DISTRICT VISION 2020

ANGUL DISTRICT

ORISSA

DISTRICT PLANNING OFFICE ,
ANGUL.

A Note from the TSI

PRIA has been involved in the district plan preparation process in several states of India, and hence the assignment of following the same process in the Angul district is but an addition to the list. However, each district has its own challenges and opportunities; so it's not just a mere repetition of the process everywhere. Rather, each such case has been a new learning for us enriching our understanding of the process and enhancing our capability.

The district of Angul, despite its challenges, has been more or less favourable for us in respect of the cooperation of the district administration including the Collector, Angul; the Project Director, DRDA, Angul; and the District Planning Officer, Angul; local NGOs, Block Development Officers, and other departmental authorities. We take this opportunity to thank all of them, and particularly to Foundation for Ecological Security(FES), Angul; Viswa Yuva Kendra, Baninali; Jana Bikas Kendra, Pallahara; Community Development Services(CDS), Banarpal; and i-concept initiatives, Bhubaneswar for their support.

To make the envisioning process participatory, PRIA has organized a number of multi-stakeholder consultations both at district level and block level. Further, orientation programme on vision building has been conducted for the line departments; and personal guidance has also been provided to individual departmental authorities. In addition to that, the suggestions of various stakeholders have been followed for necessary improvement of the vision document.

Despite several limitations, we have attempted to make this district 'dream' for the best possible development by the year 2020. This however has not ignored the realities; rather we have encouraged the district to overcome the present limitations for a better future. It will be great if the 'dream' is fulfilled, but this obviously would require efforts from all sectors and personal sincerity of the responsible individuals.

We are happy that the Planning & Coordination Department, Government of Orissa has trusted PRIA to develop the vision document and the district plan for Angul. We hope that this trust has been duly honoured through our work.

PRIA-Orissa

CONTENTS

Preamble

Preparation of District Plan has always been an arduous task for the district administration. In the post 73rd Constitutional Amendment Act (CAA) period efforts have been going on to overhaul the planning process, i.e. top-down to bottom-up. As a step towards the strengthening of Panchayats, an exercise of Comprehensive District Planning has been undertaken to fulfill the basic ethos of 73rd CAA and to enable the participation of people in the planning exercise. Efforts have been put to make the planning exercise participatory by incorporating the views of people about their Panchayat/ Block/ Zilla. In addition efforts have been put to meet or consult as many stakeholders (i.e. CSOs, line department officials, active groups (youth, women etc), elected representatives).as possible during the exercise. The preliminary outcome of this exercise is the Vision Document. It is a positive/constructive approach for sustainable development that virtually overcomes the present limitations/constraints through realistic strategies. It touches all important aspects of development of human- as well as natural resources along with adequate strategy for the optimum utilization of required resources. A district vision document unites various stakeholders of a district for a common cause, i.e. equitable and sustainable development with a promising future. In nutshell, it is a guide towards the planning process of district and broadly outlines the goals to be achieved during the course of time.

Introduction

Background

To achieve desired targets of economic growth and balanced regional development the efforts for decentralized planning commenced with the first Five Year Plan. The plan recognized the need to break up planning exercise into National, State, District and Local Government level. But it failed to spell out the process for the same. In the second Five Year Plan, two new elements, namely, establishment of District Development Council and drawing up of village plans were introduced. But again the attempt went futile due to lack of proper enabling framework. On the recommendations of Balwant Rai Mehta Committee in 1957, village, block and district level Panchayat Institutions were established in many states. But, they were not assigned with any meaningful role or resources. Administrative Reforms Commission (1967) highlighted in its Report that district planning needed to be focused in those areas where local variations in the pattern and process of development were likely to yield quick results in terms of growth. In 1969, the Planning Commission communicated guidelines to the states for formulating district plans detailing the concept and methodology of drawing up such plans. It gave some fruitful results but limited to few states. A Central Scheme was also operational from Fourth to Ninth Five Year Plan to assist states for strengthening their planning. This scheme was extended to district level in 1982-83. A Working Group headed by Prof. M. L. Dantwala (1978) identified remoteness of planning agencies at district level from actual scene of action as the cause for mismatch of financial allocations with location specific needs. The Group recommended Block as the appropriate sub-state planning unit. Planning Commission also issued guidelines on formulation of Block level plans in tune to these recommendations. The Ashok Mehta Committee (1978) in its report recommended that Panchayats ought to be strengthened for undertaking local planning. The Hanumantha Rao Committee (1984) brought out the fact that planning from below was undermined by different streams of funding the district plan. The Group recommends decentralization of function, powers and finances, setting up of district planning bodies and district planning cells. The G. V. K. Rao Committee (1985) reviewed the administrative arrangements for rural development and recommended district Panchayat to manage all development programmes. The Sarkaria Commission also highlighted the need for people's participation in the planning and administrative machinery at local level. During Sixth and Seventh Plan role of Panchayats in rural development was also enlarged. In 1992-93, the 73rd and 74th Amendments gave Constitutional status to local self- governments and provided a new and universalized platform for decentralized planning. In recent initiatives taken by MoPR regarding decentralized planning it is recommended that under Article 243ZD of the Constitution District Planning Committee (DPC) shall be constituted at the district level in every state to consolidate the plans prepared by the Panchayats and the Municipalities in the district and to prepare a draft development plan for the district. The object of district planning is to arrive at an integrated, participatory coordinated idea of development of a local area. The comprehensive district plan will integrate multiple programmes that are in operation in the district concerned and therefore address backwardness through a combination of resources that flow to the district.

Vision Document

Under Comprehensive District Plan, a district vision has to be prepared for a district through a participative process starting from the grassroots to perceive the status of district in terms of overall holistic development over the next 10-15 years. This would be the companion and guiding document during the process of development of a district. A basic requirement is that the preparation of the vision is not conditioned by schemes and programmes. The vision would be primarily articulated in terms of goals and outcomes and would address basically three aspects of development, namely,

- Human development
- Infrastructure development
- Development in the productive sector

The idea is that the envisioning process, being participative, would build a spirit of teamwork and hopefully break down the department wise planning process that is dominant till date**.**

Objectives

The broad objectives behind the preparation of vision document are:

i) To generate a common perspective, among diverse stakeholders, for the holistic development of the district.
ii) To work out a strategy for the optimal and balanced utilization of natural resources.
iii) To envisage and incorporate the role of women and marginalized in the mainstream development.
iv) To help and motivate people of the district in preparing more realistic, objective oriented and executable five year and annual plans.

An Overview of District Angul

Location

Angul district was a separate administrative unit during the British period, but became a part of Dhenkanal district after independence. However, on 1st April 1993 it was carved out as a separate district. Angul lies between 20° 31′ N & 21° 40′ N latitude and 84° 15′ E & 85° 23′ E longitude. The total geographical area of Angul is 6232 sq.kms, thus it is the 11th largest district among 30 districts of Orissa. Angul shares its borders with Sundargarh in the north, Deogarh, Sambalpur & Sonepur in the west, Boudh & Nayagarh districts in the south, Dhenkanal & Cuttack in the south-east and Keonjhar in the east.

Physiography

The physiography of the district is marked by three major regions. The South and Western part comprises ranges of the Eastern Ghat Super group & the Older Metamorphic Group. The Central portion is represented by sediments deposited in the Satpura- Mahanadi graven defined by pronounced NW-SE trending lineaments on a Precambrian plat form, almost separating the Eastern ghat Mobile Belt and Orissa craton. The northern boundaries of Talcher Basin are faulted. On a regional scale, Talcher basin takes the shape of a north westerly plunging syncline with closure in the east & the younger horizon outcropping progressively towards

west. On the other hand, the beds dip northerly & number of coal seams increases in that direction indicating a possible homoclinal structure. Three sets of intrabasinal faults trending E-W-NE-SW-WNW-ESE have been recognized. The North & North East part is occupied by hill ranges of Iron Ore Super group. The elevation varies from 76 m. to 1186 m. The highest peak of the district is Malyagiri of Pallahara Sub-division which is 1186 meter above MSL. Banamadali peak in Angul Sub-division is 790 meter in height. In Athamallik Sub-division the main peaks are Panchadhara and Hingamandal hills.

River System

The river Mahanandi marks the southern boundary of this district. River Brahmani enters the district through Rengali reservoir and passes through Talcher sub- division. Both these great rivers have innumerable tributaries large and small. Pallahara & Talcher Sub-Divisions, a major portion of Angul Sub-division form a part of Brahmani basin. The basin of Mahanadi is spread over Athamallik Sub-division & part of Angul Sub-division. Mahanadi and the Brahmani are perennial rivers. A multi purpose dam has been constructed over the Brahmani at Rengali. 250 MW of electricity is generated at Rengali hydropower station. A barrage has been constructed 35 Kms. down stream at a place called Samal. This irrigation project is poised to irrigate 3,36,400 Ha. of land in Angul, Dhenkanal, Cuttack , Jajpur & Keonjhar districts. Other rivers of Angul are mountain streams, which are torrents in the rains and in the summer contain little or no water. Their banks in the most part are high. Their beds are rocky and they cannot be used for the purpose of navigation.

Climate

The climatic condition of Angul is much varied. It has mainly 4 seasons. The summer season is from March to Mid June, the period from Mid June to September is the Rainy season, October and November constitute the post monsoon season and winter is from December to February. The best time to visit this district is during winter. The average annual rainfall of the district is 1421 mm. However there is a great variation of rainfall from year to year. The rainfall in the district during the last 10 years varied between 896 mm & 1744 mm. There are 70 rainy days on an average in a year, but it varies from 66 at Athamallik to 80 at Pallahara. The distribution of rainfall is also quite erratic causing wide spread drought year after year.

The hot season commences by beginning of March. May is the hottest month with a mean daily maximum temperature at 44 degree Celsius. With the onset of monsoon, early in June day temperature drops appreciably. After outset of monsoon by the 1st week of October both day and night temperature began to fall steadily. December is usually coldest month of a year with a mean daily minimum temperature of 12° degree Celsius. In association with the passage of western disturbances across north India during winter months short spells of cold occur and the minimum temperature drops down to 10° Celsius. The highest maximum temperature recorded at Angul was 46.90° Celsius on 30th May 1998 whereas the lowest minimum temperature was 6° Celsius on 16th January 2003. The summer temperature has shown as increasing trend in recent past. The humidity of the air is generally high, especially during the South West monsoon and post monsoon months. In other months, the afternoons are comparatively drier. In the summer afternoons the relative humidity varies between 25 and 40 percent.

Special Weather Phenomena: The district is affected by hailstorm and depressions in the monsoon season and in October, when winds increase in force and widespread heavy rain occurs. Thunder storms, occurs mostly in the afternoon in the summer months and in October. The hailstorm, which occurred on 12th April 2002, caused heavy damage in the Angul town and nearby villages. Occasional fog occurs in the cold seasons.

Administrative Divisions

There are 4 subdivisions with 8 blocks and 9 census towns. Total number of Gram Panchayats is 209. Assembly constituencies are 4[1] in number, and parliamentary constituencies 2(coming under Deogarh and Dhenkanal).

[1] To include partial constituencies the total number is 6.

Situational Analysis of Angul District

Situational analysis provides the insight of the progress of different sectors of the economy in district Angul. The analysis will be quite helpful and provides direction to the planning process. Hence, in the present chapter, sector wise situational analysis of district Angul is carried out.

Demographic profile

Demographic profile of the district is presented in Table 1. Angul has a total population of 11,40,003 consisting of 51.51 percent male population and 48.49 percent female population (2001 census) and sex ratio is 941 which is slightly less than the state average of 972. The population of Angul constitutes 3.10 percent of the Orissa's total population. The population density is 179 persons per Km^2 against the state average of 236. The decade 1991 to 2001 witnessed population growth of 18.55 percent against the state average of 15.94 percent. Literacy rate of the district is higher i.e. 68.8 percent as compared to 63 percent in a state as a whole. But the literacy rate of female population is only 55 percent, but it is higher than the state and national average. The literacy rate of SC and ST population is better in Angul district than the state average. Among the scheduled tribes the Paudi Bhuyans, who are dependent on shifting cultivation have received special attention under the Paudi Bhuyan Development Agency so as to reduce their vulnerability of livelihood.

There are 1910 villages in the district out of which 1661 are inhabited and 249 are uninhabited, as per the 2001 census[2]. The rural population of the district constitutes 86.10 percent while urban population constitutes 13.90 percent of the total population. Out of the total population of the Angul, 11.6 percent belongs to schedules tribes whose concentration is largest in the Pallahara block. The Paudi Bhuyans, the Juangs, and several other tribals groups are also found in this district. The population of scheduled castes is 17.19 percent of the total population. The important castes inhabited in this district are Chasa, Khandayat, Karana, Brahmin, Gouda, Paika, and Kumbhara. Among these, Chasas constitute the major community in the district and they are mainly cultivators whereas Gaudas are the chief pastoral caste of Orissa. Religion of the district Angul can broadly be classified into Hinduism, Islam, Christianity, Sikhism, Jainism, Buddhism, Mahima Dharma and Nath cult.

[2] However, The District Gazetteer of Angul(pg.28) mentions the total number of villages, inhabited villages and uninhabited villages to be 1922,1635 and 287 respectively.

Table 1: Demographic profile of district Angul

Demographic Indicators	Unit	Angul District	Orissa
Total Population	No.	1140003	36804660
Male		587234	18660570
Female		552769	18144090
Rural Population	%	86.10	85.01
Urban Population	%	13.89	14.99
SC population	%	17.19	16.52
ST population	%	11.66	22.13
Households	No.	230711	7738065
Population density	Persons/Km^2	179	236
Sex Ratio		941	972
Literacy rate	%		
Persons		68.79	63.08
Male		81.43	75.35
Female		55.37	50.51
ST		45.35	37.37
Male		60.25	51.48
Female		30.05	23.37
SC		56.99	55.53
Male		71.71	70.47
Female		41.77	40.33

Source: Statistical Abstract of Orissa: 2008

Occupational Structure

The majority of the population of Angul district depends on agriculture. The occupational structure of district Angul is presented in Table 2. The proportion of main workers to the total workers is 65.9 percent, which is less than the state average of 67.2 percent. On the other hand, work participation rate is 39.8 percent and is slightly higher than the state average. Proportion of cultivators to the total workers is 30.3 percent in the district. Agricultural laborers constitute 28 percent of the total workers in the district. The entrepreneurship of the people in agriculture/horticulture, particularly in Blocks like Chhendipada, is remarkable; and the work participation rate is higher than the state average. Mining & industrialization in few parts of the district have significantly influenced the traditional occupation of the local population partly because of direct or indirect employment opportunities in these projects and partly because of the loss of agricultural land through land acquisition by the government.

Table 2: Occupational Structure of district Angul

(Percent)

Indicators	Angul District	Orissa
Proportion of Main-workers to total workers	65.93	67.2
Proportion of Marginal workers to total workers	34.1	32.8
Work participation rate	39.8	38.8
Proportion of cultivators to total workers	30.32	29.75
Proportion of agricultural labourers to total workers	28.02	35.02
Proportion of workers in household industries to total workers	5.90	4.91
Proportion of other workers to total workers	35.8	30.3

Source: Census of India 200; Orissa, Series 22, Vol.1, statements 8-13

Human Development & Gender Equity

The Human Development Index (HDI) of Angul is 0.663 which is higher than the state average of 0.579. Similarly, the income index is also significantly higher 0.748 for Angul as against the state average of 0.545. In case of Reproductive Health Index, Angul had 35.76 percent of women married below 18 years as against the state average of 40 percent. Sex ratio is lower than the state average, but literacy rate is comparatively high for women in the district (HDR, Orissa, 2004).

Crime statistics indicates that number of deaths due to dowry was higher i.e. 41 as compared to state average of 33.2 and the number of registered abduction and rape cases was 18 which are slightly lower than the state average of 19 during the year 2006 (Statistical Abstract of Orissa, 2008).

The participation rate of women in the total workforce of the district is slightly higher 32.48 percent than the state average 31.54 percent. Role of the women in agricultural activities and NTFP is also very significant.

The overall position thus seems to be quite optimistic as building public awareness, social motivation, special schemes and provisions for women and girl child would help women to be in a more favourable position by 2020.

Agriculture and Allied sectors

Land Use Pattern

Agriculture occupies a vital place in the economy of Angul district. It provides direct and indirect employment to around 70 percent of the total work force of the district (2001 Census). The total cultivable area of this district is 2,16,403 ha constituting 32.7 percent of the total geographical area of the district.

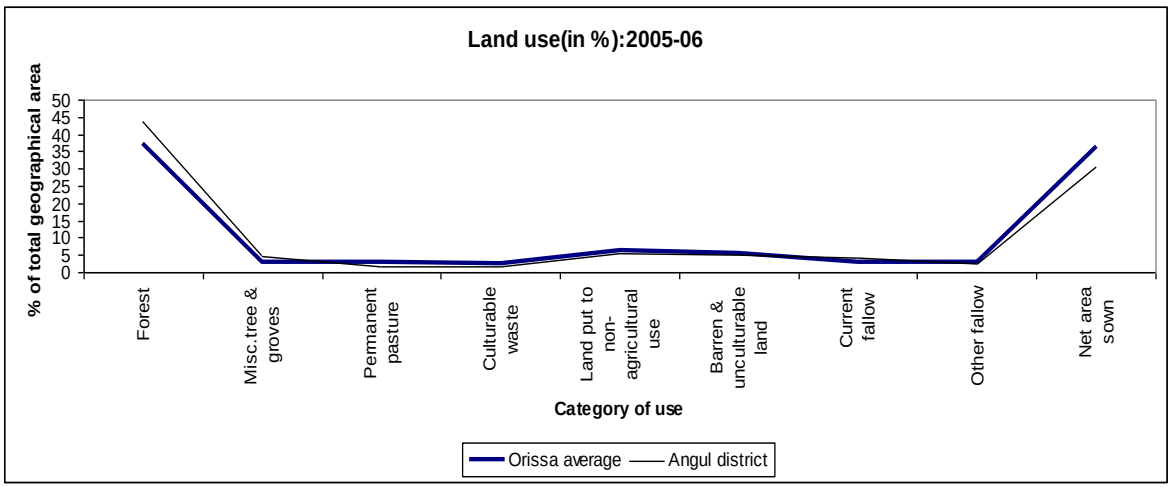


Figure 1: Land use pattern of district Angul vis-à-vis Orissa

The above Figure shows that land use has a more or less similar pattern in the district Angul as compared to the state. However, the total forest area (legal boundary) is higher than the state average. Within district, the forest area is maximum in the Pallahara block followed by Kaniha and Athamallik blocks.

The 2003 statistics suggests that net area sown is maximum in the Chhendipada block followed by Athamallik, Angul and Pallahra. Area under current fallow is maximum in Chhendipada block followed by Athamallik and Kishorenagar. Whereas, area under the culturable waste is maximum in the Kishorenagar block followed by Kaniha, Chhendipada, and Angul blocks. This indicates that the scope of extension of agriculture is highest in Kishorenagar block.

Table 3: Land use pattern of of different blocks of district Angul during 2003-04

(Area in hectares)

Particulars	Blocks								Total Angul
	Angul	Banarapal	Chhendipada	Athmallik	Kishorenagar	Talcher	Kaniha	Pallahara	
Total Geographical Area									
Forests	10715	2080	10739	20146	16355	2538	22341	41682	126596
Misc. tree crops & Groves not included in net area sown	882	216	2301	646	979	659	708	262	6653
Barren & Uncultivable land	338	472	91	3804	8819	34	1272	175	15005
Land put to non- agricultural use	3153	6424	4204	8477	2346	6664	3919	5383	40570
Culturable waste	2839	1153	2840	1821	3476	662	2967	1086	16844
Permanent pastures and other grazing land	2664	2157	3100	2302	2243	520	2042	1546	16574
Current Fallows	2893	4321	7824	6852	5514	3852	2509	3430	37195
Other Fallows	7312	3128	6891	2374	4784	1210	3392	1400	30491
Net area sown	17300	13566	21938	21501	15530	6525	15493	16354	128207

Source: District Statistical Handbook (2005), Angul, Dept. of Economic and Statistics, Orissa

Cropping pattern

Most of the cultivated area of the district is covered with double crops like kulthi (kolath), bengalgram(harad), coriander, field pea; and vegetables are taken after harvest of ground nut and early kharif paddy.

The **kharif** crops include paddy, maize, ragi, small millets, arhar, biri, mung, gound nut, til, castor, cotton, turmeric, ginger and vegetables like brinjal, tomato, and early cauliflower. On the other hand, **rabi** crops include paddy, wheat, maize, field pea, mung, biri, mustard, sunflower, safflower, niger, potato, onion, garlic, coriander, vegetables, tobacco, sugar cane etc.

The crop rotation practice followed by the farmers in the district are:

a) In Upland region: Kulthi and vegetables are taken after harvest of short duration paddy, gram, coriander and groundnut crop.
b) In Mid land region: Wheat, onion, garlic, mung, biri, vegetables and groundnut are taken after harvesting of kharif season paddy.
c) In Low land region: Paddy and pulses are taken after harvest of rabi season paddy crop. In assured irrigation farmlands, three crops like paddy-vegetable-pulses, paddy-potato-til and paddy-pulses-groundnut are taken.

Table 4 reveals that the average cropping intensity in the district is around 175 percent. The highest cropping intensity is found in Pallahara block followed by Banarpal block, whereas, in Talcher block the cropping intensity is almost half as compared to other blocks. This is mainly due to the inadequate irrigation facilities in the block.

Table 4: Agricultural land utilization in different blocks during 2004-05

Block	Total cultivated area in '000 hect.	Gross cropped area'000 hect.	Net area sown'000 hect.	Cropping intensity (%)
Angul	32	54	30	180
Athamallik	32	50	30	167
Banarpal	24	43	22	195
Chhendipada	32	56	30	187
Kaniha	24	41	22	186
Kishorenagar	23	40	21	190
Pallahara	19	36	17	212
Talcher	33	21	23	91

Source: A Profile on Agriculture in Orissa, 2006, p. 49

The Table 5 presents the production and productivity of food grains in the district and it has often been substantially lower than the state average.

Table 5: Area, production and productivity of food grains

Year	Area in '000 hect.		Yield in Kg/hect		Production in '000 MT	
	State average	Angul	State average	Angul	State average	Angul
2001-02	222.76	197.32	1232.00	1048.00	274.41	206.84
2002-03	199.73	178.45	675.00	335.00	134.83	59.71
2003-04	218.93	208.43	1178.00	923.00	257.88	192.47
2004-05	219.21	215.37	1154.00	834.00	252.94	179.59

Source: A Profile of Agriculture in Orissa, 2006, p. 99

The district has a comparatively better position in case of some vegetable crops like onion and potato.

About 90 percent of the paddy area is said to have been brought under high yielding varieties (NABARD, PLP 2008-09). In other crops also, high yield and hybrid varieties are being increasingly used.

Irrigation

The total irrigation potential of the district is 23 percent with the net irrigated area 38867 hectares kharif and 24120 hectares rabi. Lack of irrigation facilities is the major constraint in the development of agriculture in many parts of the district. Athamallik, Pallahra, Kaniha, Kishorenagar, and Talcher blocks do not have any major or medium irrigation scheme (2004-05) whereas, minor irrigation schemes have maximum coverage in Chhendipada and Kaniha blocks. Lift irrigation from bore wells is a failure in mining areas due to depletion of ground water level and as such in these areas rain water harvesting structures have been suggested.

Table 6: Source wise area irrigated

(Hectares)

By channels	By wells	By LIPs	By miscellaneous sources
17544	5636	3644	12043

Source: NABARD, Potential Linked Credit Plan 2008-09, Angul

Fertilizer consumption

The farmers use cow-dung (FYM), oil cakes, and silt of tanks as manure. But, insufficiency of bio-fertilizer, need for intensification of productivity, and popularization strategy of various agencies for chemical fertilizers has substantially increased the dependency on the latter over the years. However, short supply of chemical fertilizers and/or financial limitations may be some of the factors responsible for low consumption of chemical fertilizers in some regions of the district.

Table 7: Consumption of Fertilizers in Angul district

Year	Consumption of fertilizer in 000' MT				Consumption in Kg/hectare
	N	P	K	Total	
2001-02	4.66	1.46	1.04	7.16	25
2002-03	3.80	1.35	0.61	5.76	22
2003-04	4.79	1.33	0.91	7.03	23
2004-05	5.23	1.48	0.73	7.44	23

Source: A Profile of Agriculture in Orissa, 2006, pp.84-85

Animal husbandry

The livestock population in district Angul is presented in Table 8. On analyzing the information it is found that major part of the livestock population constitutes indigenous cattle. Whereas, crossbred cattle constitutes only a small part of this population. Majority of the present cattle population needs replacement as crossbred cattle to enhance milk production.

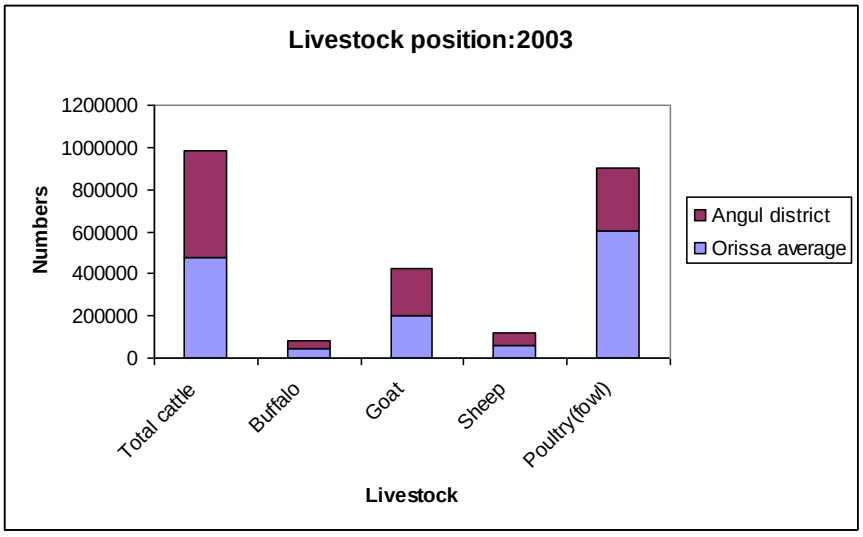
Table 8: Livestock population in district Angul (2003)

(Number)

Sl. No.	Sub-division	Crossbred cattle	Indigenous cattle	Buffalo	Total breedable cattle(including buffalo)	Sheep	Goat	Poultry
1	Angul	18646	195180	14123	60707	20310	92758	121530
2	Athamallik	2990	121137	14995	38857	27385	35169	44005
3	Pallahara	671	62188	4163	18410	4499	57696	82727
4	Talcher	7751	104827	2557	33342	1945	40611	49986
Total		**30058**	**483332**	**35837**	**151316**	**54139**	**226234**	**298048**

Source: Chief District Veterinary Officer, Angul

The livestock position of the district is comparatively better than the state average as evident from the following figure (based on Statistical Abstract of Orissa: 2008, table 7.01).



The Table 9 indicates that in district Angul production of goat meat is higher than the state average whereas, in case of production of milk and eggs it is lagging behind. Decreasing pasture lands, lack of will power, low profitability, increasing cost of production and shift of attention towards other enterprises and occupations are some of the factors responsible for less scope of increase in cattle population whereas in case of goatery the future seems bright.

Table 9: Production of different livestock products in district Angul (2005-06)

Region	Cow milk production ('000 MT)	Total egg production (Lakh)	Goat meat production (MT)
State average	37.69	426.23	1270.6
District Angul	30.6	133.24	1631.64

Source: based on Statistical Abstract of Orissa, 2008, table-7.04

Fisheries

The fish production of the district, which is only from fresh water bodies, has been provisionally estimated to be around 6684.35 MT (2005-06) which is higher than the state average of fresh water fish production 5991.33 MT. Dams and reservoirs like Rengali, and Manjore hold significant potential for pisciculture, and optimum utilization of village ponds can further increase fish production. There are fishermen's primary cooperatives, and some infrastructural support have been provided to them; however, the Fishery Department has some limitations like, production of hatchlings from government farm ponds is about 40-50 lakhs whereas the demand is between 200 to 250 lakhs annually. So there is a huge gap between the demand and supply.

Forestry

Angul district has rich sal forests in addition to mixed forests as well as pure bamboo crops. It was from Angul that the scientific management of forests was started formally by the British who had established a forest division here. Bio geographically Angul District covers the forests of Athamallik Forest Division, Angul Forest Division, Pallahara sub division which is a part of Deogarh Forest Division, and Satkosia Wild Life Division. Kendu leaf Divisions of Athamallik and Angul specifically focus on kendu leaf. A working plan division has also been set up at Angul engaged in preparing work plan of Territorial Forest Division.

Table 10 reveals that legal protection to conservation of forests is better in Angul district as compared to the state so far the area under reserve forests is concerned. The Satkoshia wildlife sanctuary has further strengthened this protection measure.

Table 10: Forest area by legal status in district Angul and Orissa

(Sq. Kms)

Region	Total government forest area by legal status	Reserve forest	Demarcated Protected Forest	Un demarcated Protected Forest	Un classed forest	Other forest under control of Revenue Department
Angul	2716.82	1760.76 (64.8)	273.21 (10.0)	11.99 (0.4)	1.15 (0.04)	669.71 (24.6)
Orissa	58136.90	26329.12 (45.3)	11687.11 (20.1)	3838.78 (6.6)	20.55 (0.03)	16261.34 (28.0)

Source: Statistical Abstract of Orissa, 2008 Figures in parenthesis are percentages

However, the satellite data analysis indicates that the district has 2657 sq. km. of forest of which 1716 sq. km (64.58 percent) is moderately dense. There is no highly dense forest in the district as per this analysis (Forest Survey of India, State of Forest, 2005).

Sal seed, kendu leaf, and several other non-timber forest products (NTFP) hold the potential to support the livelihood of the forest dwellers, particularly tribals and other disadvantaged classes. However, ban on NTFP collection from the sanctuary area, insecure markets, weak implementation of MFP policy and destruction of forests area are some of the factors because of which this potential is not utilized properly. The bamboo cutters and kendu leaf collectors of Satkoshia area have been badly affected by the ban on commercial exploitation of bamboo and kendu leaf respectively, whereas poor quality of kendu leaves in the Angul KL Division is a matter of great concern.

Government forests have been attempted to be managed under participatory mode through joint forest management committees (JFMC) or Van Samrakshan Samiti (VSS). However, lack of sufficient tenurial rights is a major weak point of this system.

There is ample opportunity of ecotourism activities in the district. Tikarpara is a major tourist attraction. Sahargurjang, called second Chilika, is planned to be developed for this purpose.

Mining and Industrial Activity

Mining

Coal is the major mining product in the district. Talcher area has extensive coal mines whereas the Chhendipada area is being developed in that direction with a proposal of increasing the current number of coal mines from 1 to more than 30 in near future**.** In fact, Angul is the leading district in the production of coal in Orissa.

Other minerals/ores include fire clay and sand, but in terms of area, output and value these are very less as compared to coal.

In 2005-06, the value of all minerals in Angul district was Rs.395728 lakhs which was highest in the state, and was 39.05% of the total output value of all minerals in Orissa. That year the number of working mines in the district were 14 employing 9115 persons, which was second largest employment in the mining sector in the state (Statistical Abstract of Orissa, 2008, table 8.06).

Industry

Industrial sector is playing a leading role for the all-round development of Angul district. Till 2008, six PSUs as enlisted below have the major share in every plan and programme of the Angul district. Out of these six, 3 are large scale enterprises have also started their production. The details are as follows.

Public Sector Undertakings (PSUs)

1. Mahandi Coal Fields Ltd (MCL)
   At: Talcher

2. NALCO Smelter Plant
   At: NALCO, Angul

3. NALCO Captive Power Plant
   At: NALCO, Angul

4. National Thermal Power Station (NTPC)
   At: TTPS , Talcher

5. Super Thermal Power Station,
   At: NTPC, Kaniha

6. Heavy Water Plant,
   At: Vikrampur , Talcher

Private Sector

1.	M/S Sree Metaliks Ltd At: Mukundpur, Parang , Angul	Sponge iron M.S. Ingots & Bars
2.	M/S Ganesh Sponge Pvt. Ltd At:Krishnachandrapur Golabandh , Angul	Sponge Iron
3.	M/S Bindal Sponge Ltd At: Sunakhani, Talcher	Sponge iron M.S. Ingots & Bars Power plant

NALCO, Angul has given ancillary status to 8 SSI units and MCL has also given ancillary status to 11 SSI units. Besides, 7 of the downstream industries have been set up based on NALCO products. As per survey, 2953 SSI units are working in this district engaged in diversified activities.

After exploration of substantial natural resources at Talcher and Chhendipada, more number of investors are coming up to set up the industries in Steel and Power sectors. Eight units have signed MOUs with the government (teamorrisa.org). Many more are in pipeline for setting up projects in Steel and Power plants in Angul district.

Due to the establishment of large industries, some environmental issues have been created. There is no plan for the utilization of Fly Ash generated as a waste material from the power and other plants. No permanent solution has been found for the utilization of clinker generated in Steel Plants. Water and air are getting polluted day by day. Agriculture sector is threatened with the waste products.

Micro and small enterprises are functioning in different areas in an unsystematic way. Some of these are in residential campuses or very nearer to villages, educational institutions, hospitals and temples. The two existing industrial estates have been saturated, and given the demand for many ancillary industries for the upcoming large and mega projects, more industrial estates are required.

Tourism, Art & Culture

A number of places bestowed with natural beauty, historical importance, and of cultural and religious importance are major tourist destinations in the district. These include Satkoshia gorge with its crocodiles and other wildlife, sleeping image of Lord Vishnu at Bhimkand, the temple of goddess Hingula at Gopalprasad, pre-historic sites at Kaliakata, etc. Besides this, *Ravanchhaya*, the traditional puppetry of Palalahara is unique in the district as well as in Orissa.

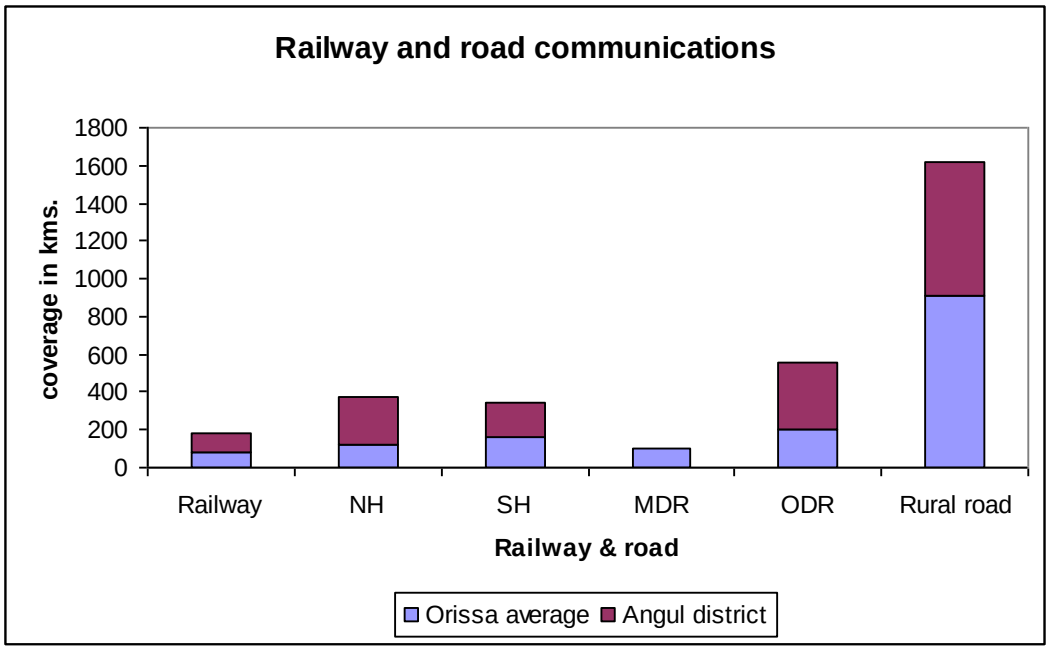
Power

Angul is a major power producing district in the state with the thermal power plant at Kaniha. However, a number of villages still lack electrification. Even the progress of Rajiv Gandhi Grameen Vidyutikaran Yojna is not satisfactory.

In case of village electrification (2005-06), the position of the district is marginally higher with 81 percent inhabited villages are electrified as compared to the state average of 80 percent villages. Moreover, the state's first solar rural electrification system has been inaugurated recently (July 2008) at Tentulikhol and Udal villages of the Kishorenagar block of Angul district.

Transport & Communications

The figure reflects that the district is in an advantageous position in railway and national highways network. NH-6, NH-42, NH-23, and NH-200 pass through the district. Of these, the condition of NH 23 is poor and requires immediate attention so that bus services to Rourkela via Samal can be resumed. On the other hand, the Bimlagarh-Talcher railway line has been pending since many decades which also needs immediate action.



Source: Statistical Abstract of Orissa: 2008, tables-11.01, 11.02

Recently, inland water transport has been proposed from Talcher to Dhamra in river Brahmani. This project basically aims at transportation of cargo.

Telecom service is provided by Bharat Sanchar Nigam Limited. Cellular tele-services (mobile) are provided by a number of companies like BSNL, Reliance, Tata Indicom and Airtel etc.

Education

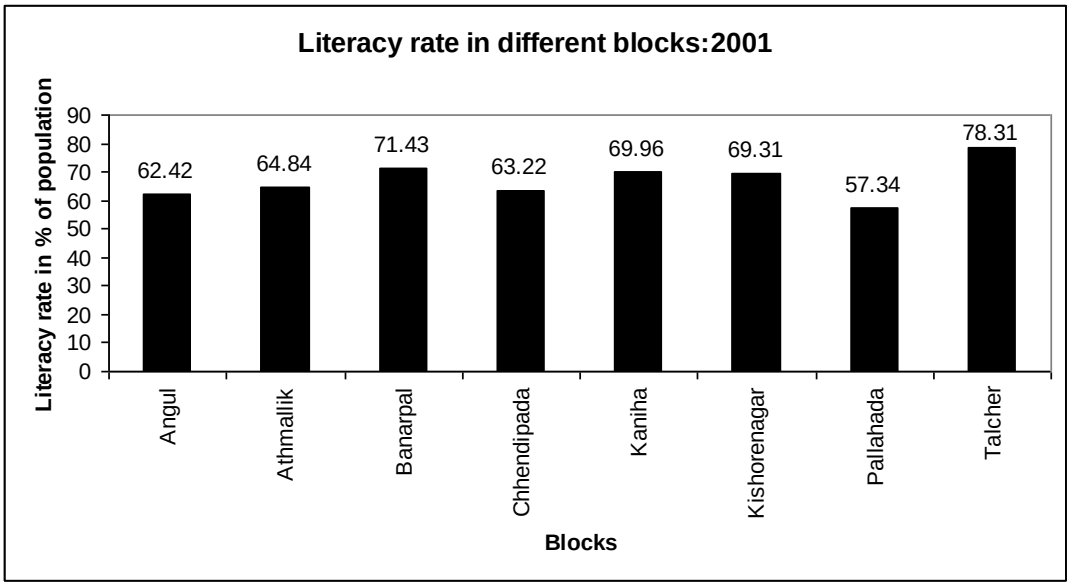
The literacy rate of the district is presented in Table 11. The table reveals that overall as well literacy rate of male and female population of district Angul is more than Orissa and India. Whereas, on analyzing the literacy rates of different blocks of district Angul, it is found that overall literacy rate in angul, athmallik, chhendipada and pallahara blocks is even less than the district average. On the other hand, literacy rate in urban local bodies is quite higher than the district average.

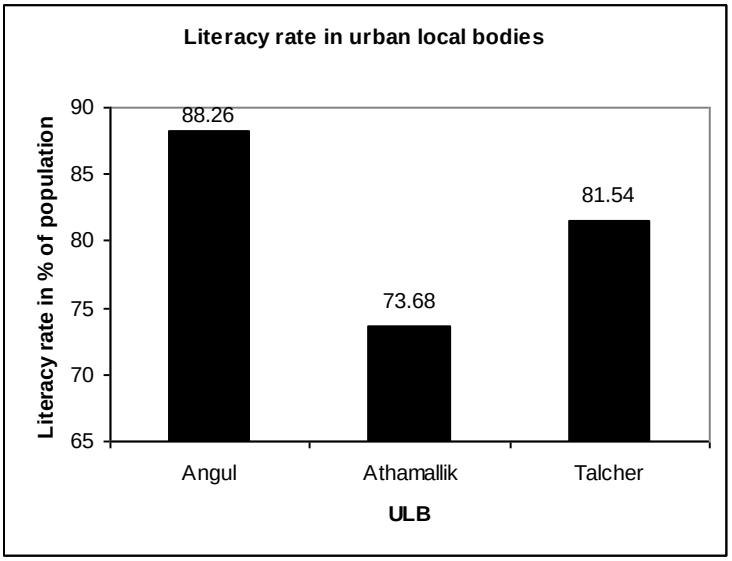
Table 11: Literacy status of district Angul (2001 census)

(Percent)

Region	Total	Male	Female
India	64.83	75.62	53.67
Orissa	63.08	75.35	50.51
Angul district	68.79	81.43	55.37

Source: Statistical Abstract of Orissa: 2008, table-1.05





Source: District Statistical hand Book 2005: Angul, table-12.05

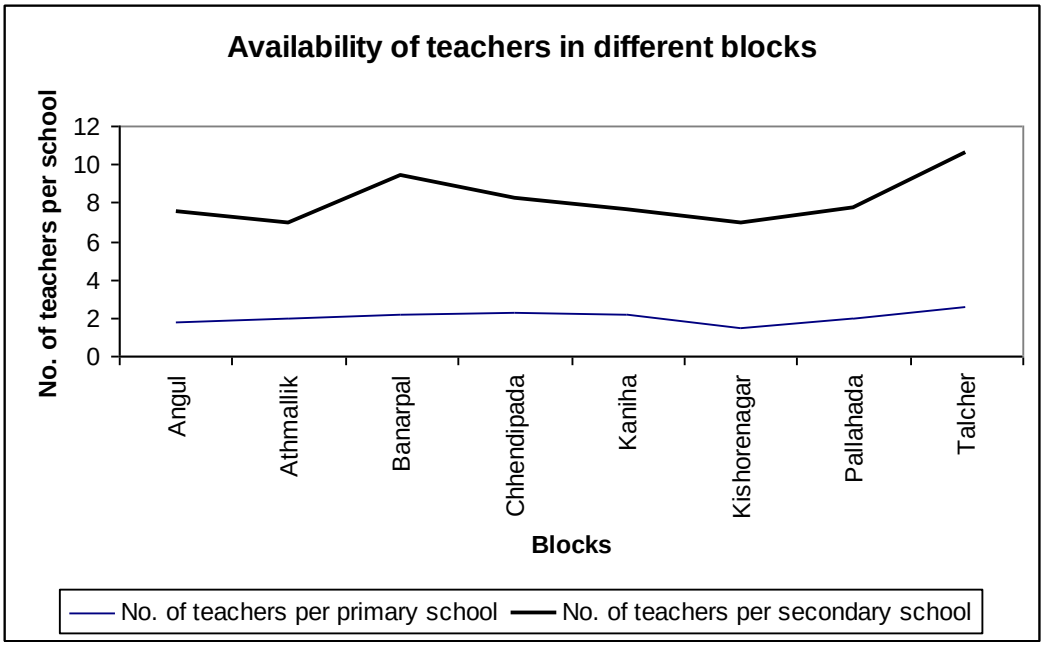
The status of educational facilities is presented in Table 12. The table reveals that the district is in a better position with respect to the number of teachers per school as compared to state average.

Table 12: Status of educational institutions in district Angul (2005-06)

Region	Primary school (No. of teachers/school)	Middle school(No. of teachers/school)	Secondary school(No. of teachers/school)
Orissa	30 (2.44)	11.12 (2.24)	4.72 (8.41)
Angul district	22.21 (5.04)	8.56 (4.69)	3.59 (8.07)

Source: Statistical Abstract of Orissa:2008, table-12.01

On the other hand, the figure below indicates that the availability of teachers per school in different blocks of the district is uneven and in Athamallik and Kishorenagar blocks it is in a disadvantaged position as compared to district average. Accessibility of educational facilities (per 100 sq.km) indicates that the district is lagging behind vis-à-vis the state average.



Source: District Statistical Hand Book 2005: Angul, table-12.01

Recent estimates indicates that the number of children belonging to different age groups not going to school are 13614 in the district out of these 10333 are drop-outs.

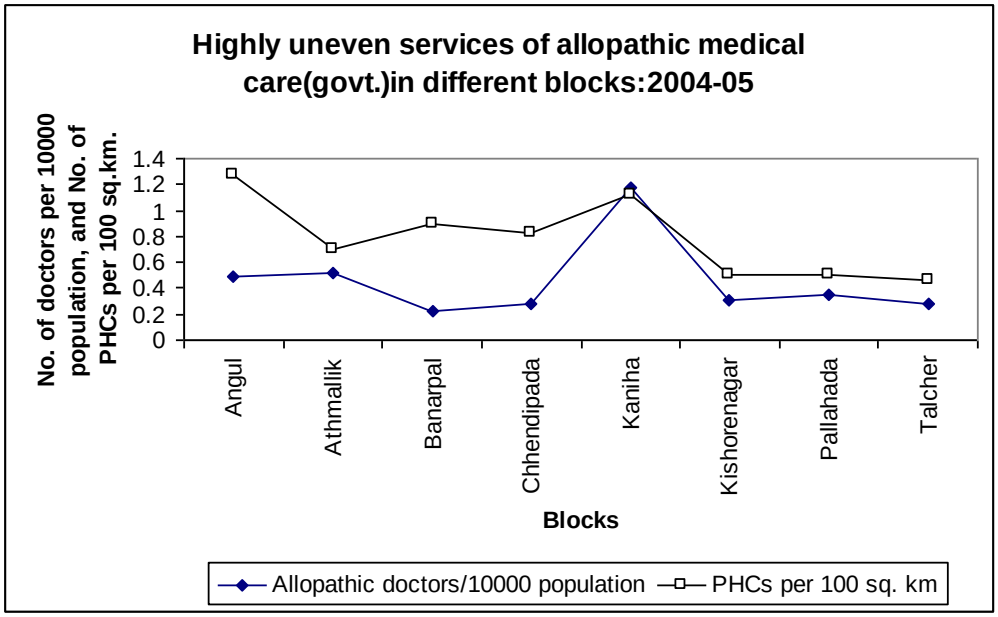
The Indira Gandhi College of Engineering at Sarang is close to the district. In addition to this, there is one private engineering school at Chhendipada, and about 20 Nos. of Industrial Training Institutes established in the district have the catalytic role for human resource development.

Coal India Ltd. has recently announced to open a medical college at Talcher. Still, accessibility and affordability of technical education, particularly engineering & medical education is a distant dream.

Health & Family Welfare

The health facilities in the district are not satisfactory. Hospitals lack adequate staff and infrastructure. Superspecility services in government hospitals is a distant dream.

As per the 2006 statistics, there are 43 allopathic, 19 homoeopathic, and 16 ayurvedic government medical units in the district. Of these, the status of the latter two is very poor as compared to allopathic units.



Source: District Statistical Hand Book Angul, 2005, Table 13.01

Non-availability of doctors and trained paramedical staff is the major grievance particularly in rural areas. Modern medical care facilities are hardly accessible in many of the remote areas of the district.

Trade & Commerce

Coal and alumina are the major items of trade among minerals and metallurgical products. Of these, alumina is exported whereas coal is supplied to other districts and states.

Among agro-products, some vegetables like onion are supplied to other districts. Kendu leaf, sal seed, mahua, etc. are among the forest products of trade.

Cooperatives, Banking & Finance

The Primary Agricultural Credit Societies (PACS) are the major institutional rural credit institutions in the district providing short-term loans. In 2004-05, there were total 103 such societies in the district with a total membership of 139000 pesons. Chhendipada is the leading block in this context.

The number of non-agricultural credit cooperative societies are 28 in 2004-05 with a total membership of 8000 persons. Besides, there is one RCMS (Regional Cooperative marketing Society), one WCCS (Wholesale Consumer Cooperative Store) and 9 Primary Consumer Cooperative Stores.

Angul United Central Cooperative Bank (AUCCB) is the central cooperative bank of the district. It has 11 branches in the district. Besides, there are 2 Cooperative Agricultural & Rural Development Bank (CARD) branches operational at sub-divisional level providing credit to

agricultural and allied activities. The Orissa State Cooperative Bank also has a branch at Angul.

There are total 23 financial institutions in the district having 103 branches of which 66 are based in rural areas. UCO Bank is the lead bank, and there are 14 other nationalized banks. The number of public sector banks are three (Axis Bank, ICICI Bank, and HDFC Bank) and one private sector bank Neelachal Gramya Bank. In addition to this there are 29 Regional Rural Banks operating in the district. The Orissa State Financial Corporation has a branch at Angul.

Law & order

The incidence of crime is increasing in the district as is evident from Table 13.

Table 13: Crime in Angul district

(No. of cases registered)

Year	Murder	Dacoity	Robbery	Theft	Kidnapping	Rioting
2002	40	7	27	127	15	105
2004	51	12	19	222	10	94
2006	39	19	47	316	16	144

Source: District Statistical Hand Book Angul, 2005, table 16.03
Statistical Abstract of Orissa: 2008, table 19.05

In 2006, Angul had the highest incidence of rioting in the state.

There are 20 police stations, but mahila thanas are yet to be established in the district.

Resettlement & rehabilitation

Resettlement and rehabilitation of the displaced people (or, to be displaced in near future) in region of coal mining, industrialization, and irrigations projects etc. have been among the major local issues of the district. The displacement has in many cases badly weakened the moral, socio-economic and other strengths of the people because of lack of proper compensation or lack of integrated rehabilitation project management. This has been alleged by the destitute of Samal and Derjang dam projects and also of colliery projects in Talcher.

The new R&R Policy of the Govt of Orissa has promised better facilities/provisions for the displaced persons and according the cost of rehabilitation has increased for new projects. However, corruptions and inadequate/insincere implementation are likely to deprive the beneficiaries of their deserving rights to some extent.

Innovative measures are urgently required to address the post-rehabilitation issues of families, particularly of the female members and next generations.

SWOT Analysis

In the present chapter sector wise SWOT analysis of district Angul is carried out. The present analysis will provide inputs towards the formulation of the elements of district vision.

Agriculture/Horticulture

Strengths

- Fertile agricultural land
- Suitable climate for the production of variety of agricultural and horticultural products
- Availability of labour force

Weaknesses

- Poor and inadequate irrigation facilities
- Rainfed agriculture
- Pest infestation
- Poor marketing and inadequate storage facilities
- Lift and minor irrigation schemes are not working properly
- Depletion of ground water level

Opportunities

- Irrigation potential ranges from 25 to 40 percent in different blocks
- Agricultural productivity can be enhanced through farm mechanization
- Establishment of village level *mandis* will provide better price of produce to the farmers
- Strengthening of Agricultural Department
- Better storage facilities (like cold storage) stop distress sale and farmers will get better prices for their produce
- New gardens of mango, litchi and other suitable fruit crops can be established.

Threats

- High dependency on rainfed agriculture and chemical farming
- Expansion of industries and mining activity will have multiple effects in the form of land availability of agriculture, pollution and labour shortage
- Declining interest of people in the in agricultural and allied activities
- Diversion of the labour force to other sectors of employment

Animal Husbandry & Fisheries

Strengths

- Ensured scope in goatery
- Sufficient availability of ponds and reservoirs for aquaculture

Weaknesses

- Poor facilities for the marketing of milk discourages people to adopt dairy farming
- Depletion of grazing lands
- Outsourcing of fingerlings leads to poor quality of fingerlings
- Only 27.5 percent of the cattle population is breedable

Opportunities

- Goatery can be promoted with the present natural resource availability
- Replacement of indigenous cattle population with the crossbred cattle leads to increase in milk production
- Farm ponds can be created under NREGS, and irrigation reservoirs can be utilized for fingerling production.

Threats

- Growing industrial and mining activity further deplete natural grazing land
- Lack of interest of people in animal rearing and fisheries
- In some areas all tanks get dry from January to monsoon period

Forestry

Strengths

- Vast availability of natural and forest resources

Weaknesses

- Poor basic facilities for people residing in forest and sanctuary area
- No legal rights are given to dwellers for the collection of NTFP and MFP
- Insufficient tenurial rights in community forestry
- Compensatory forest plantation has not been adequately taken up

Opportunities

- Optimal and need based use of NTFP to raise economic status of tribals and other forest dwellers
- Promotion of eco- tourism

Threats

- Existing practices of forestry did not promote the production of species suitable for fuel purposes leading to further pressure on forests
- People alienated from forests are joining extremist/ Maoist groups

Rural Development & Panchayati Raj

Strengths

- Politically active and strong PRIs
- Active DRDA
- Financial support from various sources
- Various developmental schemes

Weaknesses

- Lack of adequate staff
- Lack of efficient coordination
- Delayed receipt of grants
- NREGS-norms are not suitable for certain areas or sections of people, causing low demand.

- Road development and water supply are still major issues in some areas.

Opportunities

- NREGS
- Coordinated effort for development by the PRIs

Threats

- Political interference
- Corruption

Roads & Transportation

Strengths

- Widespread road network
- Four national highways
- Sambalpur-Khurdha railway line

Weaknesses

- Most of the intra district or link roads in the villages cut off during the rainy season
- NH-23 is in poor condition adversely affecting transportation to Rourkela

Opportunities

- All weather road network in the district will promote agricultural activities and well being of the people
- Bimlagarh-Talcher railway line is expected.

Threats

- Heavy traffic on national highways leads to accidents particularly near residential areas

Health & Family Welfare

Strengths

- Basic infrastructure is available
- Corporate hospitals of NALCO and Coal India working in the district
- Health Index of Angul is higher than the state average, as per Orissa Human Development Report(2004)

Weaknesses

- Inadequate infrastructural, equipments and service facilities
- Lack of Superspecility services at district headquarter hospital
- Most of the blocks in the district are malaria prone
- Considerable IMR & MMR
- Non-availability of doctors
- Lack of reliable health care services in remote areas
- Lack of awareness among people regarding health and family welfare

Opportunities

- Possibility of creating adequate infrastructure with the help of industrial houses. Coal India has also proposed a Medial College in the district
- Implementation of Yoshoda Yojana

Threats

- Increase in the number of lung and skin diseases, TB etc.
- Biological and other waste material from Hospitals may create pollution

Education

Strength

- Literacy level is higher in case of male and females as compared to state average
- Most of the villages have schools

Weaknesses

- Most of the schools buildings do not have proper infrastructure and boundary walls
- Scarcity of teachers and other staff in the schools. Untrained teachers are appointed
- Most of the tribals, SCs and poor children do not have access to the basic education
- Poor coordination between teachers, PRI members and parents
- Non- accountability of teachers towards performance of the students

Opportunities

- Possibility of creating adequate infrastructure with the help of industrial houses
- Residential facilities for teachers and staff in remote areas

Threats

- Preference of people for private schools. Poor children may get discriminated due to this.

Industrialization & Mining

Strengths

- Six major PSUs and other SMEs operating in the district provide direct and indirect employment to the people
- Coal reserves
- Some social initiatives are also taken by these industrial units
- District is getting good revenue from these industrial and mining units

Weaknesses

- Pollution in different forms, contamination of water bodies, displacement and deterioration of agriculture and forest in the district
- Displacement of people
- Poor status of handloom and cottage industries

Opportunities

- Revenue generated from these units can be used for the infrastructural development in the district

- Development of micro enterprises and promotion of allied micro enterprises
- Waste material from steel and power plants can be used for the manufacturing of other products

Threats

- Extension in coal fields and/or industrialization leads into further degradation of natural resources
- Contamination of water is increasing rapidly leads to livelihood and health related problems
- More displacement of people

Water & Sanitation

Strengths

- Ground water development structures in most areas for drinking water purpose
- Presence of rivers and reservoirs in the district
- RWSS & PHED

Weaknesses

- Lack of awareness among people regarding sanitation especially in rural areas
- Scarcity of drinking water due to defunct tubewells and ground water depletion
- Contamination of water and severity of water borne diseases
- Insufficient funds

Opportunities

- Supply of safe drinking water through pipelines
- Repairing and maintenance of defunct tube wells

Threats

- Expansion of coal fields further deteriorate the quality and availability of drinking water
- Improper sanitation facilities further leads to spread of diseases
- Fluoride pollution

Livelihood & Social Issues

Strengths

- Community based Institutions are formed and strengthened the traditional village committees, youth clubs, women SHGs

Weaknesses

- Involvement of illiterates in particular and other people in general in govt. programmes is very low
- Percentage of population BPL is very high
- Non- availability of work for labourers in the village
- Easy availability of liquor results into household violence and antisocial activities

Opportunities

- Optimum utilization of natural resources
- Optimum utilization of the scope of NREGS to stop migration of labour

Threats

- Unemployment and poverty may lead to social disorders
- Unsustainability in livelihood through increasing dependency on government and private services

Women Issues

Strengths

- Higher women literacy rate as compared to state and India's avaerage
- Significant share in the total workforce
- Increasing participation in PRIs

Weaknesses

- Out of 154 anganwadi centres only 34 centres have building
- Inadequate remuneration against significant contribution in workforce, particularly in NTFP collection and agricultural activities
- Social stigma
- Dowry-related torture and deaths
- Post-rehabilitation issues

Opportunities

- More focus on the capacity building of women SHGs
- Strengthening the Anganwadi system
- Social motivation and mobilization to minimize social pressure on women

Threats

- Instability in traditional family systems
- Risk of increasing violence against women because of their growing exposure in traditionally male dominant activities/ occupations

Power sector

Strengths

- High demand in the domestic and industrial sector
- Power production units
- Surplus power production
- Most of the villages are electrified.

Weaknesses

- Inadequate infrastructure and human resource
- Theft of transmission wire
- Transmission loss

Opportunities

- Rajeev Gandhi Grameen Vidyut Karan Yojna
- Biju Gram Jyoti Yojna
- Scope for new thermal power plans
- Solar power

Threats

- Disruption in power supply
- Risk of accidents

Vision

Angul is a model district for the country where integrated natural resource management is the key to rural livelihood. Holistic development of agriculture and industrial sector with the focus on the socio- economic and intellectual well being of the citizens lead the district towards a sustainable growth with encouraging impacts in the neighboring districts.

Mission

To achieve equitable growth in all the sectors with equitable benefits to the citizens without compromising with the basic values of life, livelihood, culture and coexistence without any discrimination of gender, caste or creed.

Elements of Angul District Vision 2020[3]

The following sectoral vision elements predict the development goals in the district:

1. Agriculture

1.1 ***The agricultural confidence and self-reliance of the district is protected.***

1.1.1 Agricultural land over 30 percent of the total geographical area of the district is protected.
1.1.2 Agriculture development is perceived with land use perspective rather than adopting an input intensive systems of production.
1.1.3 Seed Replacement Rate (SRR) increased upto 40 percent through production of quality seeds in own farmlands through seed village and other programmes.
1.1.4 SRI (System of Rice Intensification) is adopted in most of the potential areas, reducing the cost of rice cultivation and also ensuring an environment friendly agricultural practice.
1.1.5 Organic farming is promoted. Certification of organic products is subsidized and ensured with necessary market linkages with due advantage to export. Expansion of organic villages is promoted.
1.1.6 Production and productivity of pulses is increased through agro-technological interventions.
1.1.7 Area under aromatic rice is increased in feasible areas for better returns from small landholdings.

1.2 Preservation of agricultural produce is ensured through low-cost storage structures at farmers' level and establishing large cold storages at community level.
1.3 Germplasm of indigenous varieties is preserved.
1.4 Profitable marketing of agricultural produce is ensured through better trade linkages, market information system, storage facility, and Biju Krushak Bazar, etc.

2. Horticulture

2.1 Sufficient production of quality planting material is ensured through establishment of model nurseries both under public and private initiatives.
2.2 New gardens of mango, aonla, litchi, orange, banana, and lemon are established.
2.3 Floriculture of economic species like rose, tuberose, gladioli, and marigold is promoted and increased in area.
2.4 Protected cultivation in deserving areas is ensured through green houses, shade net houses, and mulching.
2.5 Post-harvest management is adequately ensured through increase in cold storage units, introduction of refrigerated vans, and mobile processing units.
2.6 National Horticulture Mission's broad objectives are fulfilled.

[3] The elements or development goals are in the present tense so as to show confidence and/or critical need of achieving these goals by 2020.

3 Irrigation

3.1 Overall irrigation potential is increased to cover 50% of the agricultural land, and judicious use of irrigation water practiced. Micro-irrigation through sprinklers and drip irrigation systems is promoted.

3.2 The Durgapur canal system and the Dhauragarh irrigation projects are operational.

3.3 Sustainability of all irrigation projects is ensured.

3.4 Rain water harvesting sustains agriculture in mining areas where LI points are unsuccessful due to depletion of ground water.

1. Soil conservation

Angul is an un-erroded district with a health agriculture, wealthy horticulture, and prosperous pisciculture & sericulture.

The treatable area of 4.45 lakh hectares is well-saturated, developed, and agriculturally processed.

891 nos. of micro-watershed projects are developed and well-saturated.

The ground water table is rationally increased, and percentage of moisture in 'Top soil' or 'sample soil' is developed to about 20 percent.

Productivity of the soil is coupled, and degraded cropping intensity is increased in the erratic rain-fed areas.

Food, fodder, fuel, fibre, and forest materials are non-migrated.

2. Animal husbandry

5.1 Indigenous breeds of cattle are upgraded through cross breeding by artificial insemination.

5.2 Sustainability of the local stocks of goatery is ensured.

5.3 Local indigenous breeds of fowls (if any) are identified and preserved.

3. Sericulture

6.1 Per capita allotment of sericultural plantation is increased to 1 hectare.

6.2 Number of tassar farmers and endi farmers are increased upto 1250 and 1100 respectively through substantial increase in plantation activities.

6.3 Seed infrastructure is increased.

6.4 Marketing infrastructures as well as linkages are improved, and farmer's cooperatives are strengthened with non-erodable revolving fund.

6.5 Weavers' cooperatives are adequately tied up with farmers' cooperatives.

4. Pisciculture

7.1 The production of inland fishery is increased to 12,000 MT through development of tank fishery and reservoir fishery.

7.2 Fish landing sheds are nearer to each primary fishermen co-operatives.

7.3 All active fishermen of BPL category are provided with low cost house, boat, and nets.

7.4 All fishermen villages are well-connected by road, and are electrified.

5. Forest and environment

8.1 Forest

8.1.1 Existing 41 percent of forest cover is maintained and the density based gradation of forests is improved along with preservation of rich biodiversity of these forests. Private forestry covers 5 percent of the geographical area of the district.

8.1.2 Successful protection and conservation of forests is ensured through community forest management. No. of VSS is increased to 981 and participatory forest management covers 70 percent of the forest land.

8.1.3 Silvicultural and plantation activities satisfy local needs of fuel, and sericulture, etc..

8.1.4 Successful dumping ground rehabilitation programme through scientifically selected plantation crops with collaboration with research centers like Regional Plant Resource Centre.

8.1.5 Compensatory plantation projects are rationally implemented with multi-spectrum benefits to the locality.

8.1.6 Forest land diversion is effectively controlled through policy advocacy and local support of public.

8.2 National Bamboo Mission ensures substantial supply of cultivated bamboo to paper mills. Use of treated wood/bamboo is enhanced, and degraded bamboo forests are restocked. Converting bamboo from poor man's timber to common man's timber is successful.

8.2.1 All forest lands are mapped, digitized, and geo-referenced with valid management plans.

8.2.2 Alternate marketing of Kendu leaves benefits the pluckers.

8.2.3 NTFP policy is revised and practiced to satisfy local needs.

8.2.4 Community-based management and eco-tourism activities make the Satkoshia sanctuary a success story.

8.2.5 Corridors and habitats of flagship species like elephants, tigers, gharials, giant squirrel are identified and conserved with community participation. The avi-faunal significance of Regali Dam Reservoir is adequately protected.

8.2.6 The objectives of forest rights acts are realized through eco-friendly and responsible community management processes.

8.2.7 Alternate and supplementary livelihood options are made available to the communities residing within the sanctuary without compromising the conservation needs of the sanctuary.

8.2.8 The biodiversity in the sanctuary are conserved in general and that along the Mahanadi Gorge and its adjoining landscape in particular with active support of the local community

8.2.9 NTFP market links are established and strengthened especially in high forest regions like Athamallik, Pallahara, Angul and Chhendipada.

8.2.10 Forests are maintained in its original form that suits to the biophysical environment of the region.

8.2.11 All villages inside forests are well-connected with all-weather forest roads, and are provided with adequate facilities of electricity, etc.

8.3 Environment

8.3.1 Quality of river water is satisfactorily improved in industrial areas to meet local needs.

8.3.2 Ambient air quality standards are maintained within safe limit and are monitored regularly by independent agencies having adequate skills. Also the findings are made available to the local people on regular basis.

8.3.3 The drinking water sources are preserved from contamination with the influx of solid waste, hazardous chemicals like fluorosis and nitrate etc.

8.3.4 Technology and devices are popularized with subsidy to check adverse impact of emission of CO_2 and other hazardous gases on human and animal health.

8.3.5 Vehicular, industrial, and other kinds of pollution of air, water, and soil is effectively controlled through regular and computerized public monitoring systems, social audits, and strict enforcement of law.

8.3.6 Public hearings are organized only after comprehensive EIA reports are submitted, and the EIA agency/consultant is answerable to the public bodies (CBOs/NGOs, etc.) in this matter.

8.3.7 Industrial hazards like ash pond breakage are completely checked.

6. Industry and mining

9.1 Industry

9.1.1 All the large scale industries utilize their own bi-products and wastes. All the periphery villages are well connected with roads, and all the growth centers are connected with railways. Pollution control measures are efficiently implemented by all the units, and carbon credit is generated by the large scale industries.

9.1.2 Clusters on different sectors like Steel , Aluminium , Automobile spares, Auto Servicing , I.T. services, etc. have been set up and maintained at specific places.

9.1.3 Fifty fly-ash bricks manufacturing units and 2 cement plants consume the fly ash & blast furnace slag generated from thermal power plants and steel industries.

9.1.4 Processed manure, building blocks, and filling material using flyash have been set up .

9.1.5 New Industrial estates are established at Jarapada of Chhendipada block, Mermundali in Banarpal block(each 200 acres) and in the Talcher-Kaniha belt (100 acres).

9.1.6 Food processing industrial clusters utilizing agriculture, horticulture & forest resources are set up in Athamallik & Pallahara Sub-Division.

9.1.7 One Aluminium Downstream Park in 1000 acres of land has been set up adjacent to Smelter Plant of NALCO, where 200 MSMEs are producing Aluminium components for Automobile sector, and power transmission sector, etc..

9.1.8 Eight heavy industries, 5 Nos. of Oxygen plants, 3 Nos. of cold storages, and 10 Nos. of Herbal/Ayurvedic processing units have been set up.

9.2 Mining

9.2.1 Only socio-ecologically proportionate mining activities are allowed to sustain minimum requirement of agricultural and forest land.
9.2.2 Abandoned mines are properly filled with ecologically suitable materials, under the monitoring of local municipal and citizen's bodies.
9.2.3 Water bodies created in abandoned open cast mines are scientifically managed for public benefit.
9.2.4 Mineral beneficiation is practiced through ecologically sound mechanism.

9.3 Textiles and other cottage industries

9.3.1 The handloom sector is upgraded to meet market challenges, through modernization of weaving mechanism, upgradation of skill, ensuring quality raw materials, and providing new designs.
9.3.2 The lac craft of Boinda and Deonali is revived with better market linkage.

10 Panchayati Raj

10.1 The three-tier Panchayati Raj system is strengthened through better infrastructure, community involvement, capacity building of PRIs and policy changes.
10.2 Service delivery by panchayats are very satisfactory with the involvement of local SHGs/NGOs etc.
10.3 Block-offices are adequately placed and staffed so as to oversee the developments in the area under their jurisdiction.
10.4 Kendu leaf grant is judiciously utilized with primary focus on the benefit of pluckers.

11. Rural Development

11.1 Each GP is connected with fair weather road. A full-time executive office is posted in each GP to monitor multifarious works operated at village level.
11.2 Each GP has adequate drainage, safe drinking water, and sanitation facility.
11.3 Disaster-mitigation cell operates at GP level to provide quick relief to the victims.
11.4 Disaster relief centres are established at GP level, and managed by women's SHGs.
11.5 Asset creation and employment generation through NREGS and other schemes substantially improves the living standards of village people.
11.6 No villager is homeless, and deserving people get houses as per government scheme.

12. Urban development

12.1 Angul-Talcher

12.1.1 Angul-Talcher twin city comes under a municipal corporation.
12.1.2 Adequate communication, sewerage/drainage, drinking water, and other facilities are developed for this twin-city.

12.1.3 Rain water harvesting and pipe line from Brahmani river help meet the water demand here.
12.1.4 Eight-storied buildings are permitted in Angul so as to make optimum utilization of land.
12.1.5 Parking space, play grounds, parks, green belts, and cultural centres, etc. are properly planned under a master plan. Encroachment of public land is minimized, and roads are widened.
12.1.6 Public-private partnership helps in the development of the city.
12.1.7 The NH is diverted through Meramundali-Badkera and a fly over is constructed at Handidhua for the convenience and security of the public.
12.1.8 Stone packing of the embankment in river Brahmani from Rajbati to Paschimeswar temple saves the Talcher side.
12.1.9 Slum development and eradication programme successfully meets its objective.
12.1.10 Proper solid waste management is ensured.
12.1.11 Two truck terminals are constructed.
12.1.12 Earthquake-resistant structures are mandatory for building works in Talcher.
12.1.13 The Talcher-Angul Development Authority functions effectively with adequate financial and other resources.

12.2 Athmallik

12.2.1 Athmallik becomes a municipality.
12.2.2 Water supply system is augmented with over-head tanks and treatment plants to provide safe drinking water to the people.
12.2.3 Bridge is constructed over river Mahanadi from Puleswar to Dhalpur to connect Angul to districts like Boud, Phulbani, Ganjam and Nayagarh.
12.2.4 Effective solid waste management plant with fertilizer unit is established.
12.2.5 Embankment development supports minor irrigation, horticulture and fishery.

13. Health and sanitation

13.1 IMR is reduced to 25/1000, and MMR to less than 2/1000.
13.2 Malaria, leprosy, filaria, and AIDS are controlled; citizens' awareness helps prevent diseases like HIV-AIDS. .
13.3 The 250-bedded district headquarter hospital has specialty departments in medicine, pediatrics, gynecology, general surgery, and orthopedics, etc. and also Superspecility departments in neurosurgery, cardiology, and nephrology.
13.4 Block-level hospitals have specialists in medicine, pediatrics, gynecology, orthopedics and surgery.
13.5 Pathology laboratories are available at GP level.
13.6 All hospitals are adequately staffed and equipped along with electricity and necessary infrastructure.
13.7 Health supporting units are available for 1000 population, and PHCs are upgraded.
13.8 Complete hygiene is maintained in and around hospitals with community involvement and medical waste management system.
13.9 Strict enforcement of law stops sell of fake medicines.
13.10 Capacity building and recruitment of AYUSH doctors successfully stops practices by local quacks.

13.11 Homoeopathic dispensaries are established at NALCO Nagar, Talcher, and Athamallick etc. A district level 5-bedded homeopathic hospital is established at Angul with adequate facilities, and the Inspector, Homeopathy may operate from here with additional charge of this hospital.

13.12 A 60-bedded Ayurvedic hospital is established at Angul. Infrastructure facilities are improved in other Ayurvedic dispensaries/hospitals along with establishment of herbal gardens.

13.13 Public Health Department makes adequate provisions for disinfection, mosquito eradication, and defluoridation of water, etc. in the urban areas.

13.14 Total sanitation campaign meets its objective in the district, and RWSS ensures reliable drinking water supply in the rural areas.

14. Education

14.1 Literacy level is increased to 80 percent.

14.2 Good quality education is available, accessible, and affordable at primary, secondary, higher secondary and university level.

14.3 Sarva Sikshya Abhiyan meets its objective satisfactorily.

14.4 Schools and colleges are adequately placed in different localities with good infrastructure and teaching staff.

14.5 Vocational training centres are established at block level.

14.6 Educational institutions have special considerations/facilities (hostels, toilets etc.) for girls, socio-economically backward students, and physically challenged students.

14.7 Residential schools are established for blind, dumb and deaf students.

14.8 Medical colleges are established at Angul and Talcher.

15. Social welfare and SC/ST development:

15.1 Social welfare

15.1.1 Social security deserving persons/groups ensured through optimum utilization of the potential of various welfare schemes.

15.1.2 Malnutrition in children reduced to minimum.

15.1.3 Overall development of women, children and adolescent girls is ensured through fully and effectively functional Anganwadi centres.

15.1.4 All Anganwadi centres have their own building, and necessary infrastructure including meeting hall and electrification. The District Social Welfare Office also has its own building with adequate infrastructure including meeting hall and garage.

15.1.5 Targets of individual household latrines and institutional latrines are fulfilled.

15.2 ST & SC development

15.2.1 Each GP has residential schools for SC & ST students.

15.2.2 Training institute exclusively for SC/ST students helps for their self-employment.

15.2.3 Pre-matric scholarship helps students of the disadvantaged groups in secondary education.

15.2.4 The Paudi Bhuyan villages in Pallahra have all weather roads, electricity, safe drinking water facility, and educational complexes for boys & girls. Irrigation facility is developed, and primary health care services are ensured.

16. Law and order

16.1 Civil & criminal courts

16.1.1 A district court and a vigilance court operate at the district headquarter.
16.1.2 Two family courts are established.
16.1.3 Circuit courts of District Consumer Forum operate at sub-divisional level.
16.1.4 Voluntary organizations provide legal aid to the poor.

16.2 Police, crime and jail

16.2.1 Angul has the lowest crime rate in the state.
16.2.2 Police stations are adequately staffed and are provided with adequate infrastructural facilities alongwith internet connection.
16.2.3 Four women police stations are established, and one industrial police station is opened to deal with industrial law and order problems.
16.2.4 One juvenile observation home is established at Angul, and existing jail facilities are improved in terms of health & hygiene, education and other reformative measures for the prisoners.
16.2.5 Sufficient recruitment of traffic police helps in better traffic control.
16.2.6 Community policing meets its objective satisfactorily.
16.2.7 The strength of the Reserve battalion at Angul is adequately increased.

17. Culture

17.1.1 Ethnic cultural identity of the district is protected with special focus in tribal areas and artisan's areas.
17.1.2 Tourist places are improved, and new tourist attractions are identified.
17.1.3 Monuments and/or sites of historical importance are protected and managed properly.
17.1.4 The district library is upgraded alongwith internet facility.
17.1.5 A district museum is established at Angul to focus on the heritage, culture, and other identities of the district.
17.1.6 Multi-purpose community centres are established at block level having library, TV, internet, indoor games, meeting hall and an open stage.

18. Information and public relations

18.1 Integrated awareness camps are organized to keep the district people well-informed about various developmental activities and schemes, etc.
18.2 The Information and Public Relations Department is adequately strengthened to carry out its activities efficiently for public benefit. Brach offices of the Department are operational at block level.

19. Sports

19.1 Play-field is developed in each gram panchayat.
19.2 Each block has a mini-stadium.
19.3 Sports tournaments are organized at GP, block and ward level. Attractive prizes are given to encourage sports activity.
19.4 Stipend and other kinds support are provided to deserving candidates.

20. Roads and Railways

20.1 The Bimlagarh-Talcher railway line is fully operational.
20.2 The four lane NH-42 (from Manguli to Angul) sustains the pressure of increasing heavy traffic.
20.3 NH-6 and NH-23 also have 4-lane standard with elephant corridors on NH-23 at three places.
20.4 The Banrpal-Panchmahala and Khamar-Pallahra by-passes divert heavy traffic for public convenience and security.

21. Rural works

21.1 Core networking system in all blocks ensures better and systematic implementation of the projects.
21.2 Various departments get their required buildings and staff quarters in the rural areas.
21.3 PMGSY project meets its target in the district.

Strategies to achieve future development goals

In the present chapter strategies to achieve future development goals are discussed

Agriculture and horticulture

- Scientific reclamation of otherwise unsuitable (for agriculture) and/or environmentally degraded (like, affected by industrial effluents) lands.
- Increase in current installed irrigation potential by 100 percent.
- Promote micro-irrigation through sprinklers and drip irrigation systems.
- Increase in Seed Replacement Rate (SRR) upto 40 percent by production of quality seeds in own lands through seed village and other programmes.
- Promotion of SRI (System of Rice Intensification).
- Increase in fertilizer consumption from 30 kg/ha to 60 kg/ha in deserving areas.
- Promotion organic farming through awareness building about and adequate supply of bio-fertilizers like Azospirillum, Azotobactor, Phosphorus solubilizing bacteria; and also through green manuring and vermi-compost. Ensure organic certification at an affordable cost.
- Increase in production and productivity of pulses by adopting seed treatment with S.T. chemicals, inoculation through rhizobium culture, and use of Phosphatic fertilizer at the time of sowing.
- Ensuring promotional schemes of horticulture suitable for small and marginal farmers
- Promotion of floriculture
- Promotion of medicinal, aromatic or other non-traditional cash crops in otherwise unsuitable lands.
- Collectivisation of farm mechanization to tackle labour problem.

Soil conservation

- Integrated soil conservation measures (contour bunding, run-off management, maintenance & conservation of water bodies with rain-fed technology, rational reclamation of non-forest & non-agricultural lands, etc.).
- Development and management of irrigation potential
- Awareness building.

Animal husbandry

- Cross breeding of indigenous cattle by artificial insemination.
- Fodder plantations for cattle and goatery
- Poultry development through supply of dual purpose backyard poultry birds from departmental hatcheries.

Sericulture

- Increase in the area under sericulture feed plantation
- Increase in the capacity of seed farms
- Improvement in credit and market linkages for tassar cooperatives

- Effective tie up of farmer's cooperatives with weaver's cooperatives

Pisciculture

- Optimum utilization of private ponds, community ponds, and reservoirs
- Increase in fingerling production
- Construction of fish landing shed
- Construction of cold storages

Forest and environment

Forestry

- Increase in the area under community forest management
- Settlement of tenurial rights of forest dwellers and forest protecting villages
- Effective implementation of compensatory plantation activities with local participation and micro-planning
- Effective implementation of regular forest management/silvicultural activities with community involvement.
- Development of the NTFP sector through R&D work
- Increase in procurement of grower's kendu leaf
- Improvement of ecotourism facilities and identification of new sites of tourist attraction
- Minimization of diversion of forest land with local support

Environment

- Active involvement of citizen's groups and NGOs in pollution control measures
- Strict enforcement pollution control measures
- Enforcement of comprehensive environmental impact assessment prior to establishment/opening of new industries/mines
- Ensuring solid waste management and hospital waste management

Industry and Mining

- Establishment of new industrial estates
- Promotion of consuming units for industrial waste material like fly-ash and clinker
- Proper filling of abandoned mines
- Carrying out scientific rehabilitation of dumping yards through plantations
- Ensuring state-of-art mineral beneficiation process

Panchayati Raj

- Capacity building of PRI members
- Increase in participation/collaboration of local NGOs/SHGs, etc.

Rural Development

- Connection of all villages with all-weather roads
- Provision of safe drinking water and electricity to all villages
- Promotion of low-cost, indigenous herbal methods of water purification
- Optimum utilization of the scope of asset creation in NREGS for sustainable livelihood

Health and sanitation

- Increase in infrastructural facilities
- Recruitment of adequate staff
- Skill development of AYUSH doctors for emergency care
- Increase in the frequency of mobile unit services in remote areas

Education

- Provision for adequate infrastructure and boundary walls to all schools
- Recruitment of adequate and trained teaching staff

Future Growth Engines

This chapter discusses the sectors which have a potential to become future growth engines for the holistic development of the district. These goals may be short, medium or long term depending on the need and available resources.

Education

Angul has a good literacy rate as compared to the state and country, and it can be further increased. Skill building of educated youth through vocational trainings can be ensured.

Agriculture

Promotion and popularization of techniques like SRI, provision of more storage facilities and marketing infrastructure, irrigation development and use of rain water harvesting etc. would give a boost to agriculture, particularly to vegetable production in the district.

Animal husbandry

Goatery has enough scope and potential for the sustainable livelihood in the district. Because of restrictions of the Forest Department on grazing in forest areas, fodder plantations in private lands would help sustain goatery development.

Fisheries

Development of recharge structures near ponds, tanks etc and increase in quality fingerling production would substantially increase fish production.

Forestry

Promotion of ecotourism has great potential in the district. Present arrangement in Satkoshia and other areas are inadequate and more infrastructural facilities are to be developed to attract international tourists.

The NTFP potential like that in case of sal seed and kendu leaf can be properly utilized to benefit the dependent people through R&D work and market linkages so as to create new and/or assured/profitable markets for the high production NTFPs.

Industries

Coal-based industrialization is in priority in the investors' agenda for Angul district. But to minimize the environmental hazards of the same in order to get public support counter state-of-art eco-friendly technology should be utilized in such units. Further, more industrial estates are to be established to accommodate ancillary units and the proposed Aluminium downstream park is to be established effectively with long term sustainability.

Improvement of the NH-23 (Talcher-Rourkela route) and opening of the proposed Bimlagarh-Talcher line would give a boost to the industrial economy of the district.

District Consultation Meeting

The District consultation meeting was held on 4th June 2008 at DRDA Conference Hall, Angul. The meeting was attended by 60 participants including district level senior officers of all line departments, ZP members, representatives of local MP and MLA, ULBs, civil society organizations (CSOs) and PRIA's (TSI) representative. The basic objective of the consultation was to build up a common understanding on the planning process, to have a clear understanding on the roles and responsibilities of various stakeholders and to ensure the process to be participatory.

The meeting began with a welcome-cum-key note address by Project Director, DRDA followed by a presentation on CDP and CDAP by representative of PRIA. Almost all the participants in the meeting were of the opinion to make the planning process participatory and need based. They also advocated that this could be realistic and need based only when the voices of the poor & marginalised people and unprivileged sections of the society are reflected in the District Plan. The participants were made to understand the process of participatory planning.

Orientation Programme on 'Vision' formulation

A training-cum-Orientation programme was organized with cooperation from the District Planning Office, on 12th June 2008. The objective of the programme was to provide basic orientation to the line departments on the preparation of sectoral vision for 2020. The representatives of various line departments, Project Director and DRDA officials attended the programme. During the orientation it was made clear that the TSI would only play the role of a facilitator. It was also stated that both the TSI and the Departments had to support each other in ensuring the preparation of the district plan with the TSI's responsibility of consolidating the sectoral plans.

During the course of discussion a number of issues were raised. The PRIA's representative stated that the planning process did not have financial limitations, the projections should be justified. In case of a reducing trend and alternative measures/options are to be suggested to overcome the problem. It was also stated that the present process does not have much scope for involving the Central Government agencies. Regarding common programmes, IMR/MMR should be clubbed under the Health Departments vision, and the concerned agencies should mutually discuss regarding their roles and responsibilities.

First joint meeting of DAPU and DPU

The first joint meeting of the District Agricultural Planning Unit (DAPU, for agriculture planning) and District Planning Unit (for non-agricultural sector) were organized on 19th June'08. During the meeting concern was raised regarding the rapid conversion of agricultural land for industrial and mining activities. The District Labour Officer suggested that a high level committee should be constituted at district level to determine the amount of agricultural and forest land to be retained for socio-economic and ecological security. He further suggested that on the basis of recommendations of this committee the 'vision' document and perspective

plan, etc. should be prepared. The suggestion was accepted by the participants but at the same time it was stated that because of limitations of time it would not be feasible in the current year of planning. It was also suggested that the Law & Order component should also be incorporated in the district vision document. A concern was also raised by the ZP official that the PRI representatives and political leaders should be educated enough to understand the planning process and to determine the strategy for its implementation. The meeting was ended with a note that all the departments would submit their 'vision' documents latest by 21st June.

Block level Consultation Meetings

Angul Block

The consultation meeting was convened on 17th June 2008 at Block office. The meeting was attended by Sarpanchs, VLWs, Panchayat Extension Officers, Assistant Engineer, Vice-Chairman of Panchayat Samiti, SHG members, federation members, partner NGO, government officials, samiti members, PRIA representative and member of NGOs. The basic objective of the consultation was to make the participants understand the process of district planning.

During the consultation participants were asked to do SWOT analysis of different sectors like agriculture, forests, irrigation etc. The participants were of the opinion that the agriculture is mostly rainfed and suggested that the agricultural lands should have irrigation facility by the year 2020. In respect of school participants were of view that most of schools do not have a boundary wall and there are very few classrooms. In addition the participants also demanded a medical college and all weather road and electrification of villages. As the district has a sanctuary the participants opined that people residing inside the sanctuary area should be protected and given employment. On health issues, the participants were of view that in many areas, doctors were not available. They demanded hospital with a medicine specialist, gynecologist and pediatrician at GP level by the year 2020. With regard to agriculture it was highlighted that the district lacks marketing and cold storage facilities for different crops.

During the consultation a grave concern was raised by the participants on industrialization and mining issues and it was brought to focus that industrial activities are leading to contamination of water, displacement, degradation of agriculture, forests etc. To make all the facilities to the reach of people it was stated that all the district offices should be located and functions from Angul (at present it is being done from Dhankennal). Proper functioning of all Centrally and State sponsored schemes. It was also brought to the notice that during disaster or due to famine or pest infestation, the crops get damaged. In this regard it was suggested that a disaster management cell at GP level should be set-up and crop insurance should be provided immediately. Reflecting on sports potential of the district it was suggested that in every Panchayat there should be a mini stadium.

Athmalik Block

A block level consultation meeting was conducted on 17 June 2008 at the Meeting Hall of Athmalik Block Office. The consultation meeting was attended by the officials of line departments. During the course of meeting the participants touched upon various aspects of

development in the district, the local resources, constraints and opportunities in utilizing the resources for poverty alleviation and above all for development of the area in a planned manner. During the meeting participants discussed on the vision statement and reached unanimously on the statement '**Secured food and income security for the poor and marginalised with basic infrastructure, connectivity and enhanced access to credit institutions**'.

During the discussion sectors were prioritized for the realization of the vision, agriculture and allied activities was put on the top priority followed by infrastructure development, power, communication, health and credit linkage. The specific aspects within each sector were discussed so as to ascertain the development need. Participants were of the view that due to lack of irrigation facilities a significant percentage of agricultural land has not been cultivated regularly. The participants felt that it would not be over optimistic to plan for providing irrigation facility to about 25% of unirrigated land by 2020. It was also brought to the notice that the area offers ample scope for horticulture development. To reduce the man power in farm sector mechanization (pumps, tillers, etc) was also emphasized.

In respect to industrialization it was brought to notice that there is no industry or reliable secondary sectors for employment. In this connection setting up of agro-industries and promoting agri-business by forming and strengthening agriculture cooperatives would add substantially to the income of local people. The participants also observed that infrastructure development should be considered next to agriculture. It was also highlighted that by providing electricity to remote villages people would be able to install lift irrigation points and use pump-sets for irrigation.

To secure individual and community's rights on forestland and to minimize the vulnerability of tribal and other traditional forest dwelling communities emphasis was laid upon proper implementation of Forest Rights Act. The participants felt that many tribal and non-tribal people who were deprived from land and livelihood options were joining hands with the Maoists. Development in communication with road connectivity to remote areas was also discussed as an area of concern. Regarding credit linkage the participants felt that it is an important area of concern especially for agriculture and setting up of small agri-business.

Banarpal Block

The consultation meeting was convened in the Banarpal Block on 17th June 2008 at the Block office. The meeting was attended by more than 40 people including representatives of various line departments, PRI representatives and representative of 'PRIA'. The house discussed the strength, weaknesses, opportunities and threats of the Banarpal Block and the following issues emerged alongwith their corresponding 'vision' status:

Regarding health sector it was brought to notice that there is lack of facilities at the GP level for health workers. To overcome this crisis it was suggested that one 10 bedded hospital may be constructed at GP level. In respect of women related there should be a labour room for smooth delivery of child. Attention was also drawn to Yashoda Yojana. For malaria eradication, DDT spray needed in some GPs. It was also suggested that air pollution and utilization of ground water should be reduced. Pathology laboratory facilities needed at GP level, malnutrition & deficiency of vitamin should be checked. To make the health facility people oriented it was

suggested that there should be quarter at GP level for Health Workers, facility of labour room at GP level, minimum 6 bedded hospital needed at GP level, an Ayurvedic/Homeopathic doctor need to be posted in each GP, PHC to be converted as community hospital, 24 hour service in health centre/hospitals and adequate staff, and other facilities with safe drinking water and sanitation.

Regarding education sector it was suggested that subject wise teacher should be introduced, educational centres should have boundary walls, enough rooms, electricity, TV, drinking water and sanitation facility, central library, housing facility for the school staff and it was also suggested that teacher should not belong to same village.

Regarding health and hygiene it was suggested that every family should have a usable toilet. In addition everybody should be aware about proper sanitation like use of hand wash, garbage pit and drain clearing, etc. and imposition of penalty for polluting and spreading dirtiness.

Regarding connectivity it was suggested that Concrete road/pucca road in every village with drainage system should be constructed and link road to every village. In addition it was highlighted that use machinery in NREGA work should be avoided.

Chhendipada Block

The consultation meeting on preparation of district vision, perspective plan, and annual plan for Chhendipada Block was held on 17th June 2008. PRI representatives as well as representatives of various line departments participated in this consultation. During the meeting the representative from Agriculture Department informed that no GP has achieved the target of 35% irrigation coverage. In respect of agriculture it was observed that there is need for improvement of minor irrigation projects, more dug-wells and bore-wells for vegetable growers, inter-connectivity of rivers in water-scarce areas.

The major concern expressed during the meeting was the destructive impact of collieries. It was also highlighted that apart from the existing collieries 38 more have been proposed in this block which would consume valuable agricultural- and forest land, and would drastically deplete the ground water resources. As the Block supplies lot of vegetables and horticultural products to other areas, irrigation development through rain water harvesting structures would be useful in areas where lift irrigation does not work. Regarding health sector it was brought to notice that major problems are lack of doctors, lack of infrastructure and malaria still is the dominant disease. Similarly, in Education, lack of staff and adequate infrastructure are an issue.

Kaniha Block

The consultation meeting was convened on 17th June 2008 at Conference Hall, Kaniha Block. The meeting was attended by thirty-two persons including line department officials, elected representatives of PRIs and PRIA's representative. After initial briefing the brainstorming sessions were done in four groups on four issues Livelihood, Health, Education and Infrastructural development.

During the consultation scores of issues were discussed and good number of issues were brought to notice like better accessibility and affordable education to all children, better irrigation facility, etc., infrastructural development like adequate storage facility, food processing units, vegetable mandi, financial support to ensure growth of agro-business, accessible and affordable health care services for all.

Kishorenagar Block

The consultation meeting was held on 17th June 2008 in the Conference Hall. The meeting was attended by 45 people including elected representatives, line department officials and PRIA's representative

During the meeting discussion was based on SWOT analysis and number of suggestions came from the participants like an institute for technical education to cover poor and marginalized youth, one primary school in each village with a good building and trained teachers, upgradation of all the three colleges as Degree College and at least one post graduate degree college, at least 2 new hospitals and the upgradation of CHC at Kishorenagar with doctors and infrastructure, malaria control measures in a large scale, blood bank to fulfill the requirement of the growing population and to save lives who are facing chronic diseases, lift irrigation and ponds for agriculture purpose, one centrally located cold storage, establishment of an agriculture (cashew, rice, dal, oil seeds etc.) and forest based (NTFP processing) industry for the creation of employment opportunity for the youths and promotion of eco-friendly lively option for the people and seed bank.

Pallahara Block

A Block level consultation meeting of Pallahara Block was held on 17th June 2008 at Sabhaghar, Pallahara. More than 25 people participated in this meeting including local PRI representatives and on behalf of PRIA the representative of Jana Vikas Kendra, a local NGO.

During the meeting number of issues were discussed and the 'vision' that emerged from this consultation are namely all villages should have safe drinking water facilities and connected by all weather roads, development of irrigation facility and other kinds of support for agriculture, well functioning of NREGS, schools with adequate infrastructure and trained teachers, modern health services for the remote areas, prohibition on alcohol, and participation of people in the decision making process to check corruption.

Talcher

The consultation meeting was organised on 17th June, 2008 in the meeting hall of Talcher Panchayat Samiti. The consultation was attended by 43 participants including Block level line Department officials and elected PR representatives.

During the consultation a number of issues were discussed and participants provided their insights on the constraints and issues for vision of the district. In respect of constrains it was highlighted that the Block has inadequate resource allocation, lack of awareness among people on various developmental programmes, lack of proper rehabilitation by industrial units – adequate civic facilities are not provided to the displaced persons.

The participants during the discussion for the vision of the district suggested scores of things like drinking water for all, pollution free Green Talcher, sustainable industrial development with focus on development of allied industries, increased electricity production with enhanced export potential, irrigation facility, mechanized and advanced agriculture with enhanced production and productivity of land, hospital in all GPs, employment opportunities with sustained livelihood, prioritization of fishery sector as key sector and sustainable development through promotion of horticulture.

The Consultative meeting at all eight Blocks helped in preparation of vision of the district as a whole and it also provided an opportunity to different stakeholders to get their views incorporated in the visioning exercise.

ULB Consultations:

Vision 2020 consultations for the three urban local bodies remained pending because of a number of reasons(including ULB elections), but the concerned Executive Officers were provided personal guidance so as to prepare their respective vision documents. The effort was successful, and Athmallik NAC emerged as the leading visionary among the ULBs.

References:

1. Directorate of Economics and Statistics, Orissa(undated). **District Statistical Handbook,Angul:2005**
2. Directorate of Economics and Statistics, Orissa(2008). **Statistical Abstract of Orissa**
3. District Council of Culture, Angul(2005).**District Gazetteer Angul**
4. Govt of Orissa: Forest Department, **Orissa Forestry Vision 2020**

In addition to the above, publications of the Directorate of Census Operations, newspaper reports, various sectoral documents, and the district website of Angul have been referred to for additional/supplementary/complementary information.