Chapter VII

LOCATIONAL ASSOCIATION OF TRIBAL POPULATION AND SETTLEMENTS OF ORISSA
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Introduction:

In the preceding chapters our analysis has been mostly giving much emphasis on and of those cases of Orissa which are identified to be tribal in character. Practically no attention has been paid or any consideration given to the mutuality and level of tribal and non-tribal association for the state as a whole at workable an appreciable lower administrative level. In the over-all interest of the State's tribal communities we cannot afford to ignore areas outside tribal regions of the state where there has been intermingling of tribals and non-tribals in the natural process for socio-cultural integration. For this reason, it is desirable to understand the level of locational association of the tribals and non-tribals both at the level of population as well as settlements for all the areas of the state instead of only concentrating on the tribal regions or core tribal areas.

The changing scenario in the pattern and nature of the human settlements, the behaviour and activities of people on
space are continuous and irreversible and it is the resultant of a multiplicity of mutually inter-dependent socio-cultural, political and techno-economic forces of disequilibrium. The traditional society - its virgin beliefs and ideals implanted on its native population - is impregnated by the invasion of new ideas and activities from contiguous or far off regions and thus a new cultural and economic order emerges. The structure, magnitude and the direction of inter-regional traffic in men, money and material immensely affect the personality of a settlement. Thus the economic geography and the peculiarities of social environment of a region are the function of a system of such interlacing factors as the existence of natural endowments, prospects of alternative opportunities of resource use, and above all the cultural aptitudes and aspirations of its people. A shift in socio-cultural landscape due particularly to a change in composition or caste, ethnic or religious groups leads to an evolutionary and sometimes revolutionary transition of the geographical map of a region and vice versa.

**Non-tribal and tribal Association:**

In the above context, the response to different socio-economic stimuli of the tribal and non-tribal components of population representing two distinct cultural species and
occupying the geographical space of the present study at least at sub-divisional level (*) shall help us to unfold some facts and facets of the dimension and degree of social change. Hilly and forested regions as we know, are the natural habitat of tribal people while the non-tribals dominate over the plains and plateaus where sedentary agriculture is practised. Centuries of geographical and cultural isolation has led to their sub-ordination and subjugation by the non-tribals. Among the several failures reinforcing the state of this cultural isolation are the existence of a primitive and tradition-bound subsistence agricultural economy, prevalence of barter system of exchange, a system of no trade or autarky with rest of the region, existence of inter-regional difference pertaining to topography, language and religious faith etc. The influx of non-tribal people to a predominantly tribal region due to, say, the pull forces generated out of available employment opportunities, higher income and better standard

(*) It is to be noted here that the present consideration at sub-divisional level for Orissa as a whole instead of taking only the two main tribal regions lying in the north and south, is deliberately done keeping in mind that in Orissa (as in most states of India) the sub-divisional officer works as the main functionary in plan proposals under the District Magistrates and therefore a sub-divisional level of locational association of settlements is operationally more logical.
of living naturally disturbs the state of stationary equilibrium of the above culturally isolated hilly and forested tracts. With growth of non-tribal settlements a dualistic socio-cultural sector develops in the hitherto tribal dominated region. The well-off non-tribal population forming the microscopic minority are found to be economically and culturally dominant and the majority tribal population regress, or further shrink to the hills and, in many cases, surrender their cultural identity to a condemned state of sub-ordination and control, mainly due to the operation of a powerful mechanism of economic exploitation and cultural subjugation by a dominant group. Thus in the tribal stage the evolution of a polarised socio-cultural phenomenon occurs.

**Association and socio-cultural integration:**

Notwithstanding what has been stated above, the phase of socio-cultural and economic dualism undergoes significant transformation through time pari passu (along with) economic development. The tribal mainstream is slowly brought to the mainstream of national and international life. Cross-currents of migration and development of modern economic institutions raise the tribal society to a higher level of interaction. An intermingling of culture takes place and as such the
settlement pattern in a region undergoes organic change. Again, change in investment and savings, employment and wage, technology and science, invention and innovation, institutions and process of decision making, accelerates the pace of change in inter-personal as well as inter-space relationship. As such the conformity of any settlement as purely predominantly tribal or non-tribal is not static, rather changeable. For example, migration of non-tribal workers to hitherto purely tribal micro-region due to a major autonomous investment shall in course of time lead to cross-migration of tribals to non-tribal habitats and this leads to significant locational re-arrangements. The landuse scene, settlement pattern and the socio-cultural structure of a region change accordingly with the changed probabilities of social interaction.

It is undoubtedly most desirable that in order to maintain intra-regional communal harmony both tribal and non-tribal settlements in a region should get mixed up so that a happy fusion of their ideas and cultures would lead to neutralisation of the forces of disruption among them, thereby usurping in a healthy social environment for the inhabitants of these settlements. But human nature is often so complex and the present day faith on social safety
is so feeble that people prefer to settle in areas of their own communities and as such there ought to be re-arrangement of settlements in particular localities in such a way that there might be equal percent of the two different types of settlements in a major territorial division. This might be activised through a process of migration of either of the establishments of a particular territory towards like establishments or settlements in another territorial division. This process would therefore lead to regrouping of settlements of the two different types in a principal region and this naturally mean a lot to the social scientists, planners, government executives, politicians and others for regional assessment and development plans and programmes, since the two types of settlements, tribal and non-tribal do not have a conformity of the needs in the context of their social upbringing with a view to develop the regions that they inhabit.

In this context, the study of settlement pattern and the tribal non-tribal population relationship of different sub-regions (in the present study the sub-divisions) of Orissa is vital in order to analyse, predict and prescribe the qualitative and quantitative changes that would occur
if a rupee is spent on construction of a road or if a tubewell is sunk or a primary school is established or an agro-based industry is set up in any such sub-regions. This will enhance the accuracy in forecasting whether a socio-economic programme can be successfully implemented and what would be the probable gaps if we smell any chances of failure.*

The Technique of Assessment of Locational Association:

To serve our purpose, the locational association of settlements and population of tribal and non-tribal groups have been found out following Gibbs' approach to measures of the association in spatial distributions which can be expressed mathematically as:

$$L_A = 100.00 - (\sum |X-Y| / 2)$$

where X and Y are the percent of each of the two types of tribal 'associated' or 'non-associated' settlements located in each major territorial division i.e., say, each police station of a sub-division. Thus to find out the $L_A$ value for different sub-divisions of Orissa either for tribal or non-tribal settlements or population their thanawise (police stationwise) percentage distribution for each
category has been differentiated\(^{(4)}\). The differentiated values have been added together and then halved and minused from 100 in order to get the \(L_A\) value.

In the above formula, the two limiting values of \(L_A\) would be 0.00 and 100.00 suggesting no possible association in the former value and a sure and strong association in the latter value. Values in between would mean the amount of spatial deviation from the probable association in either way. Suppose \(L_A\) gets a value 85.0 for the distribution of the major tribal and non-tribal settlements in a particular subdivision, this would suggest a high degree of association, since the minimum \(L_A\) value is 0.0 and the maximum is 100.0 and the said \(L_A\) value 85.0 indicates that at that particular time only 15.0 percent of either type of the settlements in this particular spatial unit would have had to receive either tribal or non-tribal population as the case may be from some other spatial unit nearby to bring about an equal percent of the two in the said areal unit\(^{(5)}\) (say, a sub-division or at a still micro-level, a police station).

**Indices of Locational Association in Orissa:**

Applying the above technique for the measurement of spatial association of settlements and population of tribal
and non-tribal groups of Orissa the $L_A$ values have been found out for two different census years i.e. for 1971 and 1981, in order to show the temporal change in the spatial association. While applying the technique to understand the level of locational association of tribal and non-tribal settlements and population, each sub-division was considered as a sub-regional unit composed of a mosaic of administrative units of lower level which are the police stations in our analysis.

(a) **Locational Association of settlements**: Settlements were scrutinised in order to assess a police station as tribal or non-tribal on the same basis as was done in chapter II while identifying the tribal regions in Orissa. Necessary computations were made and the tribal and non-tribal settlements and population association index for each of the subdivisions of Orissa has been given in the Appendix -VII. By the help of these index values 4 chropleth maps (Figs. 7.1 to 7.4) have been prepared to give a visual picture of the association index of tribal, non-tribal settlements and population in 1971 and 1981.

Taking into account the locational association of settlements in 1971, as shown in map vide Fig. 7.1 as many as 9 (nine) subdivisions become distinguished having very high
association index of more than 80. They are Kuchinda and Redhakhole in Sambalpur district, Boudh and Baliguda in Phulbani district, Patnagarh in Bolangir district, Dharamgarh and Nayapara in Kalahandi district, Jeypur and Rayagada in Koraput district. Three subdivisions namely, Bhadrak, Cuttack sadar and Bhubaneswar belonging respectively to Baleswar, Cuttack and Puri districts, have very low locational association index of less than 20. Hindol subdivision of Dhenkanal district comes within the 20-40 association index class. Besides, most of the subdivisions of coastal districts along with Angul sub-division of Dhenkanal district, Gunupur of Koraput district, Padampur of Sambalpur district, Sundargarn and Bonei of Sundargarh district show an intermediate association index ranging from 40 to 60. But the most outstanding association index class has a value ranging from 60 to 80 as it embraces as many as 30 subdivisions out of the 56 sub-divisions across the length and breadth of Orissa. From the above observation it is now clear that coastal districts of Orissa having high concentrations of non-tribal population with limited and localised tribal settlements which have come up because of the migration of the tribal people in search of employment, show very low association index. In contrast, the tribal
dominated regions with influx of non-tribals because of cheap availability of land and other resources and also in search of employment in the industries, mines and irrigation projects etc., give a high association index value.

As has been discussed earlier, with increasing mobility whether due to pull or push factors, this association index continues to change through time. Map 7.2 showing the association index of settlements in 1981 clearly substantiates the above statement. Deogarh and Redhakhole sub-divisions in Sambalpur district, Bamanghati in Mayurbhanj district, Khondmal and Baliguda in Phulbani district, Titlagarh in Bolangir district, Kendujhar sub-division in Kendujhar district, Dhenkanal sub-division in Dhenkanal district, Nawapara in Kalahandi district and Rayagada in Koraput district come under very high association index group. Bhubaneswar is the only subdivision with very low association index. Cuttack Sadar and Bhadrak are the two other subdivisions where the association index is low varying between 20 to 40. All other subdivisions have association index varying between 40-80. If we compare the association index of the settlements from these two maps, a broad similarity is clearly evident along with suitable differences. The coastal districts with very high concentration of non-tribal population still show
very low association index. Tribal settlements remain concentrated in those districts for the fear of exploitation and harassment by the dominant cultural group, i.e. the non-tribals. But there has been movements leading to re-grouping of settlements and therefore a change in the association index in the desired direction, most particularly in Balaswar, Bhadrak and Cuttack Sadar sub-divisions has been noticed. This is mostly due to the fact that the coastal districts are agriculturally prosperous and educationally advanced areas with considerable shortage of agricultural labourers to work in the rice fields. Hence the pulling effect of greater availability of food and employment has served the strong valency bonds of cultural isolation of the tribals leading to dispersion over the coastal areas. Non-tribals, because of their complete dependence on themselves for manual labour, have gradually become less hostile, thus leading to a happy fusion of the cultures. Obviously due to this, an upward change in the association index has been possible. Some spectacular changes have also occurred both in the tribal dominated areas and the non-tribal dominated areas in the interior part of the state. The forces of cohesion or equilibrium are noticed to have weakened in some areas.
while the said forces are getting stronger in some others. In most of the sub-divisions, however, the association index has fluctuated slightly, and very slightly, in these years. The association index of settlements in Jeypur subdivision shows a downward trend indicating greater concentration of tribal and non-tribal settlements. In the process, Jeypore through these years, has emerged as the most important commercial and business centre of the district. Besides, a large number of medium-scale industries, most notably rice mills, saw mills and oil processing mills, have started growing in and around it. As the town expands, more and more non-tribal settlements are getting attracted towards it and the tribals are pushed further into the higher slopes of the hills and interior parts of the forests leading to greater concentration and therefore recording lower association index. Gunupur sub-division of this district, however, shows a marked improvement in the association index because of incoming of non-tribal people into different parts of the subdivision which is very rich in forest resources. The major forest product is timber. Besides, Kendu leaf, bamboo, Sabai grass, lac and Tamarind etc. are the other important products of this area. In order to capture the trade in these products and improve their economy the non-tribal settlements are
getting distributed leading to higher association index. A marked deterioration is seen in Kalahandi subdivision where due to construction of Upper Indravati Project vast areas have been occupied and many tribal settlements have been evacuated. These disturbed tribal settlements have concentrated in surrounding tribal areas of this subdivision leading to low association index. The impact of this project has also led to low association index in the adjacent subdivision such as Dharamgarh because of greater concentration of non-tribes in the areas where the benefits of the project can be easily availed. Entire Phulbani district shows a high association index mainly because of the impact of missionary organisations who have infused in them modern ideas and outlooks. Besides, the large forest areas have been reserved thereby urging the tribals and non-tribals to live together in harmony. In the northern part of the state, the subdivisions such as Rairangpur of Mayurbhanj district, Bönei of Sundargarh district, and Champua and Kendujhar of Kendujhar district show a remarkable shift in the association index to a higher value. This implies that there has been a tendency towards better association due to the movement of the tribals to be gainfully employed in the flourishing mining areas particularly at Koida in Bönei, Barbil and Daitari in Kendujhar district and Badaumpahar and Gorumahasani in Mayurbhanj district.
(b) **Locational Association of Population:**

It will be of much spatial significance in the context of movement of people if we now analyse the pattern of locational association of the two groups of people in the northern as well as southern regions. The same technique which was applied to settlements was also applied to the population. Maps vide Fig. 7.3 and 7.4 depict the pattern of population association of tribal and non-tribal groups for 1971 and 1981 respectively. Unlike the settlement association index, the indices for population association show very high value in southern and northern portions of the state while the entire central and the coastal plains of the state have very low association of population where tribals are found to be of an insignificant proportion to the non-tribal population. All the subdivisions of Koraput district, Phulbani district, Parlakhemundi subdivision of Ganjam district, Bhawanipatna and Nuapada of Kalahandi district and Patnagarh of Bolangir district in the southern part of the state show high association index ranging from 80 to 95. This seems to be quite absurd as these regions have very large number of tribal settlements and very few non-tribal settlements. It is therefore an important indication to probe into the matter for which a check-survey was conducted and the following probable answer was obtained.
The answer to the above peculiar locational association values lies with the observation that in those areas the non-tribal populations inspite of being concentrated in a particular locality have been gradually getting diffused into different parts of the region in search of land and resources at a cheap cost. Similarly, another peculiarity has been noticed that almost all the subdivisions of Sundargarh, Kendujhar and Mayurbhanj districts in the northern part of the state, except the Panposh sub-division of Sundargarh district and Anandapur of Kendujhar district, indicate very high population association. This has mostly been possible due to intermingling of tribal and non-tribal population in these areas due to spread in mining and manufacturing activities. Confirmation of this could be possible by a socio-economic sample study on random observation through interrogation of people belonging to both the groups around the mining centres in Kendujhar and Rourkela industrial regions of Sundargarh district.

Excepting a few subdivisions, which are hilly and forested, all other subdivisions in the coastal districts show low population associations. This is quite natural and understandable as the tribals mainly migrate to these areas for employment as constructional workers or agricultural
labourers and then occupy the vacant sites wherever land is available. Because of their significant cultural differences, the tribals usually remain concentrated and thereby the indices of locational association of population belonging to the two groups of tribal and non-tribals remain low. Besides these two observations of population associations for the said sub-divisions, there are a few other subdivisions scattered here and there where the association index has an intermediate value ranging between 65 to 80. This pattern is an indication of a slow but sure decentralisation tendency through intra-regional migration of both tribal and non-tribal population in a process of assimilation.

In comparison to 1971, conditions in 1981 have slightly changed, however, in most cases, significantly for the better. Population association index has almost reached the state of equilibrium in the Koraput and Baliguda subdivisions of Koraput and Phulbani districts respectively. Development of transport and communication links, installation of Upper Kolab, Nachhakund and Balimela Hydroelectricity projects, setting up of Aero-Enginee factory at Sunabeda, paper mill at J.K.Pur in Rayagada and the Alumina plant of National Aluminium company (NALCO) at Damanjodi and other developmental works have been responsible in bringing about
about a near complete fusion of tribal and non-tribal population association in Koraput sub-division in the same fashion as it has been seen in the northern tribal region in the districts of Sundargarh, Mayurbhanj and Kendujhar. Unlike the Koraput subdivision, Baliguda is far behind so far as economic development is concerned though, however, mainly because of the spread of Christianity among the tribals there has been greater movements and social interaction leading to high association index there. Very few changes are perceptible in the coastal districts, except however in the Puri Sadar where the association index is decreasing. The condition remains unchanged in the northern districts of Sundargarh, Kendujhar and Mayurbhanj. Nayagarh sub-division in the Puri district however shows a high association index because of the development of agricultural and industrial activities in the decade 1971-81.

Observation:

The four locational association maps with the analysis presented here, it is hoped, provide ample indication towards a decision-making process for understanding the spatial situation of the trend of the desirable assimilation in a broader context. This would help the
planning authorities to take steps in fruitful decision-making and relative spatial preference in fund allocations so that a healthy trend of quick assimilation of tribals and non-tribals could be achieved which is necessary in the planning principle of regional development. It is suggested that even in such sub-divisions as Koraput and Baliguda where association index suggest a near state of equilibrium in assimilation, the authorities in-charge of developmental measures should not be complacent because in these two sub-divisions the assimilation is but in the raw state in temporal sense as it is only in the past few years that this has come into these two sub-divisions due to technological changes. This recent desirable trend needs consolidation for which continuous social surveys should be undertaken in order to locate if anywhere any negativity is trying to enter in this new achievement of equilibrium relationship. Development schemes must be guided both by spatial and social observations instead of only economic parameters.

It is important to note that the index of locational association of population at sub-divisional level considering the police stations as the smallest areal units though helps in decision-making process of allocation of funds for regional
development, it leads to an over-generalisation by ignoring the two different population groups existing at village level. Consideration of population groups of each settlement for the core tribal areas is expected to reveal the level of locational association of population in these settlements where the tribal population shares 65 percent or more in each and it is desirable to find out to what extent the tribal core villages have assimilated with the non-tribals in recent developments. Such a necessity of finding out the locational association of population exclusively of the tribal core areas with count of population groups at the grass-root (i.e. village) level, was felt when the present research scholar visited some sample villages in the core areas both in the north and south. She observed in most of the villages in Rajgangpur and Banei thanas (police stations) in the northern tribal core belt and also in many villages of Pottangi and Laxmipur thanas (police stations) in the southern tribal core belt that though there has been a low indication of spatial assimilation of tribal and non-tribal settlements due to sticking up of tribal communities to their original village locations in most cases, the tribal and non-tribal people have shown a high degree of indication to assimilate at population group level.
in most of these core tribal villages. It was only after this experience of field observation that the present research scholar mapped out separately the two tribal core areas with demarcation of the thanas (police stations) and then prepared a table of population groups in percentage for each village considering the thana as the unit for which the index of locational association of population was to be calculated where the villages (1027 in the northern tribal core and 2082 in the southern tribal core) are the micro-level spatial units holding the two population groups. The indices of locational association of population was then calculated carefully taking into account population composition of 3109 villages in total covering 12 thanas (police stations) in the northern tribal core and 10 thanas (police stations) in the southern tribal core. These indices of locational association of population were to act as indicators for understanding the present pattern of tribal and non-tribal assimilation in the said two tribal core regions of Orissa which is considered to be necessary while taking up effective measures for improving the lot of the neglected tribal concentrations. The following tables 7.1 and 7.2 show the indices of locational association of population in each thana (police station) under the two tribal core areas of Orissa.
Table - 7.1

Police Stationwise Indices of Locational Association of Population
(Northern Tribal Core area)

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Name of Police Station</th>
<th>No. of settlements</th>
<th>LA (Locational Association)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Talasara</td>
<td>101</td>
<td>78.1</td>
</tr>
<tr>
<td>2</td>
<td>Bonei</td>
<td>250</td>
<td>75.81</td>
</tr>
<tr>
<td>3</td>
<td>Bargaon</td>
<td>95</td>
<td>79.86</td>
</tr>
<tr>
<td>4</td>
<td>Banki</td>
<td>41</td>
<td>71.26</td>
</tr>
<tr>
<td>5</td>
<td>Tikayetpali</td>
<td>46</td>
<td>65.71</td>
</tr>
<tr>
<td>6</td>
<td>Mahulapada</td>
<td>35</td>
<td>69.37</td>
</tr>
<tr>
<td>7</td>
<td>Kamorposh Balanga</td>
<td>58</td>
<td>72.3</td>
</tr>
<tr>
<td>8</td>
<td>Raiboga</td>
<td>48</td>
<td>68.67</td>
</tr>
<tr>
<td>9</td>
<td>Rajgangapur</td>
<td>93</td>
<td>82.24</td>
</tr>
<tr>
<td>10</td>
<td>Gurundia</td>
<td>101</td>
<td>66.23</td>
</tr>
<tr>
<td>11</td>
<td>Kalunga</td>
<td>54</td>
<td>69.48</td>
</tr>
<tr>
<td>12</td>
<td>Kanjipani</td>
<td>105</td>
<td>67.15</td>
</tr>
</tbody>
</table>

Table - 7.2

Police Stationwise Indices of Locational Association of Population
(Southern Tribal Core area)

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Name of the Police Station</th>
<th>No. of settlements</th>
<th>LA (Locational Association)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>R.Udayagiri</td>
<td>191</td>
<td>57.34</td>
</tr>
<tr>
<td>2</td>
<td>Ramgiri</td>
<td>131</td>
<td>57.92</td>
</tr>
<tr>
<td>3</td>
<td>Seranga</td>
<td>90</td>
<td>70.82</td>
</tr>
<tr>
<td>4</td>
<td>Narayampatna</td>
<td>281</td>
<td>63.74</td>
</tr>
<tr>
<td>5</td>
<td>Kalyansingpur</td>
<td>325</td>
<td>68.68</td>
</tr>
<tr>
<td>6</td>
<td>Laxmipur</td>
<td>99</td>
<td>79.934</td>
</tr>
<tr>
<td>7</td>
<td>Puttasingi</td>
<td>61</td>
<td>68.76</td>
</tr>
<tr>
<td>8</td>
<td>Gunupur</td>
<td>170</td>
<td>78.85</td>
</tr>
<tr>
<td>9</td>
<td>Rayagada</td>
<td>462</td>
<td>76.08</td>
</tr>
<tr>
<td>10</td>
<td>Pottangi</td>
<td>272</td>
<td>73.88</td>
</tr>
</tbody>
</table>
The $L^*_A$ values have been classified and two choropleth maps (Fig. 7.5 and Fig. 7.6) for the two core areas have been prepared to depict the pattern of association of the two population groups (tribals and non-tribals).

It is observed that in none of the 22 police stations which constitute the two tribal core areas the locational association index either crosses 85 or falls below 55. It is desired that after so many years of independence with so much attention given to raise the social and economic status of the neglected tribal population there should have been a high degree of locational association of population (at least reaching to the level of 90 or 95 because 100 is rarely possible) particularly in those tribal sub-areas where much assimilation should have taken place by protecting the interests of the tribal communities in order to bring them at a nearer level with the non-tribal group due to establishment of industrial and other technological development institutions (such as the Rourkela Steel Plant and Rajgangpur Cement Industry). But, it is seen that the highest score hardly reaches 85 (with only one area in the northern tribal belt exceeding 80, i.e. Rajgangpur having a score of 82.24). The case is relatively poorer in the southern tribal belt where none of the police stations representing tribal sub-areas
could cross 80, the highest there being a score of 79.63 for Laxmipur. While 4 out of 12 police stations have each an association score of more than 75 (Rajgangpur, Bargaon, Talasara and Banei) in the northern tribal core belt, 3 out of 10 police stations of the southern tribal belt the score exceeds 75 (Laxmipur, Gunupur and Rayagada).

It is seen in the choropleth maps (Fig. 7.5 and 7.6) depicting the spatial pattern of locational association of population in the two tribal core areas that while the relatively higher score (above 75) is for a contiguous tract comprising Laxmipur-Rayagada-Gunupur tribal axis (roughly in a west-east alignment) in the southern tribal belt, there is a break in the contiguity for this value in northern tribal belt. It is clear in the map (Fig. 7.5) that out of the 4 police stations of the northern belt having a score over 75, 3 (three) lie contiguously making up the Talsara-Bargaon-Rajgangpur tribal axis while the fourth one i.e. Banei is cut off from this axis by the Kalunga police station dominated by the Oraons as a single tribal community with a psychological tendency of slower rate of assimilation. The relatively higher score for the southern tribal axis mentioned above is obviously due to urbanisation and industrial activities in Gunupur and Rayagada areas and for the impact of the State Highway passing through Laxmipur.

In the tribal axis of Talsara-Bargaon-Rajgangpur in the north is due to both accessibility and recruitments in industrial units developed there.
Fig. 7

SOUTHERN TRIBAL CORE REGION

LOCATIONAL ASSOCIATION OF TRIBAL POPULATION

0 30 60 90 120 KMS.

Association indices in percentage
55-60% 60-65% 65-70% 70-75% 75-80%

Tribal Region
Tribal Core Region

boundaries

ORISSA

100 0 100

Southern
Tribal Core Region
One of the optimistic observations from out of the locational association scores is indicated from the fact that none of the 22 police stations discussed here has a score of below 55. This clearly suggests that the two core belts even in their lowest level have a positive tendency for assimilation. The association pattern depicted in the two choropleth maps (Fig. 7.5 and 7.6) and the two tables 7.1 and 7.2 provide sufficient indications as to where care has to be taken for a speedier development of regional harmony through assimilation processes which may bring in higher scores of locational association index for population in these problematic tribal belts. The relatively low association indices in those areas of the northern belt is due to mostly inaccessibility while in the southern belt it is a combined reaction of relief, inaccessibility and single tribal domination.
Reference


(2) Ibid.


(4) Those police stations or thanas where there are more than 50 percent tribal population have been counted as tribal thanas in our present study for Orissa as a whole.