CHAPTER-II
A PROFILE OF PURULIA DISTRICT

2.1 Introduction

There are various opinions about the origin of the name Purulia. Purulia is also called by other names as Purulya, Puruila, and Purulha. Michel Madhudsudan called it as purulye. The word ‘Pur’ in Sanskrit means city and locality. According to one group, the name has its origin in it. According to another group ‘Purul’ or ‘Poral’ is one kind of vegetable. Parul is one kind of tree. So the name ‘Purulia’ has come from it. Dr. Sukumar Sen also supports this conception.

Location and Boundary: Carved out of the former Manbhum district of Bihar, Purulia district was merged with the state of West Bengal in November 1956 on the recommendation of the States Re-organisation Committee. Jharkhand surrounds this western-most district of West Bengal, Purulia, on its three sides, while its western boundary is flanked, for the major part, by Bankura district. The district also touches a part of Burdwan District on the northeast and a part of Midnapore district on the southeast. Its latitudinal and longitudinal extents are from 22°42´35´´ to 23°42´00´´North and from 85°49´25´´ to 86°54´37´´East respectively. The total geographical area of the district is 6259 sq. kms (Census 2001), out of which the urban and rural areas consist of 79.37 sq. kms (1.27 per cent) and 6179.63 sq. kms (98.73 per cent) respectively. The landscape of Purulia is quite unique having distinctive soil, terrain, drainage, forest and whole gamut of physical environmental set up which is within the ambit of Rarh tract of West Bengal.

Administrative Setup: The District head quarter is situated at Purulia town having three administrative subdivisions namely Sadar-East, Sadar-West and Raghunathpur. There are 20 police stations, 20 community development blocks, 3 municipalities, 170 gram panchayet, 2683 Mouzas and 2468 inhabited villages.

2.2 Analysis of Resources

By resource we mean here human resource and natural resource. So the resource analysis consists of two parts: analysis of human resources and analysis of natural resources. We consider them one by one.
A) Human Resources: The study of human resource is necessary to know in quantitive terms the number of people living in the district at a particular time, the rate at which they are growing and the composition and distribution of population according to various criteria.

i) Population Feature at a Glance: The district has a total population of 2927965 (as per 2011 census) of which 2554584 (87.24%) are residing in rural areas and 373381 (12.76%) in urban areas. About 51.15% are males and the rest are females. Scheduled castes and scheduled tribes constitute 18.29% (463956) and 18.27% (463452) of the total population respectively. Purulia district is having second highest percentage of tribal population (18.3 per cent) after Jalpaiguri (18.9 per cent) than that of its adjacent districts in West Bengal. People of different religious communities live in Purulia. Majority of the people (about 83.42%) believe in Hinduism. Others have faith in Islam, Christianity and Jainism etc.

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Population</th>
<th>Index with 1901 as base</th>
<th>No. of Males</th>
<th>No. of Females</th>
<th>No. of female per 100 males</th>
<th>Urban population</th>
<th>Rural population</th>
<th>P.C. of rural population to total population</th>
</tr>
</thead>
<tbody>
<tr>
<td>1901</td>
<td>777801</td>
<td>100</td>
<td>386741</td>
<td>391060</td>
<td>101</td>
<td>0</td>
<td>777801</td>
<td>100.00</td>
</tr>
<tr>
<td>1911</td>
<td>884372</td>
<td>114</td>
<td>441874</td>
<td>442498</td>
<td>100</td>
<td>0</td>
<td>884372</td>
<td>100.00</td>
</tr>
<tr>
<td>1921</td>
<td>831497</td>
<td>107</td>
<td>416347</td>
<td>415150</td>
<td>100</td>
<td>34391</td>
<td>797106</td>
<td>95.86</td>
</tr>
<tr>
<td>1931</td>
<td>972077</td>
<td>125</td>
<td>488804</td>
<td>483273</td>
<td>99</td>
<td>40037</td>
<td>932040</td>
<td>95.88</td>
</tr>
<tr>
<td>1941</td>
<td>1088201</td>
<td>140</td>
<td>550477</td>
<td>537724</td>
<td>98</td>
<td>61258</td>
<td>1026943</td>
<td>94.37</td>
</tr>
<tr>
<td>1951</td>
<td>1169097</td>
<td>150</td>
<td>589507</td>
<td>579590</td>
<td>98</td>
<td>78470</td>
<td>1090627</td>
<td>93.29</td>
</tr>
<tr>
<td>1961</td>
<td>1360016</td>
<td>175</td>
<td>689351</td>
<td>670665</td>
<td>97</td>
<td>92478</td>
<td>1267538</td>
<td>93.20</td>
</tr>
<tr>
<td>1971</td>
<td>1602875</td>
<td>206</td>
<td>816544</td>
<td>786331</td>
<td>96</td>
<td>132367</td>
<td>1470508</td>
<td>91.74</td>
</tr>
<tr>
<td>1981</td>
<td>1853801</td>
<td>238</td>
<td>947195</td>
<td>906606</td>
<td>96</td>
<td>166762</td>
<td>1687039</td>
<td>91.00</td>
</tr>
<tr>
<td>1991</td>
<td>2224577</td>
<td>286</td>
<td>1142771</td>
<td>1081806</td>
<td>95</td>
<td>210006</td>
<td>2014571</td>
<td>90.56</td>
</tr>
<tr>
<td>2001</td>
<td>2536516</td>
<td>326</td>
<td>1298078</td>
<td>1238438</td>
<td>95</td>
<td>255426</td>
<td>2281090</td>
<td>89.93</td>
</tr>
<tr>
<td>2011 (P)</td>
<td>2927965</td>
<td>376</td>
<td>1497656</td>
<td>1430309</td>
<td>96</td>
<td>373381</td>
<td>2554584</td>
<td>87.25</td>
</tr>
</tbody>
</table>

Source: Census of India-1901 to 2011
Population in Purulia in 2011 increased by 276 percent over the population in 1901 (Table-2.1). The number of females per 100 males decreased continuously.

ii) Age Composition: The study of age composition is helpful in determining the proportion of labour in the total population. According to 2011 census report the working age group of the population is considered as 15-60 and 0-14 age group is the age group of child population which reflects the portions of non-productive consumers.

**Table- 2.2: Percentage Distribution of Population by age Group**

<table>
<thead>
<tr>
<th>Year</th>
<th>0-15</th>
<th>15-60</th>
<th>60 and above</th>
</tr>
</thead>
<tbody>
<tr>
<td>1971</td>
<td>40.95</td>
<td>53.75</td>
<td>5.30</td>
</tr>
<tr>
<td>1981</td>
<td>39.00</td>
<td>55.40</td>
<td>5.60</td>
</tr>
<tr>
<td>1991</td>
<td>37.90</td>
<td>56.16</td>
<td>5.94</td>
</tr>
<tr>
<td>2001</td>
<td>35.51</td>
<td>57.16</td>
<td>7.33</td>
</tr>
<tr>
<td>2011</td>
<td>37.90</td>
<td>56.16</td>
<td>5.94</td>
</tr>
</tbody>
</table>

*Source: District Statistical Hand Book (compiled 1971 – 2011)*

A slight change has occurred in favour of working age group since 1971.

**Table-2.3: Density of Population (per Sq. Km.)**

<table>
<thead>
<tr>
<th>Area</th>
<th>Rural</th>
<th>Urban</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year</td>
<td>Purulia</td>
<td>West Bengal</td>
<td>Purulia</td>
</tr>
<tr>
<td>1971</td>
<td>237</td>
<td>NA</td>
<td>2407</td>
</tr>
<tr>
<td>1981</td>
<td>272</td>
<td>NA</td>
<td>3032</td>
</tr>
<tr>
<td>1991</td>
<td>325</td>
<td>576</td>
<td>3818</td>
</tr>
<tr>
<td>2001</td>
<td>368</td>
<td>676</td>
<td>4640</td>
</tr>
<tr>
<td>2011</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Source: Census of India 1981-2011*

Table-2.3 shows that the density of population of Purulia increased continuously since 1971 in both rural and urban areas. The overall density of population increased from 256 in 1971 to 468 in 2011.

iii) Literacy rate: The level of literacy can be judged as one of the determinants of the quality of life. From the figure below it can easily be said that the literacy rate for the district has improved significantly. Specially for the female it has almost risen by about six times over the 40 year span (8.25 in the year 1971 and 51.29 in the year 2011)
Table-2.4: Literacy Rate in Purulia (in per cent)

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Population</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>1971</td>
<td>21.50</td>
<td>34.27</td>
<td>8.25</td>
</tr>
<tr>
<td>1981</td>
<td>35.24</td>
<td>50.74</td>
<td>18.87</td>
</tr>
<tr>
<td>1991</td>
<td>43.30</td>
<td>62.20</td>
<td>23.20</td>
</tr>
<tr>
<td>2001</td>
<td>55.57</td>
<td>73.72</td>
<td>36.50</td>
</tr>
<tr>
<td>2011</td>
<td>65.38</td>
<td>78.85</td>
<td>51.29</td>
</tr>
</tbody>
</table>

Source: Census of India 1971-2011

Table-2.5: Employment Scenario in Purulia

<table>
<thead>
<tr>
<th>Category</th>
<th>% Distribution In 1981Census</th>
<th>% Distribution In 1991Census</th>
<th>% Distribution In 2001Census</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Main Workers</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>i) Cultivators</td>
<td>31.10</td>
<td>35.41</td>
<td>25.4</td>
</tr>
<tr>
<td>ii) Agricultural Labourers</td>
<td>15.68</td>
<td>17.52</td>
<td>13.91</td>
</tr>
<tr>
<td>iii) Industrial Workers</td>
<td>0.99</td>
<td>0.98</td>
<td>3.33</td>
</tr>
<tr>
<td>iv) Other Workers</td>
<td>6.73</td>
<td>7.88</td>
<td>11.20</td>
</tr>
<tr>
<td>B. Marginal Workers</td>
<td>7.17</td>
<td>7.80</td>
<td>19.0</td>
</tr>
<tr>
<td>C. Non-Workers</td>
<td>61.73</td>
<td>56.85</td>
<td>55.6</td>
</tr>
</tbody>
</table>

Source: Census of India 1981-2001

It is evident from Table- 2.5 that the importance of agricultural and industrial sector in the field of employment generation has increased during the past three decades. Simultaneously non-worker portion of the population has moderately decreased. This implies unemployment problem has been solved to some extent. Thus the high proportion of agricultural worker with high rate of illiteracy (46.8% illiterate among rural people) implied lower stage of economic development.

B) Natural Resources: Natural Resource includes land, water resources, fisheries, mineral resources, forests, marine resource, climate, rainfall and topography. While some resources are renewable such as water, fisheries and forests, others like minerals are non-renewable in nature and can be used only once.

i) Configuration of Land: In the western part of the District lower plateau is seen. On the other hand eastern part has been covered by rocky plane surface. Actually the characteristics
of Chhotonagpur plateau are spread at most of the portions of the District. In north the region of Panchet or Panchokote is located at the Gandowana basins. In the western part of the district Baghmundi hills are situated. The famous Ayodhya hills are located in the south-west of the District. Its highest peak is Gorgaburu or Gangaburu (2,200ft). Numerous small streams in its western and southern slopes flow into the river Subarnarekha. The streams which have originated from northern slopes flow, into Kasai and Kumari rivers.

The main rivers passing through or bordering the district are Kansabati, Kumari, Subarnarekha and Damodar. The land surface which covers the district is mostly residual soil formed by weathering of bed rocks.

ii) Climate and Rainfall: The district is known for its extreme climate. Actually rainfall characterizes the climate of the District. South-west monsoon is the principal source of rainfall in the District. Average annual rainfall during last 50 years is 1357 mm. The relative humidity is high in monsoon season, being 75% to 85%. But in summer it comes down to 25% to 35%. It has been observed that medium type of drought occurs once in every 3 years and severe type of drought occurs once in every 10 years in the District. Temperature varies in wide range from 7º Celsius in winter to 46.5º Celsius in summer. The monthly rainfall in the District is shown in the table below-

**Table-2.6: Monthly Rainfall in the District (in mm.)**

<table>
<thead>
<tr>
<th>Month</th>
<th>Normal (1)</th>
<th>2007 (2)</th>
<th>2008 (3)</th>
<th>2009 (4)</th>
<th>2010 (5)</th>
<th>2011 (6)</th>
<th>2011 (7)</th>
</tr>
</thead>
<tbody>
<tr>
<td>January</td>
<td>5</td>
<td>-</td>
<td>13</td>
<td>1</td>
<td>-</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>February</td>
<td>12</td>
<td>37</td>
<td>2</td>
<td>-</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>March</td>
<td>22</td>
<td>39</td>
<td>8</td>
<td>9</td>
<td>1</td>
<td>37</td>
<td></td>
</tr>
<tr>
<td>April</td>
<td>22</td>
<td>20</td>
<td>18</td>
<td>-</td>
<td>9</td>
<td>38</td>
<td></td>
</tr>
<tr>
<td>May</td>
<td>74</td>
<td>69</td>
<td>44</td>
<td>116</td>
<td>79</td>
<td>79</td>
<td></td>
</tr>
<tr>
<td>June</td>
<td>224</td>
<td>123</td>
<td>382</td>
<td>59</td>
<td>104</td>
<td>421</td>
<td></td>
</tr>
<tr>
<td>July</td>
<td>288</td>
<td>549</td>
<td>425</td>
<td>197</td>
<td>159</td>
<td>227</td>
<td></td>
</tr>
<tr>
<td>August</td>
<td>292</td>
<td>397</td>
<td>217</td>
<td>295</td>
<td>192</td>
<td>393</td>
<td></td>
</tr>
<tr>
<td>September</td>
<td>221</td>
<td>348</td>
<td>223</td>
<td>267</td>
<td>148</td>
<td>337</td>
<td></td>
</tr>
<tr>
<td>October</td>
<td>81</td>
<td>19</td>
<td>16</td>
<td>77</td>
<td>46</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td>November</td>
<td>7</td>
<td>13</td>
<td>-</td>
<td>3</td>
<td>9</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>December</td>
<td>8</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>50</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1256</strong></td>
<td><strong>1614</strong></td>
<td><strong>1348</strong></td>
<td><strong>1024</strong></td>
<td><strong>798</strong></td>
<td><strong>1557</strong></td>
<td></td>
</tr>
</tbody>
</table>

*Source: Meteorological Department, Govt. of India*
iii) Ground Water Resource: The ground water exists in the district under watertable condition. The status of ground water regions is generally reflected in the water table behavior from the network of key observation wells, which is distributed uniformly in the district. In general during the rainy season the water table in the wells rises up to 1.00m below ground level (bgl) till the end of October and as the dry season advances the water level gradually falls down to maximum of 7m to 9m bgl during April- May. The district is a ‘White Zone’ in respect of ground water status though the yield per hour is not adequate.

The potential sources of water in respect of the industries and agriculture which require plenty of water are the rivers flowing through the district or bordering the district. Other ground water resources in the district are 9972 tanks and 4312 wells, serving for irrigation purpose.

iv) Forest Resource: The natural forests of the district are primarily of damped and deciduous in nature and restricted to north-west part of the district covering Ayodhya hills and Panchet hills of north-east. The sal forests are present in sporadic patches in and around Keshargah region of the district. It occupies 12% of the total district area.

The area under forest is 127508.37 hectares. Revenue earned from forest resource was Rs. 9653 thousand in 2011-12.

v) Mineral Resource: Purulia district is endowed with mineral resources of wide range of varieties. These varieties are of basically non-metallic types. According to the findings of Geological Survey of India there are ten types of mineral deposits in this district. The main ones are coal, limestone, rock phosphate, china clay, quartz etc.

**Coal:** The main mineral resource of the district is coal. The southern part of the Raniganj coalfield lies in the north-eastern corner of the district. Total estimated reserve of coal in Madhukunda, Hijuli-Disergarh, Paradih, Ranipur-Parbelia blocks is about 450 million tons. Disergarh Seam comprises good quality of semi-coking blendable coal, containing volatile 27-38% and Ash 14.2-24.4%. Coal is suitable for power plants, as domestic fuels and in other industries.

**Rock Phosphate:** Main deposits are at Beldih, Kutni, Culghora, Medinitanr, Panrikidih and Lanka. Tentative reserve in the district estimated at about 10 million tons. Generally it is used as direct application fertilizer.
**Limestone:** Deposits are located at Jhalda, Kansapathar, and Baghmara. About 20 million tons of low grade limestone containing 25% of $CaO$. It may be used in cement plants either by beneficiating or by blending with high grade carbonates and also in production of lime.

**Dolomite:** Main deposits are in Boch area. Total estimated reserve down to a depth of 60m is 1.05 million tons of all grades. Mainly it is used in steel industries.

**China Clay:** Main deposits of clay in the district are located at Dhatara, Kalajhor, Mahatomara, Hankasara, Sialdanga, Khariduara, Malati etc. Total deposit is about 3 million tons. Main use of it is in ceramic and other industries.

### 2.3 Analysis of Infrastructure

Some basic facilities, commonly known as infrastructure, play a crucial role towards economic development of a district. The existing infrastructure of the district has been dealt with in terms of economic and social infrastructures.

**A. Economic infrastructural** facilities consist of

1. Irrigation
2. Power
3. Transportations
4. Communications
5. Financial Infrastructure.

**2. Power:** Power constitutes one of the most important, components of infrastructure of the development of both agriculture and industry. The district of Purulia receives power normally from Santaldih thermal power station. It is situated in Para block of the district. There is another 132kv substation of DVC at Purulia which is interconnected with West Bengal State Electricity Board system. The progress of rural electrification programme in the district is not satisfactory while all the towns and most of the police stations are electrified. 2407 mouzas (Out of 2683 mouzas) are electrified. The electricity consumption in the district is given below.
Table-2.7: Consumption of Electricity by Different Sectors

<table>
<thead>
<tr>
<th>Year</th>
<th>Domestic</th>
<th>Commercial</th>
<th>Industrial</th>
<th>Public lighting</th>
<th>Agricultural irrigation &amp; dewatering</th>
<th>Public Water Works &amp; Sewerage Pump</th>
<th>Railway Traction &amp; Non-Traction</th>
<th>Miscellaneous</th>
<th>(Thousand K.W.H.)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006-07</td>
<td>67825</td>
<td>43242</td>
<td>63370</td>
<td>856</td>
<td>1921</td>
<td>1152</td>
<td>27685</td>
<td>584</td>
<td>206635</td>
<td></td>
</tr>
<tr>
<td>2007-08</td>
<td>68455</td>
<td>17410</td>
<td>27300</td>
<td>1292</td>
<td>391</td>
<td>2806</td>
<td>34241</td>
<td>-</td>
<td>151895</td>
<td></td>
</tr>
<tr>
<td>2008-09</td>
<td>90697</td>
<td>33457</td>
<td>28079</td>
<td>2323</td>
<td>884</td>
<td>3191</td>
<td>31417</td>
<td>1185</td>
<td>191233</td>
<td></td>
</tr>
<tr>
<td>2009-10</td>
<td>91998</td>
<td>18758</td>
<td>13713</td>
<td>1337</td>
<td>555</td>
<td>1278</td>
<td>32842</td>
<td>5574</td>
<td>166055</td>
<td></td>
</tr>
<tr>
<td>2010-11</td>
<td>10176</td>
<td>22734</td>
<td>13471</td>
<td>2071</td>
<td>688</td>
<td>1423</td>
<td>31992</td>
<td>7811</td>
<td>181956</td>
<td></td>
</tr>
</tbody>
</table>

Source: Divisional Engineer, (O&M), W.B.S.E.B. Purulia

The picture shows that the district is not able to explore the modern technology based on electricity in the field of production sector. Only non productive domestic consumption increased during the study period. This also proves backwardness of electrification programme.

3. Transportations: Railway and road constitute the transport system of Purulia.

   a) Railway Network: The railway divisional headquarters is situated at Adra and the broad gauge kilometer range is about 233 kms within the division. The district is served by 3 rail connections provided by South- Eastern railway with a good number of railway stations. One line runs from Bihar in the south through the district upto Asansol passing through Adra. Another line runs between Bankura and Dhanbad via Adra. The third one connects Jhalda to Chas in Jharkhhand. Major cities and towns like Ranchi, Tatanagar, Patna, Howrah, Dhanbad, Asansol, Puri, Bhubaneswar, and New Delhi etc are now connected with Purulia by direct mail/express trains.

   b) Road Network: The road transport network is not adequate in terms of availability of bus and flow of goods carriage. National highway 32 connects Jamshedpur, Bokaro, Chas and Dhanbad. The state highway of the district viz state highway 2 and state high way 4 cover about 211 kms apart from Zilla Parishad roads and major district roads.
Table-2.8: Roads maintained by Different Administrative Bodies (in Kms)

<table>
<thead>
<tr>
<th>Year</th>
<th>P.W.D</th>
<th>Zilla Parishad</th>
<th>Gram Panchayet &amp; Panchayet Samity</th>
<th>Prime Minister’s Gram Sarak Yojana</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006-07</td>
<td>853.00</td>
<td>1475.82</td>
<td>4075.00</td>
<td>162.50</td>
</tr>
<tr>
<td>2007-08</td>
<td>857.00</td>
<td>1360.32</td>
<td>4099.00</td>
<td>278.00</td>
</tr>
<tr>
<td>2008-09</td>
<td>859.00</td>
<td>1283.67</td>
<td>4074.99</td>
<td>384.66</td>
</tr>
<tr>
<td>2009-10</td>
<td>861.00</td>
<td>1269.92</td>
<td>3863.24</td>
<td>472.96</td>
</tr>
<tr>
<td>2010-11</td>
<td>863.00</td>
<td>1313.79</td>
<td>3863.24</td>
<td>561.26</td>
</tr>
</tbody>
</table>

Source: District Statistical Handbook 2010,11 Combined

4. **Communications**: The total number of post offices is 443 and the number of combined offices (Post & Telegraph) is 90. There are 20 electronic telephone exchanges connecting the district to the outer world.

5. **Financial Institutions**: The banking and financial network is not adequate having concentration at the municipalities and urban agglomerations. United Bank of India is the lead bank in the district. There are 124 branches of commercial banks, 29 branches of R.R.Bs, 7 branches of co-operative banks and 2 non-bank financial institutions. As per the performance report of the banks the investment towards agriculture and allied sector is low – while that in industrial sector is promising.

**B. Social Infrastructure**: Prevalence of compatible social infrastructure along with industrial infrastructure is of vital importance for an overall growth process of any economy. In Purulia district there are 2998 primary schools, 197 junior high schools, 163 high schools and 171 higher secondary schools. Besides these, the district also possesses 17 degree colleges, 9 technical schools including polytechnics, industrial training institutes and junior technical schools and 9 technical colleges including 4 B.Ed colleges. One university, named Sidho-Kanho-Birsha University is newly established, side by side 5 study centers of open universities have in the district.

There is one District Hospital (Purulia), one State General Hospital (Raghunathpur), two State Special Hospital (Purulia), one Central Aided Hospital (Adra),
four Private Aided Hospitals, five Rural Hospitals, 15 BPHC and 53 PHCs in the district rendering medical services for the people of the district.

There is a District Science Centre which primarily aims at motivating and encouraging the people of the district to popularize science.

2.4 Agriculture and Allied Activities

Agriculture forms the backbone of Purulia’s economy. A large portion of the income comes from agriculture though the per-capita income is considerably low. On the other hand agriculture is the main source of livelihood of the major portion of (about 72%) of the population living in rural areas. Most rural households practice subsistence farming under adverse and risky environmental conditions. The natural resource base can be characterized as poorly suited to agriculture due to climatic, water resource, and soil conditions.

i) Agricultural Land: The Tropic of Cancer passes through the wide range of the district. For that the soil of the district is mostly sedentary in nature. Only in valley bottom alluvial is found. Undulated uplands are shallow, gravelly, coarse textured, well drained having low water holding capacity and are susceptible to erosion. Gora and baid land, which occupies 60% of the cultivated area is situated at upland and is not suitable for wet land cultivation. The kanali land (soil of the land between ridges and valley bottom) is moderately deep, light to medium texture, low in organic content. Clay content usually increases along with depth. This type of land is suitable for cultivation and amounts to 25% to 30% of total cultivable area. Bahal (lower valley bottom soils) are deep to very deep with medium to fine texture and suffer from drainage problem. This type of land amounts to 10% to 15% of total cultivable area.

ii) Agricultural Worker: Agricultural workers are also classified as cultivators and agricultural labourers. As per 2001 census data 29.92% of total population of the district are engaged in agricultural activity while it has been worked out to be 26.52% for the 1991 census data. Out of this 15.90% are cultivators and 14.01% are agricultural labourers. Corresponding figures for the census year 1991 are 17.52% and 9.00%. Therefore we can say that the proportion of people engaged in agricultural activity is increasing but there is
significant migration of occupation from cultivators to agricultural labourers. This is not at all welcome trend for agricultural economy.

**Table-2.9: Agricultural Workers**

<table>
<thead>
<tr>
<th>Type</th>
<th>Cultivators</th>
<th>Agricultural Labourer</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Year</td>
<td>Male</td>
</tr>
<tr>
<td>Rural</td>
<td>2001</td>
<td>230321</td>
</tr>
<tr>
<td></td>
<td>1991</td>
<td>277759</td>
</tr>
<tr>
<td>Urban</td>
<td>2001</td>
<td>1015</td>
</tr>
<tr>
<td></td>
<td>1991</td>
<td>1952</td>
</tr>
<tr>
<td>Total</td>
<td>2001</td>
<td>231336</td>
</tr>
<tr>
<td></td>
<td>1991</td>
<td>279711</td>
</tr>
</tbody>
</table>

*Source: Census of India 1991-2001*

Previously in *Rabi season* a major portion of agr. labourer usually used to go to another agriculturally developed district for searching job. Now job opportunity is being created in various ways through the work of Gram *Panchayat* such as 100 days work, distribution of vested land, registering as a *Bargadar* etc.

iii) *Irrigation*: Cultivation in the district is basically dependent on rain fed water and *Kharif* crop is the main crop. Actually mono crop system mostly prevails here, whereas *Rabi* crop is found only on lower land which has significant irrigation facilities. The source of irrigation is depicted here-

**Table- 2.10: Area Irrigated by Different Sources**

<table>
<thead>
<tr>
<th>Year</th>
<th>Govt. Canal</th>
<th>Tank</th>
<th>RLI</th>
<th>ODW</th>
<th>Others</th>
<th>(Thousand hectares) Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1)</td>
<td>(2)</td>
<td>(3)</td>
<td>(4)</td>
<td>(5)</td>
<td>(6)</td>
<td>(7)</td>
</tr>
<tr>
<td>2006-07</td>
<td>28.83</td>
<td>28.85</td>
<td>0.97</td>
<td>3.44</td>
<td>9.04</td>
<td>71.13</td>
</tr>
<tr>
<td>2008-09</td>
<td>30.36</td>
<td>46.86</td>
<td>0.70</td>
<td>3.45</td>
<td>10.02</td>
<td>91.39</td>
</tr>
<tr>
<td>2009-10</td>
<td>27.66</td>
<td>53.16</td>
<td>0.73</td>
<td>3.45</td>
<td>10.84</td>
<td>95.84</td>
</tr>
<tr>
<td>2010-11</td>
<td>8.90 *</td>
<td>60.21</td>
<td>1.14</td>
<td>3.45</td>
<td>12.13</td>
<td>85.83</td>
</tr>
</tbody>
</table>

*River Lift Irrigation
Open Dug Well
Sources: Executive Engineer, Agri. Irrigation, Purulia*
iv) **Land Utilization**: Utilization of land depends upon various factors such as fertility of land, soil pattern, irrigation system, climatic condition, traditional practices and profitability etc. How these factors affect in utilizing land in the district in what extent will be revealed by the following table.

**Table- 2.11: Land Utilization Statistics** (in thousand hectares)

<table>
<thead>
<tr>
<th>Year</th>
<th>Reporting Area</th>
<th>Forest Area</th>
<th>Area under Non-agricultural use</th>
<th>Barren &amp; Uncultivable land</th>
<th>Permanent pasture &amp; other grazing land</th>
<th>Land under misc. tree groves not included in Net area sown</th>
<th>Cultivable land</th>
<th>Fallow land other than current fallow</th>
<th>Current fallow</th>
<th>Net area sown</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006-07</td>
<td>625.65</td>
<td>75.05</td>
<td>99.90</td>
<td>6.30</td>
<td>1.03</td>
<td>3.92</td>
<td>8.94</td>
<td>4.73</td>
<td>115.53</td>
<td>310.24</td>
</tr>
<tr>
<td>2007-08</td>
<td>625.65</td>
<td>75.05</td>
<td>100.23</td>
<td>4.19</td>
<td>2.55</td>
<td>3.18</td>
<td>7.32</td>
<td>5.24</td>
<td>114.97</td>
<td>312.92</td>
</tr>
<tr>
<td>2008-09</td>
<td>625.65</td>
<td>75.05</td>
<td>104.33</td>
<td>4.32</td>
<td>3.10</td>
<td>2.50</td>
<td>7.90</td>
<td>5.82</td>
<td>105.54</td>
<td>317.09</td>
</tr>
<tr>
<td>2009-10</td>
<td>625.65</td>
<td>75.05</td>
<td>104.48</td>
<td>5.31</td>
<td>2.56</td>
<td>3.19</td>
<td>8.23</td>
<td>4.72</td>
<td>102.70</td>
<td>319.41</td>
</tr>
<tr>
<td>2010-11</td>
<td>625.65</td>
<td>75.05</td>
<td>105.72</td>
<td>3.20</td>
<td>1.81</td>
<td>2.52</td>
<td>7.60</td>
<td>4.22</td>
<td>199.40</td>
<td>226.13</td>
</tr>
</tbody>
</table>

Source: Directorate of Agriculture, W.B.

**Table-2.12: Statistics of Food Grain**

<table>
<thead>
<tr>
<th>Year</th>
<th>Cereals</th>
<th>Pulses</th>
<th>Total Food Grain</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Area ('000 Hectares)</td>
<td>Production ('000 Tonnes)</td>
<td>Productivity (Kilogram per Hectare)</td>
</tr>
<tr>
<td>-------</td>
<td>---------</td>
<td>--------</td>
<td>------------------</td>
</tr>
<tr>
<td>2006</td>
<td>282.2</td>
<td>554.1</td>
<td>1964</td>
</tr>
<tr>
<td>2007</td>
<td>294.1</td>
<td>754.4</td>
<td>2565</td>
</tr>
<tr>
<td>2008</td>
<td>322.9</td>
<td>779.1</td>
<td>2413</td>
</tr>
<tr>
<td>2009</td>
<td>310.3</td>
<td>758.6</td>
<td>2445</td>
</tr>
<tr>
<td>2010</td>
<td>275</td>
<td>611.4</td>
<td>2223</td>
</tr>
<tr>
<td>2011</td>
<td>160.7</td>
<td>276.6</td>
<td>1721</td>
</tr>
</tbody>
</table>

Source: Directorate of Agriculture, W.B (Current data)
v) Cropping Pattern: Cropping pattern of a district shows to what extent the district is agriculturally developed. Varieties of crops are produced in Purulia and the principal crops include rice, wheat, maize, pulses, and oilseed. Except these crops Lac and tasar are cultivated in forest for industrial purpose. In the district rice is produced in major area compared to other crops. The table above gives us the idea of area, production & productivity under principal crops during 2005-06 to 2010-11. (see table-2.12)

vi) Animal Husbandry: Animal husbandry plays an important role in the rural economy of the district though the rearing of animals is mostly confined to the local variety. Livestock population comprises around 22.50 lakhs of animals and 26.01 lakhs of poultry birds. The growth rate of livestock population is estimated to be approximately 2.03% per year. In the district production of milk (cow, buffalo, and goat) and egg (hen and duck) are 52 thousand tons and 288, 76, 49,000 pieces respectively. The source of the data Live-stock Census Report, Govt. of W.B. (2008)

2.5 Industry

The economy of Purulia is hugely dependent on the industrial sector. Purulia in the southwestern section of West Bengal is an enclosed tract bounded by Bardhaman, Bankura and Midnapore districts in West Bengal and Bokaro and Ranchi districts of Jharkhand. The geographical proximity with the resourceful districts helps setting up industry in Purulia. As the statistics say, only 14% of the district income comes from the industrial sector. Coal mining constitutes the major large-scale industrial pursuit with its quarries and one coal washery, while the main industrial activities in the small-scale centre on Lac, Tassar, Brass, Bell Metal and cutlery. The most important industry in the district after coal is lac.

Two large-scale units play major roles in forming the economic grandwork of Purulia, The Santaldihi Thermal Power Plant in Santaldihi and Damodar Cement Factory at Madhukunda. Moreover one major unit i.e. Pumped Storage Project with a capacity of generating 4X225 MVV is under construction. In the light of the new Industrial Policy of the Govt. of West Bengal, Purulia has achieved a marked visibility among the investors since the beginning of 2001. In recent years there has also been a giant leap in the large-
scale sector with a number of big entrepreneurs showing great interest in making investments in Steel, Cement and Power sector.

Purulia with its rich mineral reserve, vast tract of land, wide rail road network, surplus labour force, picturesque tourist locations, forests, rivulets and hillocks has enough potentialities to be developed as one of the major Industrial centre of West Bengal as well as of India.

i) *Large Scale Industry*: The District has only three large scale industrial units. One is Santaldih Thermal Power plant at Santaldih and other is A.C.C. Cement Factory, Madhukunda. Third one is Pumped Storage Project at Baghmundi. One major unit i.e. Jay Balaji groups enterprise at Raghunathpur with generation of 3 million ton steel, 800 MW electricity and one million ton cement is under construction stage.

Damodar Valley Corporation (DVC) is now going to set up a thermal power plant at Raghunathpur sub-division. The estimated capacity is 2400 Mw. The industry is likely to be expanded and extended to 4400MW. Land acquisition for 1600 acres of land is going on. In addition land acquisition of 5000acres is going on in favour of WBIDC under whose agencies Jay Balaji Company, Shyam Steel Company, Adhunik Steel Company are going to set steel & iron connected industries.

ii) *Medium Scale Industry*: There are some medium scale industrial units. They are engaged in producing slag cement, H.D.P.O oven sack, railway concrete sleeper, sponge iron, lump of metal, Shellac Commodity. These types of industries are mainly located at Balarampur, Nituria, Jhalda and Madhukunda belt in view of certain facilities available in these areas.

**Table-2.13: Total Number of Enterprises (Agricultural and Non agricultural) in Purulia**

<table>
<thead>
<tr>
<th>Area/ Sector</th>
<th>Agricultural</th>
<th></th>
<th></th>
<th></th>
<th>Non-agricultural</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Rural</td>
<td>3699(9.54)</td>
<td>3927(7.52)</td>
<td>2591(4.29)</td>
<td>4683(6.45)</td>
<td>35068(90.45)</td>
<td>48272(92.48)</td>
<td>57788(95.71)</td>
<td>67925(93.55)</td>
</tr>
<tr>
<td>Urban</td>
<td>298(3.45)</td>
<td>321(2.57)</td>
<td>310(2.15)</td>
<td>192(1.27)</td>
<td>8337(96.55)</td>
<td>12168(97.43)</td>
<td>14055(97.85)</td>
<td>14954(98.73)</td>
</tr>
<tr>
<td>Total</td>
<td>3997(8.43)</td>
<td>4248(6.59)</td>
<td>2901(3.88)</td>
<td>4875(5.560)</td>
<td>43405(91.57)</td>
<td>60440(93.41)</td>
<td>60440(93.41)</td>
<td>82879(94.44)</td>
</tr>
</tbody>
</table>

Table 2.13 shows that the number of non-agricultural enterprises in Purulia was more than 90 percent of the total number of enterprises (Agricultural & Non-agricultural). Non-agricultural enterprises increased in urban areas continuously during 1980 to 2005. During the period 1980 to 1998 the number of non-agricultural enterprises in rural areas increased but during the period 1998 to 2005 the number has deceased.

**Table-2.14: Annual Growth Rate of Non-agricultural Enterprises in Purulia**

During the period 1980-2005 (in Per Cent).

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Rural</td>
<td>3.77</td>
<td>2.46</td>
<td>2.51</td>
</tr>
<tr>
<td>Urban</td>
<td>4.60</td>
<td>1.94</td>
<td>0.91</td>
</tr>
<tr>
<td>Total</td>
<td>3.92</td>
<td>2.36</td>
<td>2.19</td>
</tr>
</tbody>
</table>


Table 2.14 shows that the annual growth rate of non-agricultural enterprises in rural areas decreased during the period 1990-98 from that in 1980-1990. It increased slightly in 1998-2005. But in urban areas the annual growth rate of non-agricultural enterprises decreased continuously.

**Table-2.15: Number of Total Employment in Enterprises in Purulia**

As per Economic Census

<table>
<thead>
<tr>
<th>Year Areas</th>
<th>1980</th>
<th>1990</th>
<th>1998</th>
<th>2005</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rural</td>
<td>88500</td>
<td>116700</td>
<td>155200</td>
<td>141490</td>
</tr>
<tr>
<td>Urban</td>
<td>39400</td>
<td>45400</td>
<td>58728</td>
<td>43879</td>
</tr>
<tr>
<td>Total</td>
<td>127900</td>
<td>162100</td>
<td>213948</td>
<td>185369</td>
</tr>
</tbody>
</table>


Table 2.15 shows that number of employment in enterprises increased continuously from 1980 to 1998, but after 1998 to 2005 employment in enterprises decreased in all areas.
Table 2.16 Average Annual Growth Rate (percentage) in Employment in Enterprises

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Rural</td>
<td>3.19</td>
<td>4.12</td>
<td>(-)1.26</td>
</tr>
<tr>
<td>Urban</td>
<td>1.52</td>
<td>3.67</td>
<td>(-)3.61</td>
</tr>
<tr>
<td>Total</td>
<td>2.67</td>
<td>3.99</td>
<td>(-)1.91</td>
</tr>
</tbody>
</table>


Table 2.16 shows that average annual growth rate increased during the 1990 to 1998. During 1998-2005 the average annual growth rate in employment was negative in both rural and urban areas. In urban areas the negative annual growth rate was higher than in rural areas.

iii) Small Scale Industrial Units in Purulia

Table 2.17 : Dispersal of Registered working units in Rural and Urban areas

In Purulia and West Bengal

<table>
<thead>
<tr>
<th>Census Number</th>
<th>Rural</th>
<th>Urban</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Purulia</td>
<td>WB</td>
<td>Purulia</td>
</tr>
<tr>
<td>2nd Census</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(1987-88)</td>
<td>1040</td>
<td>20558</td>
<td>530</td>
</tr>
<tr>
<td></td>
<td>(66.24%)</td>
<td>(44.74%)</td>
<td>(33.76%)</td>
</tr>
<tr>
<td>3rd Census</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(2001-02)</td>
<td>746</td>
<td>16574</td>
<td>498</td>
</tr>
<tr>
<td></td>
<td>(59.97%)</td>
<td>(39.32%)</td>
<td>(40.03%)</td>
</tr>
</tbody>
</table>

Source: 2nd & 3rd All India census of SSI Units

Table 2.17 shows that the percentage of SSI units in the rural areas decreased both in Purulia and in West Bengal and obviously, the percentage of SSI units in urban areas increased during the period 1987-88 to 2001-02.

The main types of Rural Non-agricultural Enterprises in Purulia are as follows:

2) Prospective Industries: Semi-mechanised bakery; Readymade garments; Shoes & chappals; Plastic utensils; Dry cell battery; R.C.C.pipes.

### Table-2.18: Percentage Distribution of SSI by Type of Activities

<table>
<thead>
<tr>
<th>Type/ Area</th>
<th>Rural</th>
<th>Urban</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manufacturing</td>
<td>55.22</td>
<td>16.27</td>
<td>71.49</td>
</tr>
<tr>
<td>Repair &amp; Maintenance</td>
<td>7.53</td>
<td>4.37</td>
<td>11.90</td>
</tr>
<tr>
<td>Services</td>
<td>7.35</td>
<td>9.26</td>
<td>16.61</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>70.10</td>
<td>29.50</td>
<td>100</td>
</tr>
</tbody>
</table>

Sources: 1) Directorate of Cottage and Small Scale Industries, Govt. of W.B.

Table-2.18 shows that manufacturing SSIs were 71.49 per cent in the total SSI sector in Purulia out of which 55.22 per cent was in the rural areas. The percentage of SSI units engaged in service was higher in urban areas. There was a concentration of 70.10 per cent of total SSI units in rural areas in Purulia.

### Table-2.19: Number of Small Scale Industrial Units registered with the Directorate of Cottage and Small Scale Industries with corresponding employment in the district of Purulia

<table>
<thead>
<tr>
<th>Year</th>
<th>Unit During the year</th>
<th>Unit Upto the year</th>
<th>Employment During the year</th>
<th>Employment Upto the year</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1)</td>
<td>(2)</td>
<td>(3)</td>
<td>(4)</td>
<td>(5)</td>
</tr>
<tr>
<td>April to Sept.2006</td>
<td>127</td>
<td>9925</td>
<td>978</td>
<td>62202</td>
</tr>
<tr>
<td>Oct.2006 - March 2007</td>
<td>103</td>
<td>103</td>
<td>956</td>
<td>956</td>
</tr>
<tr>
<td>2007-08</td>
<td>289</td>
<td>392</td>
<td>2517</td>
<td>3473</td>
</tr>
<tr>
<td>2008-09</td>
<td>231</td>
<td>623</td>
<td>2151</td>
<td>5624</td>
</tr>
<tr>
<td>2009-10</td>
<td>314</td>
<td>937</td>
<td>2163</td>
<td>7787</td>
</tr>
<tr>
<td>2010-11</td>
<td>207</td>
<td>1144</td>
<td>1484</td>
<td>9271</td>
</tr>
</tbody>
</table>

Note: After the introduction of the Micro, Small & Medium Enterprises Development Act in October, 2006 the registration system has been abolished.

Sources: 1) Directorate of Cottage and Small Scale Industries, Govt. of W.B.  
2) Directorate of Micro & Small Scale Enterprises, Govt. of W.B.
Table- 2.19 Indicates that both the total number of newly registered SSI units and total employment therein decreased during the period 2009-10 to 2010-11. The type of products in which both the number of units and employment increased were wood products, basic metal industries, machinery & parts (except electrical), electrical machinery & apparatus and transport equipment. There was higher number of units producing metal products, and repair service and food products were the next two types of products according to number of SSI units. Highest numbers of workers were was there in case of Metal products followed by food products and chemicals & chemical products.

Purulia District once occupied a predominant position in the field of lac production. Lac was cultivated in all the blocks (20 nos) throughout the district. Many lac-based industries were functioning in this district by virtue of this district’s raw materials base, traditional skill of the lac growers and processing capacity etc. Now the situation is reverse. Lac cultivation has dwindled and lac industries are performing in lesser number. Sericulture has got an important role in the district economy in the tribal areas for production of cocoons, reeling and weaving.