between G.T.Road and the Eastern Railway Main line shall be used for industrial developments like ancillary units, small and medium size industrial units, industrial housing etc., as part of second phase of development and programme by ADDA. Moreover, the accessibility of the region by G.T.Road running through the region increases its importance to a great extent.
8.3.3. LAND USE PLAN FOR THE TOWNSHIP:

According to the land use plan, as proposed by ADDA, Mangalpur will be a composite township having provisions of residential zone, commercial zone, industrial zone along with an industrial estate. Mangalpur Mouza (JL No. 22) of Raniganj P.S. covers an area of 4.88sq.km of land, of which 0.0081sq.km. is forest, 0.25sq.km. is unirrigated land and 4.62sq.km. is not available for cultivation. A large part of this Mangalpur Mouza has been handed over to ADDA for the proposed satellite township. In this Mouza, so far residential use is concern, there are 204 families living at present with total population of 839 of which 242 are from S.C/S.T. community. There are 367 workers mainly engaged in trade and commerce, transport and other services.

The proposed land use plan of Mangalpur Satellite Township, as drawn by ADDA comprises the following major uses (Fig 8.7) (Plate 8.2 A to F):

A. Residential
1. medium to high density plotted housing
2. low to medium density plotted housing
3. housing for economically weaker section.

B. Commercial

C. Mixed Use

D. Institutional
1. school
2. Govt. office, college, hospital, civic center.

E. Green space
1. green verge plantation
2. central park

F. Water body

G. Transportation

H. Land for S. E. B.

I. Industry

J. Land for police station

Source: ADDA, Asansol.

There is a plan of composite land base to start and complete the infrastructural facilities like primary/secondary road system, sewerage system, drainage system, water supply and power grid etc. The development of primary roads is almost complete. The land use proposal of Mangalpur envisages independent sectors with residential, institutional, recreational, commercial facilities - interdependent and accessible to the higher order central facility sector like sub-district centre composed of commercial, trade, government and semi-government offices, hotel, cinema halls, supermarkets, schools, playground, parks etc. ADDA has planned to sell the commercial plots to private developer under its strict control and supervision. The site along the both sides of G.T. Road is highly demanded for hotels, commercial complexes, vehicle servicing centres etc. Such commercial plots began to grow all along G.T. Road and to some extent along the feeder roads.

8.3.4 BRIEF OUTLINE OF THE PROJECT:

The total available land within Mangalpur and other outlying areas have been proposed to be developed in 3 phases. The time from each phase development shall be 5-10-15 years (Plate 8.1 A to E).
PROPOSED LAND USE MAP OF MANGALPUR

Legend

- Residential
  - MEDIUM TO HIGH DENSITY PLOTTED HOUSING.
  - LOW TO MEDIUM DENSITY PLOTTED HOUSING.
  - HOUSING FOR ECONOMICALLY WEAKER SECTION.
- Commercial
- Mixed Use
- Institutional
  - SCHOOL
  - GOVT. OFFICE, COLLEGE, HOSPITAL, CIVIC CENTRE.
  - GREEN SPACES
  - CENTRAL PARK
- Green Space
- Water Body
- Transportation
- Land for S.E.B.
- Industry
- Land for Police Stn.

Source: ADDA, Asansol

Fig. 8.7
Plate 8.1: Phases of the work at Mangalpur for the development of the satellite township. Clockwise from top left: A: Original condition of ground surface on the southern side of the G. T. Road in Mangalpur. B, C & D: Levelling of land on progress. E: The site of Mangalpur satellite township on the northern side of G. T. Road.
Plate 8.2: Some important land uses in Mangalpur satellite township. Clockwise from top left. A: A newly constructed metalled road beside which there is a water tank and a police station. B: A newly developed industrial unit (Shyam Super Cement Factory). C: A newly developed hotel which is on the way of completion. D: A petrol pump developed in the satellite township. E: A public school has already started here. F: Mangalpur Jute Mill, a newly grown industrial unit in the satellite township.
First phase: The first phase has been enmarked on the south of G.T. Road bounded by the Mangalpur Road to Raniganj township on the west about 1.42sq.km. and about 0.10 - 0.12sq.km. of land on the north of G.T. Road enmarked for industrial use also proposed to be included within the first phase of development. In order to make the first phase of development a feasible one, the privately owned lands required to be acquired with immediate effect under Act - II and the possession of the same need to be given to ADDA at the earliest to have a composite land - base to start and complete the infrastructural facilities like primary and secondary road system, sewerage system, drainage system, water and power grid supply etc.

Second phase: The second phase of development shall be predominately of industrial use and other related facilities like central trade centre, warehouse, local transport, product display areas, commercial centre, trade training etc. as well as industrial housing schemes, low cost housing site and services basically for industrial labour force. The area has been particularly chosen for industrial use because of its locational advantages being on G.T. Road and spreading over on the sides of the Railway line to the north-eastern end. In future large industries will utilise the services of railway sidings for easy transporting raw materials as well as finished product transhipment.

The type of industries which shall be given priority at the present moment is small scale ancilliary units and service types etc. A part of the second phase also being proposed as a transport centre with all kinds of related facilities like auto-markets, truck servicing areas, repair shop, hotel etc.

Third phase: The third phase of development envisages mostly vastues, trade and commercial uses, recreational, institutional and other related uses.

ADDA has made a head on the provisions for power, water etc. within the area through continued discussion with West Bengal State Electricity Board (WBSEB), Public Health Engineering (PHE), Raniganj Municipality, Panchayat etc. and secured assurances regarding availability of power and water during construction period as well as in the long run as and when shall be required during different stages of development of the township. As necessary funds have been made available by the State Govt., ADDA has started the job of infrastructural development on site like land, both levelling and dressing, construction of roads, drainage and sewerage etc., so that necessary spaces may be allotted to respective departments like WBSEB, PHE, Police, Housing Department etc., in order to facilitate them to start with and complete their necessary jobs as per time schedule. ADDA proposed to develop commercial plots along G.T. Road to be served by a service road and dispose off these plots through public auctioning, so that a sizeable amount of fund is created. It is also proposed that ADDA shall develop small industries and give them over the private entrepreneurs as per approved schemes.

The proposed township plan being a challenging project for the greater interest of public at large in and around the existing Raniganj township - ADDA is committed to do the job on war front basis.

8.3.5 HUMAN RESPONSE TO THE SATELLITE TOWNSHIP:

It is difficult to give a clear cut picture of human response to satellite township - Mangalpur. But a broad outline can be given as evident from the analysis of computed data as prepared from the survey schedule.

Since the project of Mangalpur is in the initial stage of development, it is not expected that
the entire population of Raniganj will give positive response to shift towards the new satellite township. So to make a comparative study some categorisation of population is necessary.

**People who are reluctant to shift:**

i) People possessing fixed assets in Raniganj are reluctant to shift.

ii) People whose age is above 40 years are also reluctant to shift, because they are conservative minded and very much suspicious about the future prospect of the project. Moreover they are calculating the possibility of collapse of the existing township in comparison to their life span.

iii) People, dwelling under the bliss of ignorance, are not aware of the possible danger of collapse and they do not realise the necessity of shifting from the centre of danger.

**People who want to shift:**

i) Landless middle class urban people who have no binding in Raniganj are willing to shift with a view to acquire land at a cheaper rate and to build a better and comfortable settlement.

ii) Some poor people are willing to shift if they are offered with better job opportunity. Poor people like daily-labours, hawkers, rickshaw pullers, shopowners, cobblers etc. are also willing to shift for better earning.

iii) People whose age is below 40 years are expected to be conscious about the possible chance of collapse of Raniganj town within their life span and, therefore, opt for Mangalpur township.

iv) A class of big marchants, stockists and traders are also willing to shift for better earning opportunity.

v) So, from the above points, it is very clear that people of younger and working group, middle class people without fixed assets, merchants, etc. are expected to give a positive response to the growth of Mangalpur than those belonging to other categories.

**8.4. VIABILITY OF CHANGE IN URBAN LAND USE**

**8.4.1. ECONOMIC REFLECTION**

Economic condition of Raniganj is reflected through its resource potentiality, job opportunity and locational importance. The resource potential of Raniganj is wide and varied and to a large extent comparable to other regions. Coal is by far the most important resource base in Raniganj region. Extensive coal belt rich in high quality bituminous coal with 60% of carbon content is of high demand for industrial, cooking, fuel and electricity generating purposes. Coal mining provides employment opportunity to the inhabitants of Raniganj and a firm economic base to the region itself. Vast reserve of underground water is a great resource of this region. It is evident from Fig 6.9 and 6.10 which exhibit that in both the pre and post monsoon seasons the level of underground water remains 2 to 4 m. higher than its expected level. It is no doubt, a very good sign for the bright prospect for the development of the satellite township. Small and medium scale industries including stone crushing, brick kiln, pottery, tiles, paper, refractory bricks etc. also provide a rich resource horizon to the region. Trade and commerce can be considered as the most important resource
base of this region so far human activities are concerned. As indicated before about 95% of the total working population of Raniganj town is engaged in the occupation of trade and commerce. So it becomes a major source of resource supply, maintaining good communication facilities with Kolkata and Haldia Port and rest of India.

8.4.2. ENVIRONMENTAL CONSIDERATION:

Mining areas have to suffer from a large number of environmental vulnerability. This is also true in the case of Raniganj area. First of all subsidence of large area cause the collapse of productive agricultural lands and subsequent loss of employment of the poor agricultural labours. Thus land subsidence and expansion of mining activities in Raniganj and nearby areas are responsible for degradation of land causing aesthetic injury to the landscape of the mining belt. Next to subsidence an all round pollution including air, water, land and noise creates exposers to a large number of disease causing ill-health and reduction of the life expectancy of the labours and other inhabitants. Air pollution with the emission of carbon di-oxide \((\text{CO}_2)\) and carbon monoxide \((\text{CO})\) from the mines and automobiles, cause broncheal trouble. The coal dusts that are deposited on the lung membrane, cause black-lung to the miners. Different types of gases and coal dusts affect the miner’s health and they are victimised by T.B. and asthma. Blushing and other types of impulsive noise may cause sudden impairment of hearing, and disease of heart and pressure diseases. All such occupational diseases are associated with mining activities. Moreover a large scale water pollution creates gastroenteric troubles among the general mass even living in the proper township of Raniganj. Some people are suffering from chronic gastro-enteric troubles, skin diseases, eye irritation etc. Frequent accidents like mine-fire, flash flood, roof-collapse, underground subsidence, underground poisonous gas leakage, suffocation etc. - all may take a large toll of human life or may handicap the people. Various social evils like smuggling and anti-social activities may cause deterioration of social values and morality. Fast life, boot legging, rat race etc. all create mental trouble and cause hyper tension. Thus the physical environment as well as social environment are getting deteriorated day by day in Raniganj area and such disorder owes its origin mainly to the mining activity of coal.

8.4.3. AN ANALITICAL STUDY:

Conflicting view points have emerged among ADDA planner who are going to establish a new satellite township, and local inhabitants who are expected to be shifted to the new township. Eastern Coal Field Ltd. (ECL) are still discovering underlying coal seams and also willing to excavate it. All these conflicting view points need to be discussed indetail. The main aim of the ADDA officials is to reduce the pressure of human activities on the surface area of Raniganj. To achieve this goal, they have already started their initial work procedure and advanced a lot in the pre-selected site at Mangalpur. The view point of local inhabitants regarding the Mangalpur Project have already been elaborated under the sub-heading of ‘Human response to satellite township’. Here, in brief, it can be stated that some people are very hopeful of the project in advance, while some other possess pessimistic view point. The ECL, which is one of the major concerns associated with the project, holds the view that Mangalpur is over laid by a rich coal seam. Moreover, the coal seam lies near to the surface. So coal mining will be a profitable business at Mangalpur just like Raniganj. If ECL began to excavate coal deposits then the main aim of the Mangalpur Project will sound hollow.
The view points of the Government, ECL and local inhabitants no doubt conflict with each other, which sites the future of Mangalpur as a satellite town in question.

8.5. CONCLUSION:

Degradation of land, contamination of water and pollution of air are quite evident in Raniganj. It was revealed through perception analysis that local people are aware of the hazards of the mining belt. So the ensuring danger of collapse of the urban system is not haunting the people. It is only a question of option to them considering relative advantages on time scale. No wonder young fortune seekers are willing to move to Mangalpur and older people are reluctant to do so. Land owners in Raniganj are obviously slow movers. Increasing pressure of population on limited utilisable land and growing sickness of industries have led to a boon in the business of real estate in this locality. Prospect of coal seam even in Mangalpur has made the issue more confusing. But it is supposed to be that the future of this satellite township of Mangalpur has no doubt, a bright prospect. It seems that it is still, a question of cost benefit ratio of which the ADDA planners, ECL and the local people are mostly concerned with. General rule is that, if the value of land is higher than that of the structure built on the same, existence of the latter one becomes vulnerable. So, if it is found that valuation of coal reserve is too high to forgo, the Mangalpur project if at all materialise should at best be curtailed to a considerable extent to suit the cost benefit ratio. Cost of creating infrastructure for the satellite township is another major issue. It does not depend entirely on the planners. Availability of Government fund and interest of the private entrepreneurs will be a decisive factor. From the environmental point of view the project should be developed in order to reduce the pressure of Raniganj as soon as possible. Degradation of natural sources have already reached an alarming level there. It will not be wise to keep fingers crossed for a possible collapse after allowing normal economic activities to roll on. If the Government fails, the task should be shouldered by the environmentalists, so that an awareness movement involving the grass root level can be organised with a view to counter the interplay of vested interests of various pressure groups of the society. Experience tells that, it is the poor people and ignorant who are the ultimate victim of any natural and man made hazard. So, apart from concerning the habitat of Raniganj, it is also essential to safeguard the interest of this section of the society, who suffer from greater exposure to any kind of hazard. So the struggle of nature consideration, rationalisation of resource procurement, upgrading quality of life of the poor people of the locality and the creation of a satellite township in Mangalpur are not separate issues. These are linked to a single issue of protection of the environment for well-being of the society, for which Government, private entrepreneurs and environment protection force should work in complete harmony.