EVALUATION OF PLANNING AND DEVELOPMENT IN KAKOPATHAR BLOCK, TINSUKIA, ASSAM

A DISSERTATION

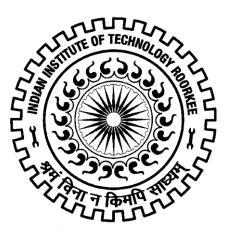
Submitted in partial fulfillment of the requirements for the award of the degree

of

MASTER OF URBAN AND RURAL PLANNING

By

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JUNE, 2014

CERTIFICATE

Certified that report entitled "Evaluation of Planning and Development in Kakopathar Block, Tinsukia, Assam" which has been submitted by Mr. Dipankar Saikia, for partial fulfillment of the requirement for the award of the degree of Master of Urban and Rural Planning, in Department of Architecture and Planning, Indian Institute of Technology- Roorkee, is the student's own work under my supervision and guidance. The matter embodied in this dissertation has not been submitted by him for the award of any other degree of this or any other institute.

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CANDIDATE'S DECLARATION

I hereby declare that this report entitled "EVALUATION OF PLANNING AND DEVELOPEMNT OF KAKOPATHAR BLOCK, TINSUKIA, ASSAM" which has been submitted in partial fulfillment of the requirement for the award of the degree of Master of Urban and Rural Planning, in Department of Architecture and Planning, Indian Institute of Technology Roorkee, is an authentic record of my own work carried out during the period from July 2013 to June 2014, under supervision and guidance of Assistant Professor Ar. Uttam Kumar Roy, Department of Architecture and Planning, Indian Institute of Technology, Roorkee, India.

The matter embodied in this dissertation has not been submitted by me for the award of any other degree of this or any other institute.

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This is to certify that the above statement made by the candidate is correct to the best of my knowledge and belief.

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Dipankar Saikia

Abstract:

Kakopathar block is situated in the district of Tinsukia which is one of the most urbanized regions in Assam. It extends upto 832sq.km and covers 21% of the total geographical area of the district. The largest share of population from the district lives in the villages of Kakopathar. The planning and development in Kakopathar Block had started in 1964 after the establishment of the block during Community Development Programme, but till present rural character is still prevalent in the block. It is located in a core economic region distinguished by National Commission on Urbanization for planned urban development in India.

Block Planning has a very unique history in Indian planning. Since independence Community Development Blocks are treated as normal administrative units. They have regular budgetary allocations. Block Development Officer (BDO) at each block or the revenue tehsil, with a team of subject specialists and village level workers (VLW) execute the various developmental activities in a block. The BDOs reported to the District Collector, who is the administrator of the district. This type of centralized approach however resulted failure in upliftment of regional disparities in rural and urban growth.

Prior to the recommendations made by Balwant Rai Mehta Committee three tiers of Panchayati Raj Institutions were established at village, block and district in 1957. Accordingly, the 73rd and 74th Constitutional Amendments in 1992 provided legal framework and endowed functions and responsibilities to the institutions at each level for performing developmental activities. The District Planning Committee (DPC)'s as mandated by the 73rd CAA are to be constituted at all states for consolidating plans prepared by Panchayats and municipalities in the district into the Draft District Plan. Block planning units act as an extension of District Planning Committee at the intermediate level.

This study is thus revisits the block planning in regional development and tries to find the imbalances in growth within a known flourished region. Generally, a district is often too large a unit in which to fully understand the extent to which local social and cultural contexts influence the effectiveness of key services. This is more possible at a smaller local government level, such as an Intermediate Panchayat or a Village Panchayat.

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Chapter I - Introduction

1.1 Background

In India where majority of people live in well spread rural agrarian societies, Micro planning offers a special edge for development of smaller regions. The main objective of micro level planning is to achieve integrated development at the national level. It deals with the preparation of plans at micro scale so that they can be properly planned to give maximum utilization of resources in a region.

In 1988, National Commission on Urbanization (NCU) identified 49 Spatial Priority Urban Regions (SPURs), demarcated as core areas to increase economic opportunities. According to the assessment of the Commission, these areas had the potential to become as planned urban regions which in turn would expand the development impulses towards the backward regions of the country. Such an attempt of priority regional planning in India was the first of its kind and evolved from the idea of expanding planned urban regions (Draft URDPFI Guidelines, 2014). SPURs were generally very large areas and crossed among inter-district boundaries, sometimes state boundaries too. These regions also hold lion's share of states' GDPs. NCU asked for policy and programmes for development of such regions as the Commission thought concentrations of investments would flourish the urban areas and lessen the existing regional disparities in social and economic development.

India is a very large country and due to its various heterogeneous characteristics like climate, topography, physiography, local politics, law and order, administration, availability of resources etc.; disparities can be found in any planning unit. In response to the degree of economic viability in a region, the scale of development changes and thereby necessitates decentralization in various planning units for implementation of schemes and programmes.

Democratic decentralization and economic liberalization has opened now a days many facets of planning and development in different hierarchies of planning units. India has been engaged in micro-planning at both district and block level for several times. In 1952, the Government of India launched 55 Community Development Projects, each

covering about 300 villages or a population of 30,000 in various parts of the country. These development blocks were treated as normal administrative units for planning. Prior to the recommendations made by Balwant Rai Mehta Committee¹ three tiers of Panchayati Raj Institutions were established at village, block and district in 1957. Accordingly, the 73rd and 74th Constitutional Amendments provided legal framework and endowed functions and responsibilities to the institutions at each level for performing developmental activities.

The present integrated district planning aims at harmonizing sector wise development in the region (district) with strong public participation and social justice. The District Planning Committee (DPC)'s as mandated by the 74th CAA are to be constituted at all states for consolidating plans prepared by Panchayats and municipalities in the district into the Draft District Plan.

Block planning units act as an extension of District Planning Committee at the intermediate level. The 11th Five Year Plan (2007-12) was focused at formulation of District and Sub-District Plans at all levels of Panchayats aimed at delivery of basic minimum needs to citizens at the grassroots levels.

1.2 Need for the study

It was seen from the past experiences that the capacities of Block level officials are often limited to prepare integrated developmental plans for demarcated areas. In present situation where participative decentralized planning is gathering momentum it is a felt need to re-examine the current scenario at the intermediate level below district.

In micro planning, vision goals are set for a district for a period of 10-15 years. These vision goals need evaluation of from time to time to keep track of the development. Spatial evaluation is thus necessary for a planner to identify the gaps and the possibilities of a region. It also provides a basis for aligning the implementation schemes according to the set priorities. The growing impetus of bottom-up approach in all rational planning models finds relevance in regional/district planning as well. The "Developmental Block" formed under statutes by the state is an excellent unit to begin

¹ A Committee set up in 1957 by National Development Council (NDC) for assessing the extent of Community Development Programme under chairmanship of Balwant Rai Mehta.

planning and such plans can then be worked upwards to formulate a co-ordinated district plan. In view of this, the Kakopathar block in Tinsukia District has been studied to prove the fact that plan making at district-level alone cannot ensure an equitable development, that such efforts have proved to be unsustainable and tends to overlook issues, strengths and opportunities.

Kakopathar block was established in 1964 during the large extension of community developmental projects throughout the country. It has been over fifty years but only 25 percent population lives above the poverty line. It is located in one of the 49 **Spatial Priority Urban Region (SPUR)** distinguished by **National Commission on Urbanization (NCU)** in 1988, but agriculture is still prevalent in the block. It is therefore necessary to identify the bottlenecks in development of the area.

1.3 **Aim**

The aim of the study is "**to evaluate the planning and development in Kakopathar block**" for integrated district development of Tinsukia, Assam.

1.4 **Objectives**

The study will have the following objectives -

- To study the planning frameworks in development of Community Development Blocks.
- To evaluate the level of development in Kakopathar block (study area).
- To identify gap, issues and potentials of the study area.
- To formulate planning strategies for future development of the study area.

1.5 Scope of study

The scope for the study is to understand the process of vertical and horizontal planning frameworks practiced over time in India. This study will try to understand the process of shifting dimensions in planning functions at local level and its implications on the physical and economic growth of the region.

The study also looks into a lesser-known dimension of urban and rural growth within a district. Spatial growth of physical and social infrastructure and clustering of economic activity goes hand to hand in regional planning. It is an attempt to look at the orientation of schemes by the intermediate planning units in relation to utilization of human and other resources.

This study will help in understanding the comparative position of communities in different parts of the area and realize the potential sectors for growth.

1.6 Limitations

- This study of block planning mainly deals with the context of Assam and is limited to the administrative boundary of Kakopathar block as a study area.
- Not all the aspects of integrated district planning might hold relevance.
- According to the local and physical conditions it may not be applied to other planning units in India. The proposals made might not be applicable other than the study area.

1.7 Methodology

The study has the perspective of regional development in a diverse economic region. The district of Tinsukia was included in one of the 49 Spatial Priority Urban Region (SPUR) notified by National Commission on Urbanization of India. By so far the industrial and economic growth has been limited to only a small part of the district.

The methodology adopted for the study is to select an area within the district where rural character is predominant in spite of being located near to regional growth centres and then evaluate its performances under different parameters for having an idea of the development.

The framework adopted for the study is as follows

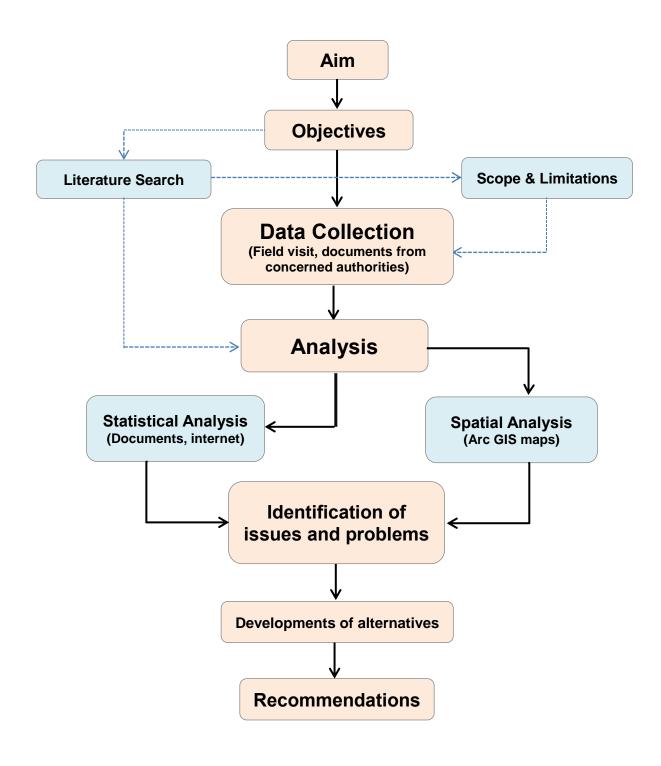


Figure 1: Research framework for the study

Chapter II – Literature Study

2.1 Regional planning in India

The concept of region is something related to space and its spatial dimensions. In some cases the term region also used by the economists devising macro - regional growth theories which treated regions unconsidered of space. Therefore the limits of regions vary in line of the policies and programmes. The planning regions can thus be classified by combining areas of homogeneity according to the purpose and scale. In regional planning, macro region takes whole nation as a unit taking as one point economy. The Zonal regions cover more than one state and Meso region for one state. Administrative units such as District, Block, Villages in a state are taken as the lowest unit as micro regions.

2.1.1 **Delineation of planning regions**

According to Chand & Puri (1981) the delineation of planning regions can be grouped under three categories; administration, homogeneity and nodality. For the availability of data and correct political status of a region, an administrative boundary aids convenient implementation of developmental plans. In regional development concept, the localization of development/ growth elements at a selected point at a given space is the solution for regional development and reducing the economic disparities within region and amongst different regions. If the nodal character is ignored than there might be ambiguity in development of e delineated region. Some homogeneity in topography, economic and socio-cultural structure is also required for a region to implement the development plans.

The definition of a planning region stressing upon the characteristics of administrative convenience, homogeneity and nodality is given by P.D. Malgavkar and B.M. Ghira. It has defined planning region emphasizing the following factors –

- 1. Geography: It should be a contiguous unit which can be sub-divided into plain, hilly track, coastal belt, lake area etc.
- 2. Social and Cultural cohesiveness.
- 3. Separate unit for ease of data collection and analysis.

- 4. It should have an economic existence which can be assessed from statistical records.
- 5. Small enough to ensure local people's participation but big enough to exploit resources and to permit the major part of labour requirements in any employing centre to be met from within the region.
- 6. It should be under one administrative agency.
- 7. Homogenous economic structure i.e. variation in local proportions of employment and output in agriculture, industry and services should be within a narrow range.
- 8. Topographical homogeneity which ensures absence of seasonal or permanent breaks in road links.
- 9. It should have one or more growth points.
- 10. Common appreciation of local problems and common aspirations and approaches to their solutions.

2.1.2 Classification of planning regions

In India, various studies have been done in India to classify the country into different regions.

a. Physiographic Regions

The classifications of the regions are based on the homogenous formal features such as physiography, structure and climate. Gazetteer of India, Vol I (1909) has divided India into seven major physiographic divisions based on the similarities in topographic features. The various regions are –

- 1. Northern Mountains: included Himalayas and North Eastern mountain ranges.
- 2. Great Plains: Rajasthan, Punjab, Uttar Pradesh, Bihar, west Bengal
- 3. **Central Highlands:** Aravalli Range, Eastern Rajasthan Upland, Madhya Bharat pathar, Bundelkhand Upland
- 4. **Peninsular Plateaus:** Western hills, Eastern Hills, North Deccan, South Deccan and eastern plateaus
- 5. East Coast: Coastal plains of Orissa, Tamilnad plains
- 6. West Coasts: Konkan coast, Kerala coast, Karnataka coast

7. Bordering Seas and islands: Andaman and Nicober islands, Lakshadweep islands

The physiographic regions though gave the knowledge about basic geography of the country; it did not serve the purpose of economic planning which involved different physical and socio-economic conditions of the masses.

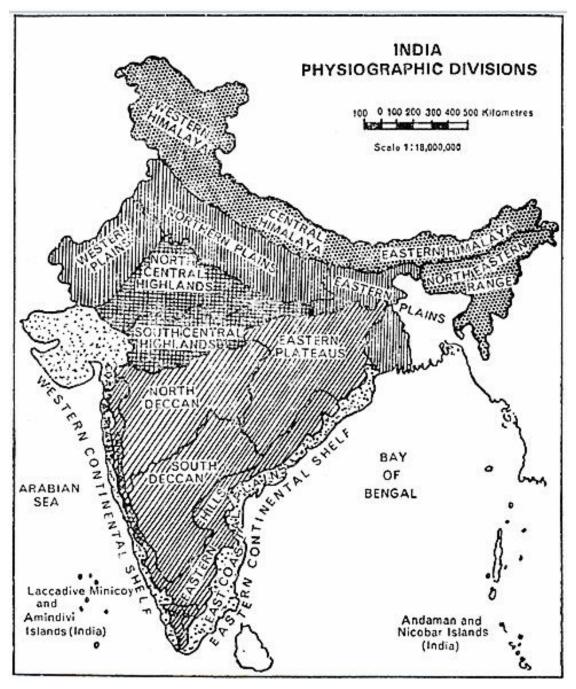


Figure 2: Physiographic Regions in India

Source: Chand & Puri (1992), Regional Planning in India, Chapter I, pp 17

b. Economic Regions

Economic planning is a well-accepted method of economic development. The per capita income of India is extremely poor due to under-development of the Indian economy. Moreover, some poor states of India like Assam, Orissa etc. face acute problems of economic deficiencies.

To cure all these, under the Planning Commission of India in 1964, Viswambar Nath prepared a scheme of Resource Development Regions so that allocations and planning programmes could be directed and maximum development of resources could be arranged.

The Resource Development Regions are based on the conditions of homogeneity under the following criteria –

- Physical feature: topography, climate, geology and soil characteristics
- Agricultural land use and cropping pattern
- State as a homogeneous unit of planning

Nath divided India into 15 Resource Development Regions viz. Western Himalayan region, Eastern Himalayan Region, Lower Gangetic Plain Region, Middle Gangetic Plain Region, Upper Gangetic Plain Region, Trans- Gangetic Plain Region, Eastern Plateaus and Hill Region, Central Plateaus and Hill Region, Western Plateaus and Hill Region, Southern Plateaus and Hill Region, East Coast Plain and Hill Region, Western Dry Region and The Islands.

For administrative convenience Nath further remarked that districts have not been divided and the entire are of the district forms a part of one or the other resource development division.

c. Functional Regions

The functional regionalization concept is based on the observed trade and flow of commodities in different trade blocks of the country. Strong trade relationship and transportation linkages play a vital role in a region's development.

A study carried by S.R.Hashim on Inland (Rail and Riverborne) Trade Accounts in 1959-1960 for assessing the trade flow of 61 commodities between 36 trade blocks in India suggested the following regions –

- Assam, Manipur, Tripura, and Nagaland
- West Bengal, Bihar, Orissa, and Calcutta
- Uttar Pradesh
- Punjab, Haryana, Himachal Pradesh, Delhi, Rajasthan and Jammu and Kashmir
- Gujarat, Maharastra and Bombay
- Goa, Mysore, Kerala, Tamilnadu and Andhra Pradesh

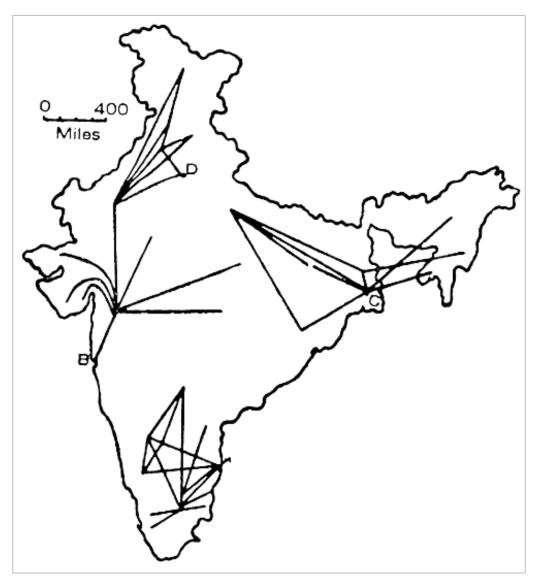


Figure 3: Functional Regions in India based on quantity of trade flow

Source: Chand & Puri (1992), Regional Planning in India, Chapter I, pp 26

Inferences

However or whatever the category it belonged to, States has been favoured as macro administrative unit for the purposes of implementation of policies and programmes. India is divided as per the linguistic characteristics of people into states which sometimes do not correspond with the economic regions of the country.

In a region, planning imperatives are regarded as necessary condition for economic development. Developing countries which require investment decisions of its scarce resources in an optimal manner, regional planning is a potent instrument in attaining that purpose.

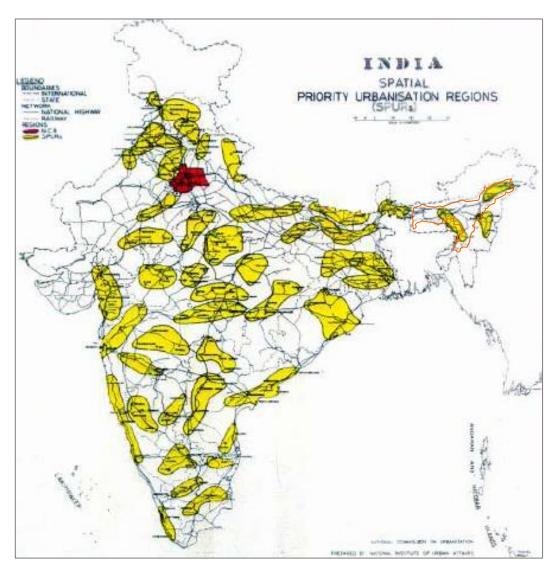
2.2 Spatial Priority Urban Regions (SPUR) in India

In 1981 urban population in India showed 46.1% increase in decadal growth. Almost 25% of the total population lived in urban areas. All the million plus cities experienced heavy population migration and continued to concentrate in large cities and urban agglomerations. The pattern of urbanization was polarized by these urban centres and spatial variations in urbanization could be observed at across the states and cities which was affecting at the macro level development of backward regions.

This necessitated setting up of a committee to look at the urbanization scenario in India and make strategies for achieving harmony in urban development across the country.

Under the chairmanship of Charles Correa, the National Commission on Urbanization (NCU) came out with a visionary report in August 1988. It alarmed the nation with the glaring disparities in the urban scene of India. With an approach to future urbanization in India the commission identified 329 urban centres all over the country as **Generators of Economic Momentum (GEMs)** where development activities should converge.

The Commission also identified 49 **Spatial Priority Urban Regions** (**SPUR**s) based on observed trends of growth and Commission's assessment of growth potential, integration with national transport network, optimizing investments and opportunities already in a particular region. Such an attempt of regional planning pan India was the first of its kind and evolved from the idea of expanding planned urban regions (Draft URDPFI Guidelines, 2014).



Map 1: Identified SPURs in India by NCU, 1988

2.2.1 SPURs in regional development

As argued by Mehta & Mehta (1989) regional differences in nature of economic activity suggests the need for different urban patterns. An agriculture based region has different needs compared to industrialized region. The agriculturally rich region requires well-dispersed service centres whereas an agriculturally poor region with some industrialization possibilities may need strengthening of selected middle order centres for industrial development.

They also pointed out that desirable urban pattern will be subjected to the possible regional variations in planning regions. Unless these variations are recognized and incorporated in the planning process, the top down planning process will fail to integrate economic and spatial planning. The figure below shows the 49 identified SPURs in the country.

These SPURs contained networks of several metropolitan cities and small and medium towns notified as urban centres with concentrated growth of economic activities which in turn supposed to accelerate the development impulses in the region.

2.2.2 Recommendations of NCU

The task force report on Urbanization in 1983 stated that regional urban systems can be identified according to their economic, climatic, geographical and transportation characteristics. Planning for urban development can be done on the basis of such regions and according to the relative need and function of each town in its regional context.

The SPURs were distinguished economic regions which shared most of the state economy. For obvious reasons they vary in size and in many cases cut across the state boundaries. The commission preached for a policy and programme for the development of those SPURs.

NCU however did not give clear cut policy directions for development of Spatial Priority Urban Regions. The extensive studies related to the identification of GEMs and SPURs was supported by generalized strategy statements of removing bottlenecks and improvement of services. As argued by Mehta & Mehta (1989) the commission failed to highlight the coordination between the services supporting economic activities and social population supporting services. Exact spatial manifestation was also absent in the recommendations.

2.3 SPURs and development in Assam

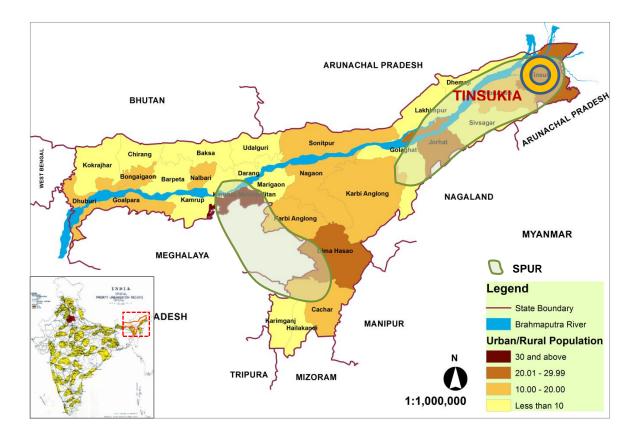
Assam is the second largest state in north eastern region. Being the central part it tends the communication and transportation of goods and services to other states of the

region. In spite of that the level of urbanization in the state is low. Assam is the third lowest urbanized state in India. According to the present census nearly 14% of people live in urban an area which is far lower than the national average of 31.16%.

The decentralized planning introduced in Assam is confined to sub-divisional level instead of district level as introduced in other states of our country.

The present distribution of urban population shown in the following map shows that the districts which were marked by NCU has somewhat higher level of urbanization than the remaining districts. The highest percentage of urban population lives in Kamrup Metropolitan (82.9%) as the state capital Dispur is located and many other regional and state facilities are placed there.

The other districts Dima Hasao, Jorhat and Tinsukia have shown fairly equal growth pattern in the next category of urbanization. Dibrugarh district has a little lower than Tinsukia with 18.4%.





The rate of urbanization fell down for the district of Dibrugarh as Tinsukia district bifurcated from it in 1989. Dibrugarh town has been identified as one of the GEMs in 1988.

As we can see from the figure below, urban population of newly formed Tinsukia District was initially less than its parent district. During last two decades (1991-2011) Tinsukia experienced a rapid growth.

District	Year	1991	2001	2011
Dibrugarh	Total	1038090	1185072	1326335
Distagan	Rural	865452	956634	1082605
	Urban	172638	228438	243730
	No of towns	6	9	9
Tinsukia	Total	926015	1150065	1316948
Thound	Rural	803624	926105	1063186
	Urban	158674	223957	264743
	No of towns	6	10	10

Table 1: Comparison of two	proposed SPUR districts of Assam
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Source: Censes of India 1991, 2001, 2011

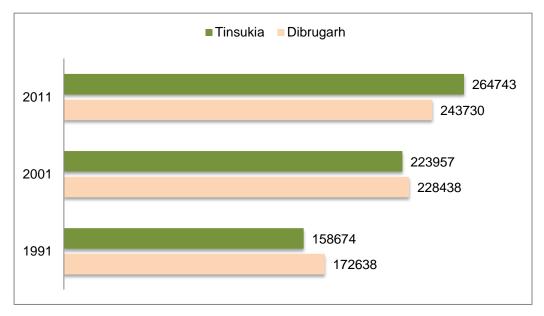


Figure 4: Urban Population growth in Tinsukia and Dibrugarh District (1991-2011)

In addition to that the no. of towns has also increased in Tinsukia. It shows that the existing towns and cities have accumulated the increased percentage of population and polarized the growth. It tends to concentrate the investment made under various

regional development schemes within it. Thereby shifting focus from less developed parts of the region (viz. rural areas) and consequently creating a resource disparity.

The phenomenon is greatly visible in the case of Kakopathar Block which although falls in SPUR designated region and is within 50 km radius from major towns, centre being the block headquarter Kakopathar. It can be seen in greater detail how regional investments in only GEMs, towns have triggered lopsided development thereby totally failing the objective of SPUR.

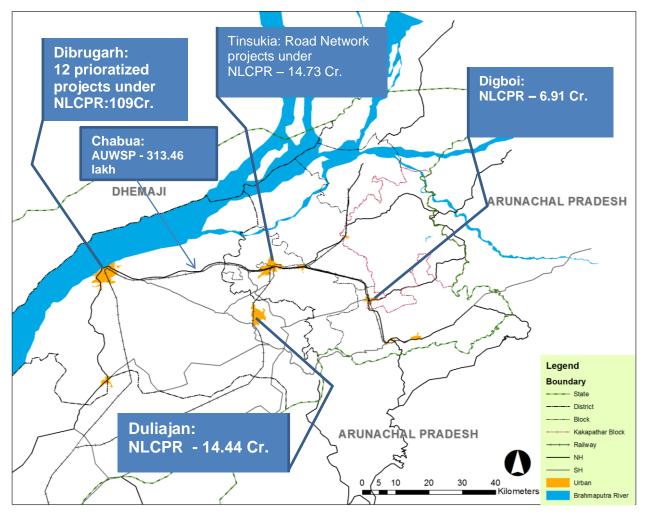


Figure 5: Costs of prioritized projects under Non Lapsable Central Pool of Resources (NLCPR) for the financial year 2013-14

The above figure represents the resources put under the Non Lapsable Central Pool of Resources (NLCPR). We can see huge amounts of investments for creating assets and services going to the existing urban centres of the region. Under the sub part of JnNURM small and medium towns have been covered by UIDSSMT. In a span of 50

years since its establishment Kakopathar block has not produced any urban growth centres within the block thereby missing the opportunity of development.

2.4 Block as a planning unit in regional planning

A block is a rural area earmarked for administration and development in India. Blocks are normally notified Planning & Development units within a district. It generally covers several gram panchayats and local administrative unit at the village level. These areas were under marked as a group of villages during Community Development Programmes (CDP) and National Extension Services in 1952-53.

Community Development Blocks were treated as normal administrative units. They had regular budgetary allocations. To implement the CDP, an extension organization, was established headed by a Block Development Officer (BDO) at each block or the revenue tehsil, with a team of subject specialists and village level workers (VLW). The BDOs reported to the District Collector, who is the administrator of the district. The Development Commissioner, at the state level was responsible for coordinating community development through the District Collectors.

2.4.1 Planning and development of blocks in India

In a span of five years (1952-57) there were 1114 Community Development Blocks established all over the country and around 163,000 villages came under the blanket of Community Development Programmes by sixties.

The Community Development Programme was designed to transform the economic and social life of the Indian villages. Though it was built up with an institutional framework with a multidisciplinary approach and facilitated the implementation of concrete development projects but it did not bring the desired result. Its impact on agriculture was improvement was meager and co-ordination of activities of different government departments at block level proved to be the biggest problem (Sundaram, 1992). It led to only piecemeal and fragmented development in some areas.

The adoption of a multi-level planning framework has led to the evolution of the community development block as a spatial unit of planning and the need for planning at

this level has been accepted widely in plan policy (Bagchee S. & Bagchee A., 1980). Though both the Fourth and Fifth Five Year Plans were directed towards decentralization taking district and block as the micro-levels of planning to speed up the work of planned rural development, no adequate steps were taken to materialize the idea (Jana, 2004).

The concept of "Integrated rural development and block level planning" emerged in the Sixth Five Year Plan (1978-83). This programme aims at integrated rural development at the block level to secure fuller utilization of local resources, both physical and human, to provide full employment opportunities in the area (Sundaram, 1992).

2.4.2 Guidelines for Block Planning in India, 1979

With reference to the report submitted by Prof. M.L. Dantwala, the Planning Commission of India published Guidelines for Block planning in 1979 and issued it to all states. By that time there were more than 5000 blocks in the country and it was thought that eventually it would be necessary to make block plans for each block to have an integrated growth.

It proposed the integration of block plans with the district plan and stated that creating a machinery system at block planning units would enhance the capacity of for better implementation of plans. The rationale for taking Community Development Block as a micro planning unit is that the block being an administrative unit with a compact and nearly homogeneous area, it is possible to devise a suitable developmental strategy specifically suited to the requirements of the area as well as to the needs of the people.

A peripatetic planning team constituted at the district level will monitor the block level functions. The basic for block staffs consisted planning team of an economist/statistician, an industries officer and a credit planning officer. It was supposed to be initiated in 2,000 blocks in the country under the Integrated Rural Development Programme (IRDP) as an experimental basis. It also proposed to take additional blocks under this programme in a phased manner.

Certain essential steps in micro planning process were encouraged in the Guidelines. A concrete methodology which include undertaking a baseline survey, assessing the

financial resources, setting up planning machinery and establishing co-coordinative mechanisms at top down levels.

2.4.3 Contents of a block plan

The major components of the block the block level plan have been specified as -

- a. Programmes aiming at optimizing the production potential of the area in the various sectors e.g. agriculture, animal husbandry, forests, village and smallscale industries, etc.
- b. Special production programmes for the target groups in the area in light of the resource potential
- c. Manpower planning and skill development in relation to the production programmes
- d. A programme for the provision of basic minimum needs, and
- e. Programme for institutional support

It was suggested that while preparing the individual sectoral plans and the final integrated plan, the major objective of augmenting employment for increased incomes for weaker sections must be kept in mind.

2.4.4 Functions of a Block Planner

A block planner needed to perform the following tasks -

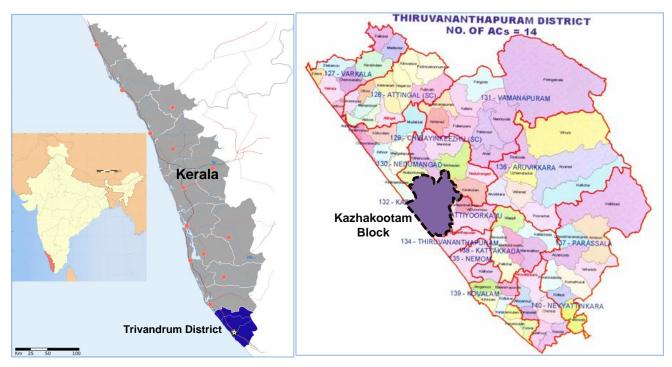
- To conduct base line surveys regarding physical and biological resources, infrastructure & institutions; and no of beneficiaries in the block
- To identify the divisible schemes in context of the block from the district plans
- To estimate the financial resources for the plan
- To establish necessary linkages with various departments, agencies and institutions and make mutually compatible and supportive schemes.
- To make efforts in augmenting employments for unsatisfied job demand

2.4.5 Case study of Block Planning in Kerala

The case study was a follow through regarding the implementation of IRDP for a period of nine months in Kazhakootam Block, in the district of Kerala in 1979-80.

a. Kazhakootam Block, Trivandrum, Kerala

Kazhakootam block, located in Trivandrum (Thiruvananthapuram) District covers 133.65sq.km. comprising of seven panchayats. The population in 1971 was 152781 with a density of 1143 persons per sq.km.



Map 3: Location map for Thiruvananthapuram (Trivandrum) District and Kazhakootam Block, Kerala

The workforce composition of the block consisted of all sectors viz. Primary 38%, Secondary 26%, tertiary sector 36%. Therefore, agriculture was not so dominant in the block.

During nine month period a total number of 615 beneficiaries were identified by IRDP. On fifth of the beneficiaries belonged to Scheduled Caste families. 562 family plans were formulated to focusing at increased income of farm families.

b. Outcomes and difficulties in implementation of IRDP at blocks

The identification process of beneficiary was found in haphazard manner. Lack of systematic procedure resulted into formulation of only standardized Family Plans which could not able to generate equal distribution of benefits. Integration with other diverse economy such as fishing, coir, spinning, weaving, and handlooms were neglected. Extension and support to the needy groups were also limited.

The following table gives the variation in income and employment of different family types in Kazhakootam block. It shows that agriculture based families had the least share of annual income and employment.

Family Type	Employment (Mandays)	Annual income (Rs)
Small nuclear family (agricultural)	100	1550
Large complex family with subsidiary occupations	175	2000 - 3000
Handloom Family	250	1800
Family from coir based occupations	300	1800
Fisher folk	-	-

Table 2: Variation in income and	employment of different family types
----------------------------------	--------------------------------------

Source: Sundaram (1997), Decentralized Multilevel Planning: Principles and Practice

It was also found a great difficulty while attempting co-ordination among different departments and agencies. Voluntary agencies had not drawn into exercise in developmental activities. Absence of adequate machinery and organization for preforming tasks worsened the performance of the programme.

2.4.6 Inferences

The guidelines brought up numerous genuine issues. The panel was quiet about some critical administrative capacities like land reforms and public distribution systems. The association of Panchayati Raj Institutions was also additionally a genuine issue in the proposed structure.

The Guidelines failed to make any impression in the integrated approach adopted by the government. Only handful of states experimented with block planning but did not get the desired output. Whereas target group oriented schemes were successful, large scale mobilization was hindered.

2.5 Advantages of block level planning

Though the former practices in block planning were not very productive there are few advantages of planning at development blocks.

- 1. **Small in size**: The block is sufficiently small in terms of area and population to facilitate understanding between the planners and those responsible for the implementation of the plan on the one hand, and the people on the other.
- 2. **Heterogeneity:** Blocks have physiographic, socio-economic and cultural diversities and can attend to the special problems of the concerned areas.
- 3. Economic Viability: Blocks are more viable and the spatial problems can best be dealt with by the block administration due to their accessibility in the concerned matters.
- 4. Likewise, blocks also provide the area base where various sectoral plans and schemes sponsored by central and state governments can be well integrated.
- 5. Duplication and redundancy, which are the characteristics of all sectoral plans implemented in isolation, can be eliminated in the block level planning
- It can, therefore, be observed that block level planning becomes significant in the light of the fact that the very objective of decentralized planning is to evoke a sense of response among the lower functionaries of government as well as the people.

2.6 Present status of block in Integrated District Planning

In 1969, Planning Commission issued Guidelines for the plan of District Plans taking District as an arranging unit underneath the national and state level. It was the time when region advancement projects were presented and the Commission inferred that the zone improvement approach couldn't be attempted at the state level, given the broadly differing physical, geographic, and investment aspects of generally states. District was viewed as perfect for zone level arranging as a database existed for that level and likewise on the grounds that it had suitable regulatory structure to attempt the arranging.

Integrated District Planning methodology is directed to make Integrated Plan in an area considering natural, human and budgetary resource, and coating it with the sectoral

exercises and plans doled out to the locale level and beneath. The crucial setup in district thus bears the guarantee that every panchayat at any level or Municipality is dealt with as an 'planning unit' and the region is developed through merging and combination of these units, considering the advancement of the area overall. A vision document is for 10 to 15 years is to be prepared by the district and for each local government based on a participatory assessment. The District Planning Committee holds formal interactions with the local governments and other key stakeholders on this and then finalizes the plan.

The report is meant to recognize the key explanations behind backwardness/ advancement and locational issues that blocking improvement of the district.

2.6.1 Block visioning and Plan for gram panchayat/ municipality

A vision report for each block will be made under block visioning. They need not to be totally distinctive in light of the similar agro-climatic states. Despite the fact that the same vision is received for each blocks, it is important to have the plans and proposals claimed by the Intermediate Panchayat to be organized. This activity will be carried out by a group of specialists at the block level.

The plans at the GP of ULB will be ready with the assistance of individuals' support. Once the Gram Panchayat vision is endorsed, the Samiti will direct a few discussions to figure out the possibilities, needs and demands of the people in Gram Sabha. The felt needs of those who need backing for enhancing their economic conditions will be evoked.

2.6.2 Inferences

The visioning process in integrated district planning is thus framed to take practical suggestions from the grassroots level and combining it to the integrated vision of the region (district).

2.7 The Constitutional Amendment Acts, 1992

Prior to the recommendations made by Balwant Rai Mehta Committee, Constitutional Acts were amendment to provide legal framework and mandatory functions and responsibilities to the institutions at three levels for performing developmental activities.

The act envisages a new system of governance rooted in the panchayati raj system for the transformation of the rural India. Two different acts came into operation for governing rural and urban areas. The Acts made it mandatory for the State governments to introduce three- tier hierarchies of panchayats and municipal bodies for effective administration in rural and urban areas.

The governance system is shown as below

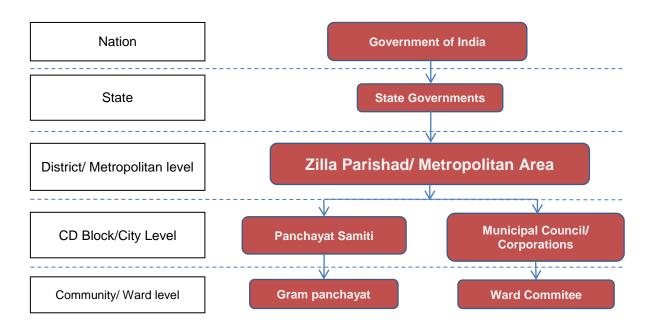


Figure 6: Frameworks for rural and urban governance

2.7.1 73rd Constitutional Amendment Act

The main objective of the act is of decentralization of planning and governance in rural areas. The provisions of the act was different levels of planning starting from grassroots level –

- a. Village level Gram Panchayat
- b. Block level Block Samiti / Panchayat Samiti
- c. District level Zila Panchayat

Direct elections for seats take place. All the seats in a Panchayat shall be filled by persons chosen by direct election from territorial constituencies in the Panchayat area. Seats are reserved for women (33%) and SC/STs.

Powers, authority and responsibilities of Panchayats:

a. Gram Panchayat

 Preparation of plan for economic development and social Justice; Implementation of schemes for economic development and social justice in relation to subjects given in Eleventh Schedule of constitution; and to levy, collect and appropriate taxes, duties, tolls and fees.

b. Panchayat Samiti

 Integrated rural development, agriculture, social forestry, animal husbandry and fisheries, health and sanitation, adult education, communication and public works, family planning and sports and rural employment programmes; Provision of emergency relief in cases of distress caused by fires, floods, drought, earthquake, scarcity, locust, swarms, epidemics and other natural calamities; Arrangement in connection with local pilgrimage and festivals; Management of public markets, public melas and exhibitions; and any other function with the approval of the state government or Zila Parishad.

c. Zila Parishad

 Control, co-ordinate and guide, the panchayat samiti and gram panchayat within the district; Co-ordinate and consolidate the panchayat samiti plans; Co-ordinate the demands for grants for special purpose received from the panchayat samiti and forward them to the State government; Secure the execution of the plans, projects schemes, or other works common to panchayat samitis in the district; and advise the state government in the developmental activities, social forestry, family welfare, welfare of the disabled, women, youth and children and sports.

2.7.2 74th Constitutional Amendment Act

The main objective of the act is to decentralize planning and governance in urban areas and to encourage integrated development of district

The act provides for creation of Constitution of urban local bodies at:

- a. Transitional area Nagar Panchayat
- b. Small urban area Municipal Council
- c. Large urban area Municipal Corporation

Direct elections for seats take place. Seats are reserved for women (33%) and SC/STs.

Powers and responsibilities of urban local bodies:

- Preparation and implementation of plans for economic and social development w.r.t. Urban planning, regulation of land use, Services and poverty alleviation.
- Constitution of finance commission, District planning committee, metropolitan Planning committee.

2.8 Inferences from literature study

The conclusions made from the study are as follows

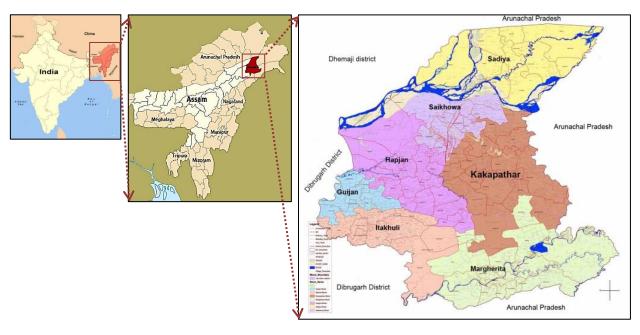
- Regional planning in India started with First Five Year Plan (1952-57). Community Development Programme, initiated in 1952 was first of its kind which executed planning and development of micro regions such as block after independence.
- Districts chosen under Spatial Priority Urban Regions (SPUR), identified by National Commission on Urbanization shows high development. However, owing to absence of clear guidelines and want of further detailing of plans, rural-urban divides are eminent within blocks.
- Planning Commission introduced block level planning through its guidelines in 1979 for making block plans of over five thousand community development blocks. Block is a compact area hence thought comprehendible to planners for preparing micro economic policies and plans for the region. Due to the shortcomings in institutional arrangements and co-ordination the attempt however did not succeed.
- Blocks have now a unique place in the framework of decentralized planning process. They lie in a crucial position between the first and the third tier, as a functional link between the Village Panchayats and the Districts Panchayats. They integrate the village plans on the one hand and enable the panchayats to get it approved by the district on the other.
- Mix-up of duties and responsibilities between administrative and executive bodies have been resolved with the 73rd and 74th Constitutional Amendments Acts in 1992.

CHAPTER III – OVERVIEW OF THE STUDY AREA

3.1 Delineation of Study Area

When one comes to defining regions for planning purposes, administrative convenience assumes paramount importance. Sometimes part of a district is called a region. However in the enthusiasm of administrative considerations one must not forget the importance of the factors of homogeneity and nodality (Chand & Puri ,1983).

The study area selected for the study is Kakopathar Development Block. It is one of the 7 development blocks in Tinsukia District. It has an area of 832sq.km which is approx. 22% of the total geographical area of the district. The population of the block according to Census 2011 is 212257 with a density of 322 persons per sq km.



Map 4: Location of Tinsukia District

The following criteria have been kept on mind while selecting the area-

- 1. Administration: It is the largest block in the district.
- Accessibility: The area has a good connectivity with three side surrounded by allweather National Highways (NH 52A & 52B). No breakage of transportation routes.
- 3. Topography: The area is relatively plain. No hilly terrain lies within the area.

- 4. Social Composition: The area has a heterogeneous and well mixed social composition of SC/ST, Tea tribes and OBC people
- 5. Urban character: Unaccounted urban development abutting major transportation routes affecting development and planning.

The following table describes a general description about the study are in comparison of the district of Tinsukia.

SI No.	Classification	ClassificationTinsukiaKakopatharDistrictBlock				
1	Total Geographical Area (sq.km)	3790	832	22		
2	Total Population (Census 2011)	1316948	212257	16		
3	Density (Persons/sq.km)	349	273	-		
4	Villages (No.s)	1146	245	21.4		
5	Gaon Panchayat	88	15	17.04		
6	Towns	5	1*	-		
7	Urban Local Bodies	5	1	20		
8	Police Station	11	4	36.7		
9	Fire Service Station	3	-	-		

 Table 3: Basic overview of District and the study area

(* - Kakopathar town has not been classified as a census town. But there is a functional town committee for development of the town.)

There are 5 municipal bodies in the district and 1 Zilla Parishad to administer 88 Gaon (village) Panchayats.

3.2 Regional Setting

Kakopathar Block is situated in Tinsukia District. The district of Tinsukia is situated at the north-east corner of Assam. It is one of the 23 districts of the state of Assam and encompasses 3790 sq.km of its total geographical area. The District is bounded - in East-South by Arunachal Pradesh, in the South-west by Dibrugarh District and in North by Dhemaji District which is separated from Tinsukia district by River Brahmaputra. The district has 3 subdivisions viz, Tinsukia, Margherita and Sadiya. The district was itself once a sub division of undivided Dibrugarh District. The District of Dibrugarh was created through its bifurcation from Lakhimpur District on October 2, 1971. Following the formation of the district of Dibrugarh, a new sub-division–Tinsukia was created in the district in 1973. In 1989, the Tinsukia sub-division of Dibrugarh district was separated to form a new district called Tinsukia.

Kakopathar block shares its boundary with; North: Sadiya and Saikhowa block, East: Arunachal Pradesh, South: Margherita Block and West: Hapjan Block. **15 Gaon Panchayats and over 249 villages fall under the selected study area.**

3.2.1 Location

The district extends between $95^{\circ}22'$ to $95^{\circ}38'E$ to $27^{\circ}23'$ to $27^{\circ}28'N$. The elevation of the area is 148.70m above msl.

3.2.2 Topography and agro climatic characteristics

The District is mainly a plain area. The lower hilly mountain range of Arunachal Pradesh has bounded the region from three sides. The climatic condition of the district is warm in summer and cool in winter. The average maximum temperature of the district is about 36°C and minimum 4.6°C. The area receives an average of 250 cm annual rainfall. The months of September and October constitute the main northeast monsoon season.

Tinsukia district is having favourable agro-climatic conditions for being situated at the Upper Brahmaputra Valley Zone.

Table 4: Particulars of Upper Brahmaputra Valley Zone

Agro-climatic Zone	Districts	Area Km²	Area percent	Population Percent
Upper Brahmaputra Valley Zone	Dibrugarh, Sivasagar, Golaghat, Tinsukia and Jorhat,	16013	20.4	22.21

Source: <u>http://www.rkmp.co.in</u>

3.2.3 Connectivity

The District head quarter Tinsukia can be reached by NH 37, SH-23 and by other connecting roads. The distance from major locations are; Guwahati – 494 km, Nagaon - 253 km, Sivasagar – 173 km, Jorhat – 141 km, Dibrugarh – 47km. Regular bus and private taxi services are available between the locations.

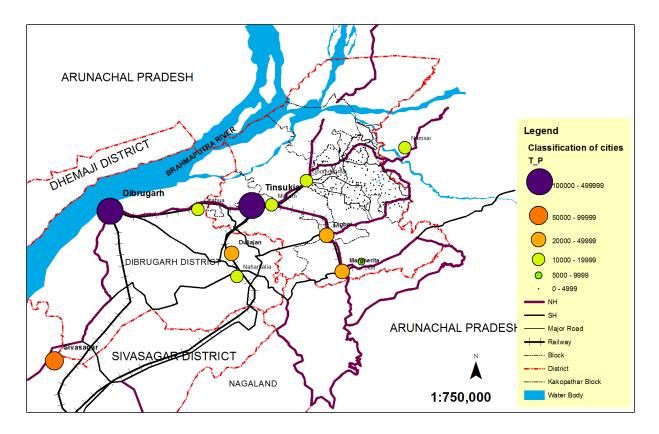
SI No.	Name of Block Headquarter	Distance (km.)	Approach Road
1	Guijan	11	Rangagara Rd
2	Hapjan	9.1	AT Road
3	Itakhuli	5.4	Tinsukia - Duliajan Rd
4	Kakopathar	39	NH – 52 A
5	Margherita	47.9	NH 38
6	Sadiya	57.2	AT Road
7	Saikhowa	45.6	AT Road
0			

Table 5: Distance to block headquarters

Source:

Tinsukia is also well connected by air and railway. The nearest Airport is at Mohanbari, Dibrugarh which is about 40 Km from Tinsukia with daily flights for New Delhi, Guwahati and Kolkata.

The Lumding–Dibrugarh broad-gauge railway line connects Tinsukia to other surrounding places. A meter gauge line also runs from Tinsukia to Sadiya and Lido.





3.3 Kakopathar Block Profile

This chapter consists of basic profile of Kakopathar Block related to demographic, social, cultural, economic conditions and access to services. The block Kakopathar was established in 1964. The name originates from a paddy field named 'Kako'.

3.3.1 **Demographic features**

Kakopathar has the second highest population in the district. The population in Kakopathar block has increased at a very high growth during 1991-2001 in comparison to other blocks with similar population like Hapjan and Margherita.

a. **Population growth**

According to the survey done under the District Co-ordinator for MnREGA, the population fell down nearly 5% in 2009. The population of Kakopathar Block in 2009 was 56063 which has further come down to 212257 (decreased by 43,000 persons) in 2011.

Name of Block		Year						
Name of Block	Area (Sq. km)	1991	2001	2009*	2011			
Sadiya	781	92012	111605	111605	121555			
Saikhowa	442	95113	120195	120195	147320			
Hapjan	516	186018	161691	161691	208073			
Kakopathar	832	183961	268261	256063	226927			
Guijan	209	87256	113358	104660	114683			
Itakhuli	387	100459	142261	206076	207677			
Margherita	623	181286	232691	232691	305383			
Total	3790	926105	1150062	1192981	1316948			

Table 6: Growth of population in Tinsukia District (1991-2011)

Source: Census of India (* - Perspective Plan for MnNREGA, Tinsukia District, 2009) (figures in persons)

Large extremist movements and moist activities have threatened social security and brought agitations in daily lives of people in the area. Recent Kakopathar Massacre (10 peoples were killed by army soldiers) which is the result of growing conflicts between local people and peace keepers is also

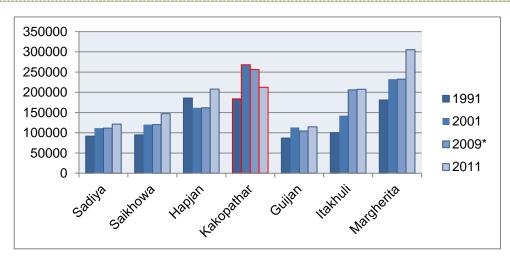


Figure 7: Population growth in Kakopathar and other constituent blocks

- Considerable drop in population (15.4%) is the result of political instability owing to border disputes, maoist insurgencies resulting in lack of social security in the region that has triggered outmigrations.
- State government has given Tinsukia District a special status for tackling such problems.

b. Social composition

The block has a high mixture of Scheduled caste and Scheduled tribe population. The SC/ST together shares 48% of the total population for the selected area. **Majority of people follows Hinduism.**

Block	Population		Percentage		Ρορι	Population		Religion			
Bioon	SC	ST	SC	ST	O.B.C.	General	Hindu	Muslim	Sikh	Others	
Sadiya	4427	41112	4.8	44.6	37580	8893	99%	0%	0%	1%	
Margherita	53654	67414	20.4	25.7	59801	81327	73.38%	3.33%	0.51%	22.78%	
Itakhuli	43035	10090	20.6	4.8	16824	110871	91.07%	4.09%	0.21%	4.63%	
Guijan	10818	22435	12.3	25.7	27534	26469	89.74%	1.78%	0.55%	7.93%	
Kakopathar	37852	51003	20.5	27.7	61273	61595	85.71%	5.50%	0.36%	8.43%	
Hapjan	72931	31855	33.0	14.4	61178	54978	89.69%	2.04%	0.25%	8.02%	
Saikhowa	18221	33202	19.1	34.9	22601	21089	88.00%	2.59%	2.78%	6.63%	
Total	240938	257111	16.6	27.3	286791	365222	88.00%	3.00%	1%	8%	

Table 7: Social composition of Tinsukia District, 2009

Source: Perspective plan for MnNREGA, Tinsukia district, 2009

c. Density and Sex Ratio

The average density of Kakopathar is 273 persons per sq.km. Household size of Kakopathar Block is 5.2 which is nearly equal to District average of 5.5.

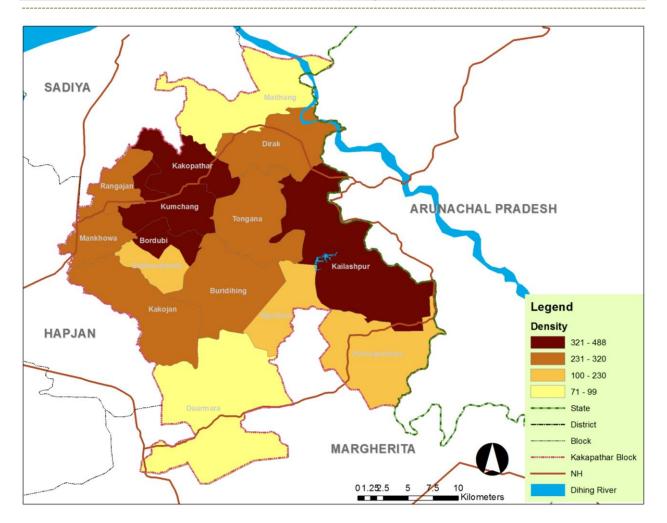
Kakopathar, Kumchang, Bordubi and Kailashpur Panchayats have much higher densities than the others. It can be noted that villages under Bordubi and Kumchang Panchayat is totally dominated by tea garden communities. Similarly Tongona, Buridihing, Kakojan where tea gardening is extensive, also received significant number of population owing to more economic opportunities.

Gram Panchayat	Area (sq.km)	No. of HHs	HH Size	Total Population (No.s)	Density (persons per sq.km)	Males (No.s)	Females (No.s)	Sex ratio
Kakopathar	39.6	3222	5.3	16943	428	8629	8314	963
Maithang	64.1	1252	5.0	6320	99	3173	3147	992
Dirak	51	2701	5.1	13813	271	7003	6810	972
Tongona	48	2859	5.2	14725	307	7503	7222	963
Kumchang	45	3661	5.0	18233	405	9264	8969	968
Rangajan	34.1	1888	5.3	9950	320	5102	4848	950
Gabharubhetti	37.3	1474	5.3	7836	210	4013	3823	953
Bordubi	31.4	2965	5.0	14945	434	7427	7518	1012
Mankhowa	39	2269	4.9	11045	283	6006	5039	839
Buridihing	66	3403	5.2	17683	268	9012	8671	962
Bijuliban	41	1853	5.0	9351	228	4581	4770	1041
Kakojan	57.5	3154	5.0	15701	273	8030	7671	955
Kailashpur	96	8594	5.4	46837	488	23740	23097	973
Duarmara	115	1717	4.8	8214	71	4111	4103	998
Puronipukhuri	67	2906	5.3	15380	230	7662	7718	1007
Kakopathar Block	832	43918	5.2	226976	273	115256	111720	969

Table 8: Household distribution in Kakopathar Block, 2011

Source: Census of India, 2011

The Sex Ratio (969 females per 1000 males) of the block is an impression of minute gender gaps which is a healthy sign but also same time suggests attention towards marginal women headed households.



Map 6: Population density of Kakopathar Block, 2011

The density of population tends to concentrate towards the block headquarter – Kakopathar. As seen from the above figure Bordubi, Kumchang, Kakopathar and Kailashpur are high density areas. The Kailashpur Panchayat shares its boundary with the neighboring district Arunachal Pradesh. Due to the interstate relationships and good connectivity via National Highway 52A, population has increased in the Panchayat. The Dihing River and Doomdooma Reserve Forest has been acting as physical barriers for Maithang and Duarmara resulting low densities.

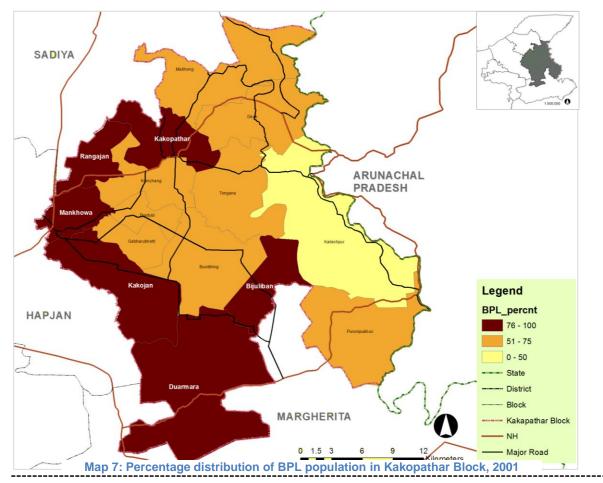
As like any other tribal rural areas, Kakopathar block has yet to be benefitted by rural income opportunities as 75% of the population of Kakopathar block belongs to the *below poverty line*. The highest percentages of BPL population live in Mankhowa and Rangajan Gram Panchayat. Gram Panchayats under extensive tea cultivation has higher BPL densities than the agriculture dependent ones.

Table 9, given in the next page shows BPL densities of the 15 Gram panchayats of the block.

Name of GP	Population	BPL Population	%age of total population
Bijulibon	27241	21178	77.7
Bordubi	12198	8130	66.7
Buridihing	15408	10095	65.5
Dirak	10126	6333	62.5
Duarmora	10910	8234	75.5
Gabhorubheti	22979	13363	58.2
Kakojan	27810	22379	80.5
Kakopathar	16635	14468	87.0
Kailashpur	15884	7241	45.6
Kumsang	12748	6547	51.4
Maithong	10000	6195	62.0
Mankhowa	19729	19347	98.1
Puranipukhuri	25512	18986	74.4
Rongajan	28958	28958	100
Tongona	12123	8539	70.4
Total	268261	202389	75.4

Table 9: BPL densit	y distribution	of Kakopathar	Block, 2001
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Source: Office of BDO, Kakopathar block



- The population density of Kakopathar is 273 persons per sq.km, below district average of 349. Concentration of population observed in and around Block headquarter and Kailashpur Panchayat which has interstate relationship with Arunachal Pradesh. The Dihing River and Doomdooma Reserve Forest are acting as physical barriers for eastern and western part of the block.
- One third of the population in the block is below poverty line. Accessibility is major reason propelling poverty intensification. For example, Panchayats lacking in internal connectivity with major roads found having higher percentages of BPL population. Kailashpur has high density of population but less count in rural poor.
- The Sex Ratio (969 females per 1000 males) of the block stood ahead of District (950 females per 1000 males) displaying minute gender gaps which is a healthy sign but also same time suggests attention towards marginal women headed households.

d. Settlement Pattern

The settlement pattern of the block shows a dispersed pattern. The distribution of settlements shows the most obvious pattern of growth. Settlements are scattered along NH 52, Doomdooma - Phillobari Road and Kailashpur Road. The scattered pattern has left some of the areas in the block underdeveloped. As shown in the figure below settlements dependent upon agriculture is dispersedly distributed to the eastern part of the study area.

Absence of urban growth centre in the block suggests up gradation of service villages in such agriculturally rich areas, as understood in the literature study. Mainly three centres of population are identified by analyzing the spatial distribution of settlements. They are namely Kakopathar (Block headquarter), Bordubi, Phillobari and Madhavpur.

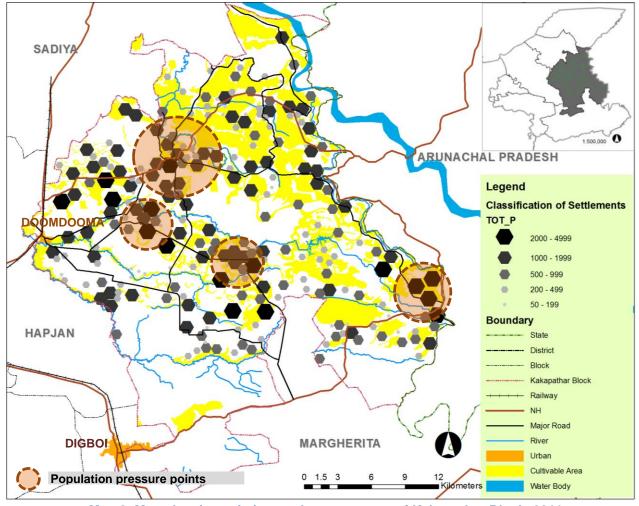
Inferences:

Settlements have uneven distribution over the study area. Major population
pressure points in such as Kakopathar (Block HQ) and Madhavpur (Kailashpur)
have potentials to be developed as growth centres in account of their locational and
density behaviours.

Gram Panchayats/ Classifications	Below 200	200-499	500-999	1000-1999	2000-4999	Total
Kakopathar	4	9	3	6	1	23
Maithong	2	7	3	1	0	13
Dirak	3	9	4	6	0	22
Tangona	0	1	2	6	2	10
Koomsang	2	4	1	9	1	17
Rangajan	1	2	4	3	1	11
Gabharubhetti	1	2	8	3	0	14
Bordubi	1	2	1	3	3	10
Mankhowa	1	0	0	3	2	6
Buridihing	5	1	2	6	2	16
Kakojan	3	9	4	6	0	22
Kailashpur	2	11	10	8	4	35
Bijuliban	0	4	2	1	2	9
Puronipukhuri	5	7	10	2	1	25
Duarmara	1	5	4	2	0	12
Total	31	73	58	65	16	245
Percentages	12.7	29.8	23.7	26.5	7.3	100

Table 10: Settlement pattern of Kakopathar Block

Source: Census of India, 2011



Map 8: Map showing existing settlement pattern of Kakopathar Block, 2011

e. Literacy

Though the district literacy is nearly 70%, Kakopathar Block has low literate population. Female illiteracy is higher in all gram Panchayats. Maithang Panchayat has highest literacy percentage in the block but 61% of the illiterates are female. This indicates that access to educational facilities probably favouring only male students and restricting female students in terms of physical distances.

GP	Literates (No.s)	Literacy rate	Male literacy	Female literacy	Illiterates (No.s)	%age to Total Illiterates	Male Illiterates (%)	Female Illiterates (%)
Kakopathar	12553	74.1	54.0	46.0	4390	4.6	42.1	57.9
Maithang	4898	77.5	53.6	46.4	1422	1.5	38.6	61.4
Dirak	10314	74.7	54.3	45.7	3499	3.7	40.1	59.9
Tongona	8681	59	57.9	42.1	6044	6.3	41	59
Kumchang	8057	44.2	61.0	39.0	10176	10.7	42.7	57.3
Rangajan	4321	43.4	60.2	39.8	5629	5.9	44.4	55.6
Gabharubhetti	5503	70.2	55.8	44.2	2333	2.4	40.5	59.5
Bordubi	5592	37.4	62.0	38.0	9353	9.8	42.3	57.7
Mankhowa	7437	67.3	60.4	39.6	3608	3.8	41.9	58.1
Buridihing	9676	54.7	58.0	42.0	8007	8.4	42.4	57.6
Bijuliban	4257	45.5	57.3	42.7	5094	5.3	42	58
Kakojan	6715	42.8	62.6	37.4	8986	9.4	42.6	57.4
Kailashpur	31828	68.0	55.1	44.9	15009	15.7	41.3	58.7
Duarmara	3028	36.9	61.1	38.9	5186	5.4	43.6	56.4
Puronipukhuri	8598	55.9	56.6	43.4	6782	7.1	41.2	58.8
Kakopathar Block	131458	57.9	57.1	42.9	95518	100	42.1	57.9

Table 11: Block literacy profile of Kakopathar, 2011

Source: Census of India, 2011

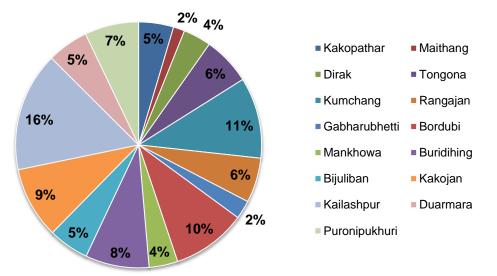
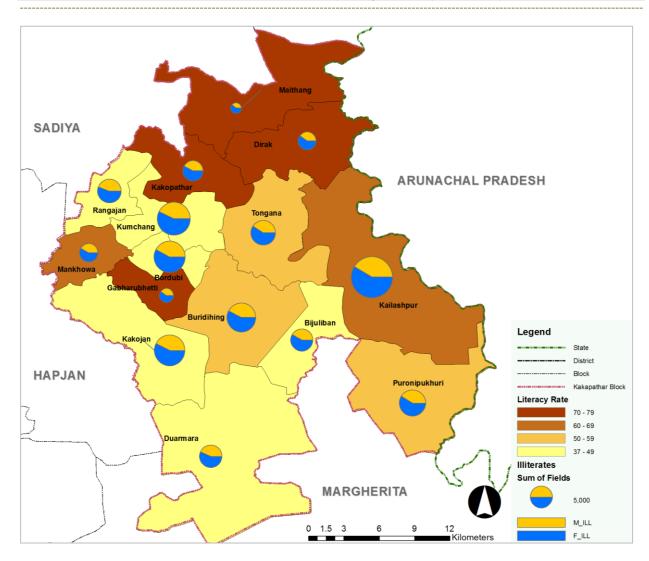


Figure 8: Distribution of Illiterates in Kakopathar Block



Map 9: Illiterates and Literacy in Kakopathar Block, 2011

- Some of the areas having high density population have low literacy rate.
 They are Kumchang, Rangajan, Bordubi and Bijuliban. Female literacy is also significantly low in such panchayats compared to males.
- Though educational institutions present in the block are highest in the district, the performances in literacy of the GPs are not coherent.

3.3.2 Socio-economic profile

This chapter includes the social and economic conditions of people in the block. More than half of the people are cultivators which results abundance workforce of agricultural laborers.

a. Occupational Pattern

The occupational pattern of the district shows that cultivation (51%) is the main source of income. The second prioritized sector is industries (23%) as because some major companies like Oil India Ltd (OIL), ONGCL, Coal India Ltd. etc. have their operations going on in different parts of the district.

The following figure shows the sector wise occupational pattern of the district.

_			Occupation									
SI.	Name of the Block	Govt	Private sector	Own	Business (I	No)		s Others				
No.	БЮСК	Servant	servant	Small	Medium	large	Cultivators					
1	Sadiya	1526	564	1220	350	102	13115	1513				
2	Margherita	2854	8922	5509	1439	121	19159	10931				
3	Itakhuli	1345	9848	2407	481	204	9539	4184				
4	Guijan	975	5206	1337	265	46	6223	4332				
5	Kakapathar	1899	8662	3952	1014	652	24155	7072				
6	Hapjan	1697	12144	1719	404	70	13354	4572				
7	Saikhowa	1241	4194	1553	631	79	11379	1899				
	Total	11537	49540	17697	4584	1274	96924	34503				

Table 12: Block wise occupational pattern of the district

Source: Perspective plan for MnNREGA, Tinsukia district, 2009

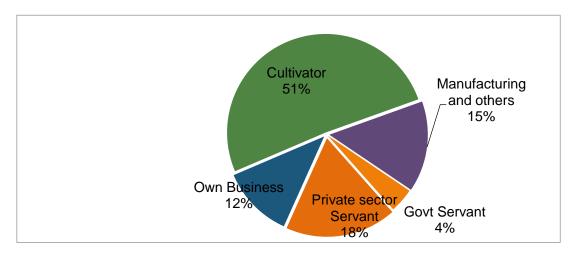


Figure 9: Occupational Pattern of Kakopathar block

It is seen from the above figure that 63 % of total population are engaged in agriculture and allied sectors. The remaining 39% population is employed in tertiary sector. Govt. service holder is more in Margherita block compared to the other blocks. Similarly, farmers are more in Kakopathar compared to the other blocks of the district. Almost 25% of cultivators belong to Kakopathar block.

Inferences:

• High share of cultivators in Kakopathar suggests availability of small land owners. Similarly a low share of cultivators in Itakhuli indicates landlessness and dependence.

b. Workforce distribution

The non-working population of Tinsukia District is 47% higher than the working population of the district. This shows the high dependency of non-working family members upon the earning members in a household.

Kakopathar Block has the second highest percentage (26.2%) of total available workers in the district. High percentage of agricultural laborers (refer table 14) signifies skilled workforce for developmental activities under rural employment and wage programme such as MnREGA.

Blocks	Total Populatio n	Total HHs	Marginal Farmers HHs	%age of Total Marginal farmers	Agricultural Labour HHs	%age of Total Agricultural Iaborers	Education unemployed HHs	Other HHs	Total HHs availab le for work	%age of Total HHs availabl e for work
Guijan	113358	20338	1445	4.8	6857	6.9	1033	12003	9335	6.3
Hapjan	161691	33960	12144	40.0	13354	13.5	1719	7623	27217	18.4
Kakopathar	268261	49541	4119	13.6	25784	26.0	8706	10932	38609	26.2
Itakhuli	134914	28008	4403	14.5	9539	9.6	2407	13612	16349	11.1
Marqherita	232691	49035	5509	18.1	19159	19.3	1439	24928	26107	17.7
Saikhowa	120195	20976	1241	4.1	11379	11.5	1553	7S33	14173	9.6
Sadiya	111605	18390	1513	5.0	13115	13.2	1220	3512	15848	10.7
Total	1142715	220248	30374	100.0	99187	100.0	18077	72610	147638	100.0

Table 13: Worker categories of Tinsukia District (2001)

Source: Office of the BDO, Kakopathar, Tinsukia District

GP Name	Total Populati on (No.s)	Total Working Population (No.s)	WFPR	Male Workers (%)	Female Workers (%)	Main Workers (No.s)	Marginal Workers (No.s)	Non Workers (No.s)
Kakopathar	16943	6137	36.2	70.3	29.7	4864	1273	10806
Maithang	6320	2740	43.4	63.2	36.8	1989	751	3580
Dirak	13813	6990	50.6	57.7	42.3	4457	2533	6823
Tongona	14725	6603	44.8	59.3	40.7	3278	3325	8122
Kumchang	18233	7815	42.9	58.1	41.9	6187	1628	10418
Rangajan	9950	4266	42.9	60.0	40.0	2652	1614	5684
Gabharubhetti	7836	2855	36.4	65.8	34.2	2366	489	4981
Bordubi	14945	7275	48.7	53.2	46.8	5127	2148	7670
Mankhowa	11045	4835	43.8	72.4	27.6	3711	1124	6210
Buridihing	17683	7326	41.4	62.6	37.4	5500	1826	10357
Bijuliban	9351	4248	45.4	56.8	43.2	2938	1310	5103
Kakojan	15701	7267	46.3	56.8	43.2	5652	1615	8434
Kailashpur	46837	21177	45.2	61.4	38.6	12892	8285	25660
Duarmara	8214	3941	48.0	54.3	45.7	3405	536	4273
Puronipukhuri	15380	6462	42.0	60.9	39.1	4084	2378	8918
Total	226976	99937	44.0	60.6	39.4	69102	30835	127039

Table 14: Workforce distribution in Kakopathar Block, 2011

Source: Census of India, 2011

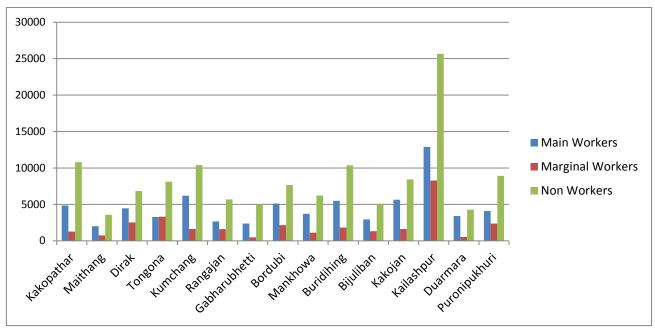


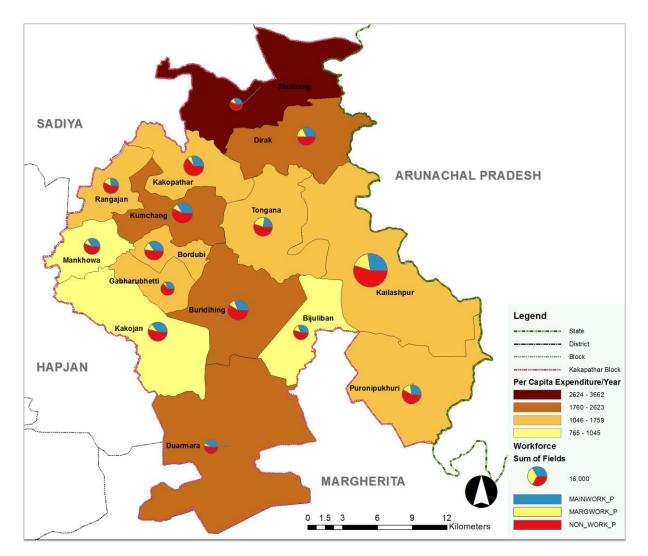
Figure 10: Distribution of worker categories

44 percent of total population is workers in the block. Lowest workforce in Kakopathar and Gabharubhetti Panchayat signifies lack of employment opportunities.

Kailashpur has highest number of nonworking population which indicates dependence.

When analyzed with the implementation of MnREGA, it is observed that some of the panchayats having larger pool of workers could spend least per capita expenditure in the block. Kakojan, Bijuliban, Mankhowa are in this category and the vice versa can be applied to Dirak, Maithang and Buridihing.

The expenditure for semi-skilled and skilled labourers is found highest in Maithang GP (3662/capita/year) for the period between 2008 - 2013.



Map 10: Per capita expenditure in worker categories under MnREGA (2008-2013)

				Year						
Gram Panchayat	Total HH	2008-09	2009-10	2010-2011	2011-2012	2012-2014	Total Expendit ure	Expendit ure per HH	Expendit ure per capita	
	No.s		in lakhs			in lakhs	Rs./HH/yea r	Rs. /capita/ye ar		
Bijuliban	4677	12.31	10.64	13.37	4.79	0.32	41.44	4430	820	
Bordubi	1840	2.64	2.54	17	7.31	0	29.49	8014	1484	
Buridihing	1922	10.29	15.05	20.24	4.08	0	49.66	12919	2392	
Dirak	1677	4.44	22.8	15.65	1.28	3.33	47.5	14162	2623	
Duarmara	1535	3.35	12.4	10.46	3.32	1.91	31.44	10241	1896	
Gabharubhetti	2609	10.16	13.21	14.16	5.65	0.17	43.35	8308	1538	
Kakojan	4941	5.29	20.46	20.94	9.05	0	55.74	5641	1045	
Kakopathar	2356	7.25	14.71	19.97	1.78	1.04	44.75	9497	1759	
Kailashpur	2030	3.35	9.17	19.16	2.27	1.87	35.82	8823	1634	
Koomsang	1982	6.13	15.58	13.54	3.77	1.79	40.81	10295	1907	
Maithang	1450	6.3	21.39	22.56	7.09	0	57.34	19772	3662	
Mankhowa	2665	2.75	10.69	1.5	3.82	3.25	22.01	4129	765	
Puronipukhuri	2774	6.68	16.42	14.35	1.55	0	39	7030	1302	
Rongajan	4191	10.68	15.24	16.44	7.6	4.85	54.81	6539	1211	
Tongana	1960	4.54	11.64	14.34	2.34	0	32.86	8383	1552	
Kakopathar Block	38609	96.16	211.94	233.68	65.70	18.53	626.02	9212	1706	

Table 15: Financial progress under MnREGA in Kakopathar Block (2008-2013)

Source: Office of the BDO, Kakopathar

Inferences:

- Workforce consists of 60:40 male and female workers. Tinsukia district is improving in gender gaps but inequalities still observed in the block in terms of employment and literacy.
- Female workers are higher in Panchayats dominated by tea communities which can be inferred as regular availability of work in tea plucking which needs tender hands like females.
- Per capita investments made in skilled and semi-skilled work under MnREGA shows less expenditure in areas of eminent non-working population.

3.3.3 Land Particulars

The geographical area of the district is 3790 sq.km out of which 345.52sq.km is under forest (9.1%) and 741.8 sq.km is not available for agricultural use (19.6%). Kakopathar block is occupying 832sq.km which is the largest unit and shares 21.4% of total geographical area in the district.

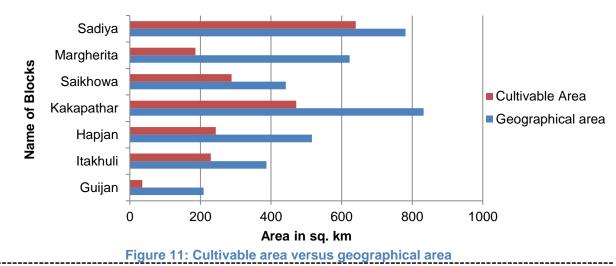
a. Land Utilization

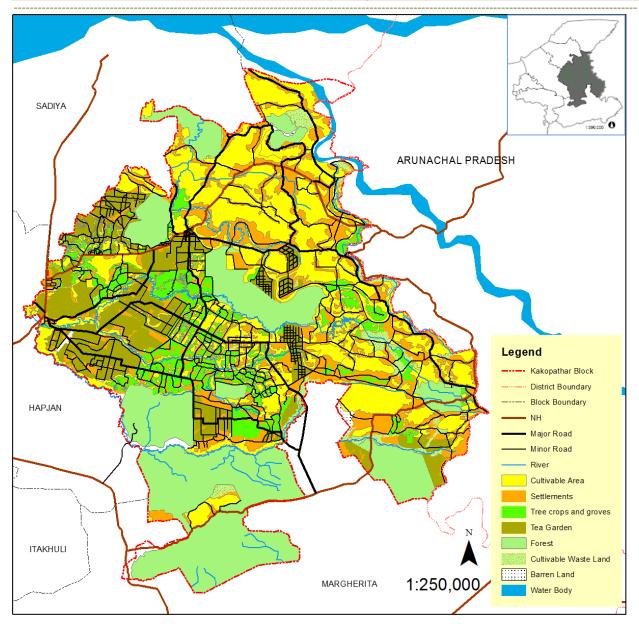
The land utilization pattern of the block shows that 57% of the total land is under cultivation. High gross cropped areas and average cropping intensity indicates pressure on cultivable land thereby raises issues pertaining to land health.

Block	Geographical area	Cultivable Area	Forest Area	Land under non- agriculture use	Cultivable waste	Barren Land	Permanent pasture	Land under miscellaneous tree crops and groves	Current fallow	Other fallow	Net sown area	Gross cropped area	Cropping intensity
	(km²)					(%)					(km²)	(km²)	
Guijan	209	16.8	10.5	22.7	1.7	25.1	4.5	11.8	5.5	1.2	61.3	82.1	134
Itakhuli	387	59.2	4.4	15.1	0.3	4.2	1.0	11.5	3.6	0.6	81.1	105.4	130
Hapjan	516	47.2	16.9	24.1	0.4	7.2	0.5	2.7	0.6	0.5	148	157.3	106
Kakopathar	832	56.6	11.5	18.5	0.3	1.7	0.8	9.4	0.8	0.3	334	722.7	125
Saikhowa	442	65.2	2.5	8.0	0.9	12.9	0.9	7.9	1.4	0.2	116.8	145	124
Margherita	623	29.8	16.4	40.3	0.2	11.1	1.0	0.2	0.9	0.0	232.4	266.1	114.5
Sadiya	781	81.9	1.5	1.4	0.1	11.3	0.4	1.2	2.1	0.1	200	223.3	136
Total Area	3790	2093.4	346.8	681.4	16.4	334.5	35.7	206.5	63.5	11.5	1173.7	1702.2	124.1

Table 16: Block wise land utilization of Tinsukia District

Source: Guha D. "Planning for integrated development of Tinsukia District" 2011, unpublished thesis, IIT Roorkee





Map 11: Land Utilization Map of Kakopathar Block, 2011

Kakopathar block has second highest cultivable areas present in the block. 1715Ha. is found as cultivable waste area (Village directory of Tinsukia District, Census 2011). Kailashpur GP and Maithang GP contain such areas. These areas should immediately brought under cultivation. NCU have also recommended in their report on Urbanization to bring land under development which has little opportunity cost.

The cultivable lands has good capabilities of which 26% are very good cultivable lands (Class I), 34% are good cultivable lands (Class II), 37% moderate cultivable lands (Class III) and 3% fairly good cultivable lands.

	La	and Capa	bility clas	ses	Soil Fertility				
Block	Very Good	Good	Moderately Good	Fairly Good	No. of		PH		
	Class-I	Class-II	Class-III	Class-IV	samples	Acidic	Neutral	Alkaline	
Guijan	1840	3679	307	307	90	72	19	9	
Itakhuli	2433	4867	405	407	85	68	5	12	
Hapjan	116	5150	9269	270	14	5	-	-	
Kakopathar	275	5196	16000	200	10	5	-	-	
Saikhowa	1752	4089	4673	1169	414	393	-	21	
Margherita	-	-	-	-	210	NA	NA	NA	
Sadiya	15600	6150	585	-	0	-	-	-	
Tinsukia district	22016	29131	31239	2353	823	543	24	42	

Table 17: Land suitability classes of Tinsukia District

Source: Comprehensive District Agricultural Plan, Tinsukia, 2008,

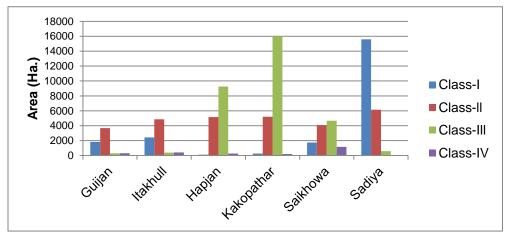


Figure 12: Land capability classifications of Tinsukia district

Class III cultivable lands have problems of erosion, slope, texture, gravels, depth and surface crusting and compaction. Moreover the soil is mainly acidic in nature which effects the plant root growth and decreases production crop choices. Fertilizer utilization is required in such type of soils for production. Due to the acidic nature of the soil there is sufficient production of citrus fruits in the district.

Inferences:

• Assam doesnot have a land utilization policy but as regarding as a rural component of Tinsukia Metropolitan Area, Kakopathar block can be classified under *areas under transformation* Land Utilization Zone².

Department of Architecture and Planning, IIT Roorkee

² Six types of Land Utilization Zones (LUZ) have been proposed by Land Resources Department, Government of India.

- Areas belong to cultivation (56%) have restricted use due to acidic nature which effects the plant root growth and decreases production crop choices. Fertilizer utilization is required in such type of soils for production.
- This coupled with more cultivators in the block paints a grim picture of the fate of cultivable land that is constantly put under strain with repeated cultivation, fertilizer addition and small holding size.

b. Land holding status

Indian government had faced huge difficulties in regulating land reforms in rural areas. Land reform in Assam was also unsuccessful. Marginal land holdings are predominant in Kakopathar block. The persons holding below 1ha. land is 95.5% to those who have the remaining land showing the uneven distribution of land. This adversely affects agriculture because the same patch of land will be subjected to cultivation repeatedly for more yield without any gap for its natural rejuvenation. Also, large-scale investments in agriculture from both government and non-government sources will be negligible because of small holdings and more number of beneficiaries.

SI.	Name of	L	and Holding	size (no. of p	persons)	
No.	the Block	less than 0.5 ha	0.5 - 1 ha	1 - 5 ha	5 - 8 ha	above 8 ha
1	Sadiya	8851	5429	3208	618	284
2	Margherita	35795	9040	3281	688	131
3	Itakhuli	15715	4413	1075	503	97
4	Guijan	12834	4055	1348	136	11
5	Kakopathar	35246	10042	1584	418	116
6	Hapjan	23711	7812	1693	601	143
7	Saikhowa	15538	3495	646	296	149
	Total	147690	44286	12835	3260	931

Table 18: Land holdings in Tinsukia District

Source: Perspective plan for MnNREGA, Tinsukia district, 2009

Inferences:

 Cultivator has access to land as a small landowner and tenant and no-cultivators are landless and unskilled workers. High share of cultivators in Kakopathar suggests availability of small land owners.

3.3.4 Irrigation

Tinsukia district has no major irrigation projects. There are only medium, minor and lift irrigation projects which cover only 2.9 % of total cultivable land of the district. Kakopathar block has yet to exploit its potentialities in irrigation.

Only a small percentage of cultivable are has benefitted through irrigation facilities in Kakopathar block. Canals and rivers are the major sources of irrigation. Present irrigation network covers only three Gram panchayats viz. Kailashpur, Bijuliban and Buridihing. Other areas are mostly rain fed. The gross cropped area of Kakopathar Block (42% of the district total) indicates intensive use of agricultural lands as discussed earlier too but, small irrigation projects such as STW³s and LLP⁴s have limited reach to the small farmers.

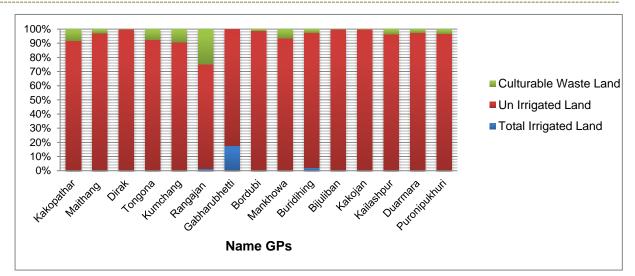
The table below shows the status of irrigation facilities in the block Kakopathar.

GP Name	Total Irrigated Land (Ha.)	Irrigation Canals (Ha.)	Tanks (Ha.)	Un Irrigated Land (Ha.)	% to Total Unirrigated Land	Culturable Waste Land (Ha.)	% to Total Culturable Waste Land
Kakopathar	0	0	0	2188.3	6.1	199.7	11.6
Maithang	0	0	0	1623.9	4.5	50.0	2.9
Dirak	0	0	0	3016.6	8.4	4.7	0.3
Tongana	0	0	0	2272.6	6.4	188.0	11.0
Kumchang	0	0	0	2266.6	6.3	232.7	13.6
Rangajan	24.1	16.0	8.0	1381.8	3.9	465.0	27.1
Gabharubhetti	206.7	206.7	0.0	966.0	2.7	0.0	0.0
Bordubi	0	0	0	2368.9	6.6	30.0	1.7
Mankhowa	0	0	0	875.0	2.4	60.1	3.5
Buridihing	56.3	56.3	0.0	2744.4	7.7	75.3	4.4
Bijuliban	1	1	0	1419.3	4.0	1.4	0.1
Kakojan	0	0	0	3332.0	9.3	7.2	0.4
Kailashpur	0	0	0	6069.0	17.0	235.0	13.7
Duarmara	0	0	0	1937.6	5.4	52.3	3.1
Puronipukhuri	0	0	0	3291.1	9.2	113.5	6.6
Total	288.0	280.0	8.0	35753.1	100	1715.0	100

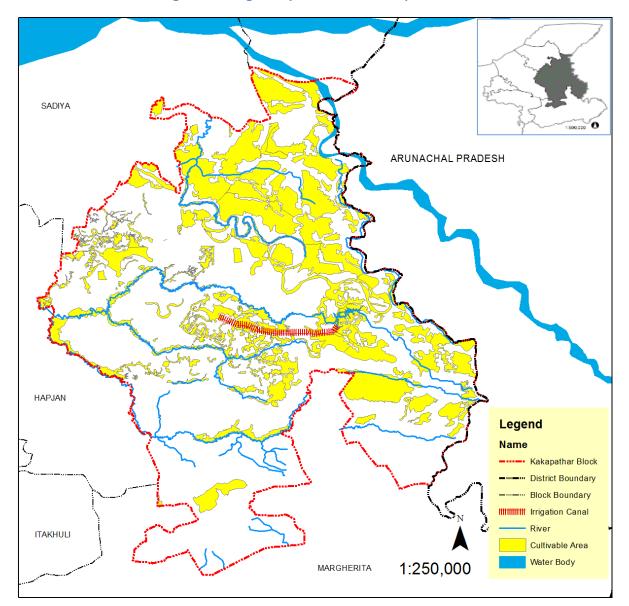
Table 19: Irrigation facilities in Kakopathar Block

Source: Census of India, 2011

⁴ LLP – Low Lift Pumps







Map 12: Irrigation facilities in Kakopathar block

- Irrigation facilities cover only few Gram Panchayats. Its working status is also suspicious as Panchayat like Rangajan, receives one third of the irrigation facilities (only 3 Panchayats have irrigation facilities) but contains most of total culturable waste area (27%) which has not been brought under cultivation.
- The present scenario in the block with highest cultivable land and most cultivators but scarce irrigation projects indicates absence of rural planning. In absence of a unified district plan, such developmental disparities are imminent. Also, as discussed earlier, since the land-holdings are small, the irrigation canals (if provided) will be intercepted in close succession leading to loss of water and disturbed flow of water

3.3.5 Animal Husbandry

By looking at the livestock population of the block it can be inferred that though Kakopathar has benefitted from the modern techniques of breeding and rearing, facilities have been limited to small part of the block.

Table 20:	Livestock	information	of T	insukia	District
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Block	Fodder crop (Ha.)	Grazing land (Ha.)		Cattle (No	s.)	Buffaloes (Nos.)	s Sheep (No.s)	s Goats (Nos.)	Poultry (Nos.)		Nos.)	Others (Fowl)
	Area under I	Area under (Improved	Indigenous	Total	Indigenous	Indigenous Indigenous		Broiler	Layer	Ducks	(Nos.)
Guijan	1	50	2501	57015	59516	2524	75	35275	6921	246	56264	120315
Itakhuli	-	-	3585	53210	56795	2227	54	42562	8257	347	1372821	195368
Hapjan	-	-	3300	38224	41524	4627	96	36572	7658	451	117654	87962
Kakopathar	-	-	2275	62520	64795	4366	82	12925	5959	221	109576	92536
Saikhowa	-	-	2102	26119	28221	4235	67	25438	7256	183	28809	7692
Margherita	3	-	2342	45002	47344	3865	56	24782	9872	274	42209	9686
Sadiya	-	-	2096	218200	220296	4325	31	8809	9527	128	195789	13575
Tinsukia Dist.	4	50	18201	518491	518491	26169	461	186363	55450	1850	1923122	527134

Source: Comprehensive District Agricultural Plan, Tinsukia, 2008

- Fodder crops are grown only at 4 ha. Therefore, indigenous cattles are mostly dependent on the cultivable areas which, once cropped, are left for grazing of cattle. 180 days in a year is average cultivation period in Kakopathar. During this period cattles are stranded away from the field which in turn affects the cattle health. Moreover, there is no fodder industry currently present in the block.
- No cattle health institutions are present in the block.

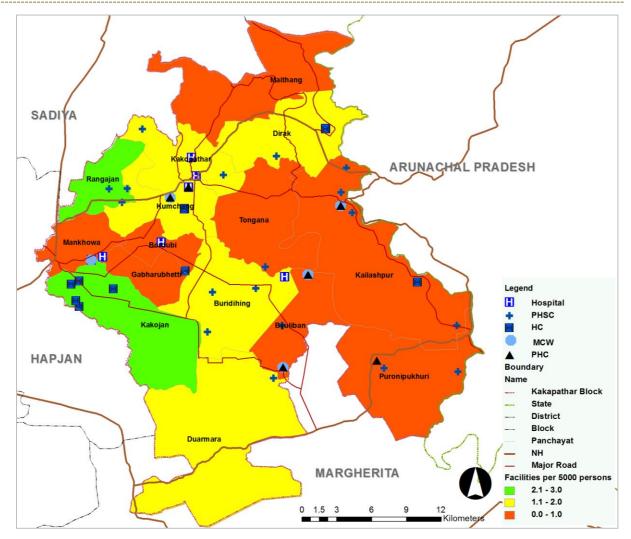
3.3.6 Health & Family Welfare

Health is one of the important parameters which play a major role in development of resources. The healthcare system of Kakopathar consists of 6 PHC, 2 dispensaries, 9 Hospitals, 18 Sub Centres. Apart from the government healthcare facilities there are private healthcare facilities also present at the block headquarter.

GP Name	Population	Hospital	Dispensaries	Maternity & Child Welfare	Health Centre	Primary Health Centre	Primary Health Sub Centre	Total Facilities	Facilities per 5000 persons
Kakopathar	16943	3	1	0	0	1	1	6	1.8
Maithang	6320	0	0	0	0	0	0	0	0.0
Dirak	13813	1	1	0	1	0	1	4	1.4
Tongona	14725	0	0	0	0	0	0	0	0.0
Kumchang	18233	1	0	1	1	1	0	4	1.1
Rangajan	9950	0	0	0	0	0	4	4	2.0
Gabharubhetti	7836	0	0	0	0	0	1	1	0.6
Bordubi	14945	1	0	0	1	0	0	2	0.7
Mankhowa	11045	0	0	0	0	0	0	0	0.0
Buridihing	17683	1	0	1	0	1	1	4	1.1
Bijuliban	9351	0	0	0	0	0	1	1	0.5
Kakojan	15701	2	0	1	5	0	1	9	2.9
Kailashpur	46837	0	0	1	1	1	5	8	0.9
Duarmara	8214	0	0	1	0	1	1	3	1.8
Puronipukhuri	15380	0	0	0	0	1	2	3	1.0
Total	226976	9	2	5	9	6	18	49	1.1

Table 21: Health facilities in Kakopathar Block, 2011

Source: Census of India, 2011



Map 13: Healthcare facilities in Kakopathar Block, 2011

- Maithang, Tongana and Mankhowa have no healthcare facilities. Kailashpur has higher number of facilities but availability is inadequate in terms of total population of the panchayat.
- The uneven spatial development of health infrastructure shows signs of lack of vision on a district-level. The absence of co-ordinated efforts on a larger perspective has resulted in concentration of facilities in pockets and total absence in other parts of the block.

3.3.7 Education

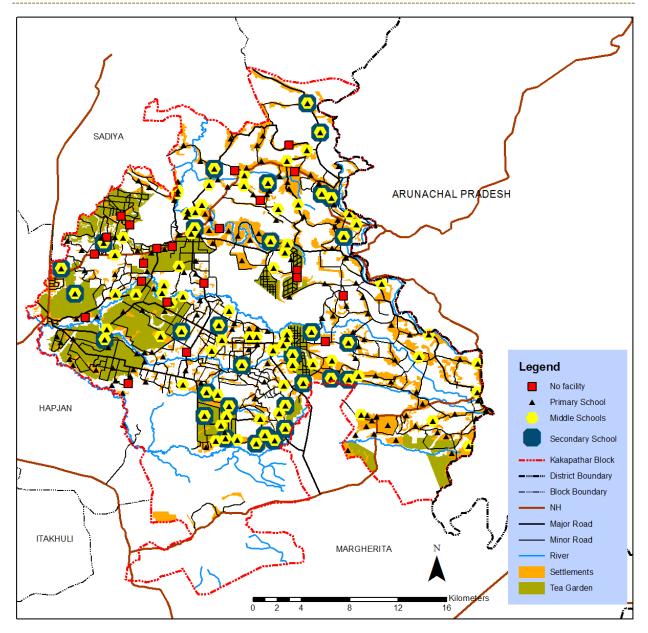
There are good numbers of educational institutions available in the block ranging from elementary to higher education. There are 268 primary schools, 37 secondary schools, 3 senior secondary schools and 1 college in the block. Despite of such amount of infrastructure, literacy rate is poor in the block and the performances of Panchayats in literacy can be related to presence of institutions in the area.

Bordubi is a case of low infrastructure and less improved literacy unlikely to Dirak which has larger number of institutions and a sound literacy.

GP Name	Literacy rate	Population (0 - 6 years)	Primary School	Secondary School	Senior Secondary School	College	Total
Kakopathar	74.1	2241	24	7	1	0	32
Maithang	77.5	782	15	1	0	0	16
Dirak	74.7	1778	33	5	0	0	38
Tongona	59.0	2133	19	1	0	0	20
Kumchang	44.2	2978	15	0	0	0	15
Rangajan	43.4	1664	8	1	0	0	9
Gabharubhetti	70.2	1011	12	1	1	0	14
Bordubi	37.4	2423	9	1	0	0	10
Mankhowa	67.3	1345	6	2	1	1	10
Buridihing	54.7	2622	19	4	0	0	23
Bijuliban	45.5	1654	11	2	0	0	13
Kakojan	42.8	2495	24	1	0	0	25
Kailashpur	68.0	7112	33	3	0	0	36
Duarmara	36.9	1546	15	7	0	0	22
Puronipukhuri	55.9	2724	25	1	0	0	26
Kakopathar Block	57.9	34508	268	37	3	1	309

Table 22: Educational facilities present in Kakopathar Block, 2011

Source: Census of India, 2011



Map 14: Map showing distribution of primary educational facilities

 Primary schools and upper primary schools are present in every panchayats but their coverage is might be uneven in Bordubi Rangajan, Kailashpur and Puronipukhuri, which exhibited low literacy rates.

3.3.8 Access to drinking water

Safe drinking water availability ensures long and healthy human life. Therefore its coverage is very crucial for development. 31% of the total habitations have been covered fully under government public water supply sources. There are also good numbers of water supply schemes going in different Panchayats.

	Total	Fully	%age of	Partially	Safe Source/	No. of Schemes			
	Habitations	covered	coverage	covered	Delivery Point	PWS	Hand pumps	Others	
Bijuliban	26	8	30.8	18	34	1	14	12	
Bordubi	14	6	42.9	8	21	0	4	17	
Buridihing	41	13	31.7	28	39	1	6	24	
Dirak	47	21	44.7	26	58	5	4	27	
Duarmara	22	8	36.4	14	15	0	1	14	
Gabharubhetti	53	31	58.5	22	80	11	5	32	
Kailashpur	54	23	42.6	31	33	1	2	24	
Kakojan	33	15	45.5	18	49	5	10	21	
Kakopathar	84	21	25.0	63	121	10	2	35	
Kumchang	66	10	15.2	56	38	2	3	24	
Maithang	76	11	14.5	65	48	3	1	24	
Mankhowa	21	6	28.6	15	29	2	0	9	
Puronipukhuri	41	14	34.1	27	29	0	2	27	
Rangajan	47	6	12.8	41	41	3	2	25	
Tongana	30	12	40.0	18	25	3	0	8	
Kakopathar Block	655	205	31.3	450	660	47	56	323	

Table 23: Access to drinking water

Source: http://indiawater.gov.in/IMISReports/NRDWPPanchayatMain.aspx

Ground water of Kakopathar Block contains iron as contaminants ranging from 0.4 - 2.5mg/L (acceptable limit 0.3mg/L). It results rusting, bad taste and foul smell.

Inferences:

- Accessibility might be the concern for low water supply coverage in Panchayats like Rangajan and Maithang.
- High number of source points but less coverage in terms of served habitations in Kakopathar shows concentration of services in limited area.

3.3.9 **Rural sanitation**

Sanitation status of Panchayats shows that almost three fourth populations in Kakopathar block do not have access to toilets. It is evident that unhealthy open defecation practices will result in greater chances of exposure to diseases. Also contamination of water due to open defecation results in chronic diseases.

Panchayat	Total Household	Without Toilet	Percentage (%)	Target	Achievement	Percentage (%)
Bordubi	1457	792	54	770	403	52
Bijuliban	1764	1556	88	547	375	69
Tongana	2451	1132	46	821	436	53
Buridihing	3500	3269	93	2719	1707	63
Dirak	1754	1014	58	670	574	86
Duarmara	1412	1324	94	827	440	53
Gabharubhetti	3133	3075	98	1844	930	50
Kailashpur	2475	1966	79	818	322	39
Kakajan	3231	2587	80	2280	1180	52
Kakopathar	3068	1851	60	572	572	100
Koomsung	2089	1202	58	1057	600	57
Maithong	1871	1607	86	941	440	47
Mankhowa	1821	358	20	270	75	28
Puronipukhuri	2964	1444	49	643	643	100
Rangajan	2536	2436	96	2143	2015	94
Kakopathar Block	35526	25613	72	16922	10712	63

Table 24: Status of sanitation, Kakopathar Block, 2013

Source: http://tsc.gov.in/Report/PanchayatReport/RptFindGPStatus.aspx accessed on 11.3.2014

Inferences:

- Only 28% of total individual households have toilets which imply unhygienic condition and greater exposure to diseases.
- The target achieved in provision of toilets to individual BPL household is 63%.
- The performances in service deliveries shows lack of accountability in inter panchayats as Puronipukhuri achieved 100 percent but neighbouring panchayat Kailashpur have achieved only 39 percent.

3.3.10 Rural Connectivity

National Highway 52A & 52B is connecting settlements of east, west and southern parts of the block. Phillobari Road is a Major District Road which connects inner settlements to highways.

Under MnREGA, few rural connectivity projects have been executed in the block. The table below shows the status of projects.

	Rural connectivity projects taken under MnREGA				Total	Status			
GP	2008 -09	2009 -10	2010 -11	2011 -12*	2012-13	expenditur e by GPs (in lakhs)	Completed	ongoing	Approved
Bijuli ban	-	2	4	1	3	48.9	6	2	2
Bordubi	-	2	4	-	2	25.8	6	2	-
Buridihing	-	2	5	1	2	43.0	4	4	1
Dirak	-	3	6	-	1	36.6	6	4	-
Duarmara	-	3	2	1	3	50.3	4	5	-
Gabharubhetti	1	3	3	1	3	75.6	6	3	2
Kakojan	-	4	4	-	2	52.1	7	3	-
Kakopathar	-	2	4	-	3	43.4	4	4	1
Kailashpur	-	2	2	1	2	47.0	4	3	-
Kumchang	1	4	2	-	2	48.3	7	2	-
Maithang	1	2	4	-	1	38.5	7	1	-
Mankhowa	-	2	2	1	2	32.1	5	1	1
Puronipukhuri	1	4	5	-	1	37.3	7	2	2
Rangajan	-	3	4	1	3	31.7	6	3	2
Tongana	1	2	1	-	3	27.1	4	2	1
Kakopathar Block	5	40	52	7	33	637.6	83	41	12

Table 25: Status	of rural	connectivity pro	ojects in	Kakopathar Block
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Source: Office of the Block Development Officer, Kakopathar Block.

(* - In the period 2011-12, extensive tea plantation projects were executed therefore rural connectivity projects dried up for the year.)

Inferences:

• Kailashpur has the least number of projects taken under MnREGA for the period 2008-2013. This can be attributed to the low literacy and less access to drinking water facilities and minimum wages for the people in the area.

• Some panchayats have heavy burdens of ongoing projects which results difficulty in management of resources. These schemes should be completed in a sooner way for speedy development.

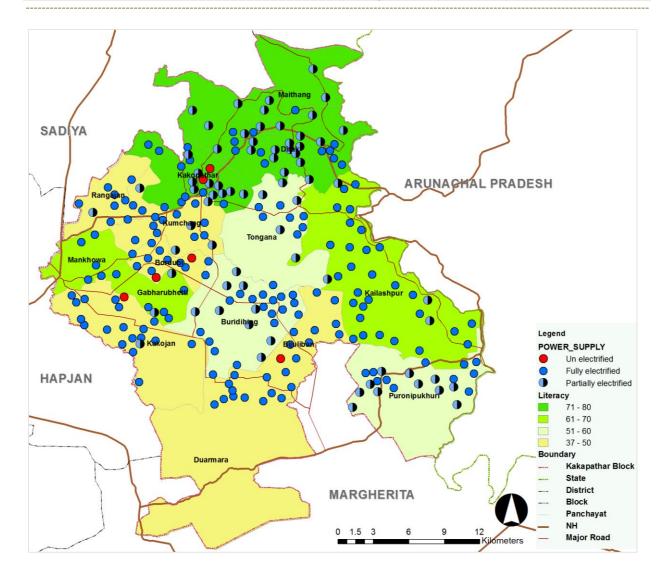
3.3.11 **Rural electrification**

Power supply in Kakopathar covers almost all villages. Only six villages (2.9%) are not covered under rural electrification. Though the electrification scenario of the block presents a good picture but if we analyze it with literacy, then we can find that panchayats like Kakopathar, Dirak and Maithang exhibits high literacy in spite of low coverage (72% villages are partially electrified). In the case of Puronipukhuri, the literacy is equally low with the coverage of electricity. This might mean that electricity connections to the educational institutions have been disrupted in between panchayats.

GP	Fully Electrified	Partially Electrified	Total Electrified Villages	Un electrified Villages	%age of electrification
Kakopathar	8	13	21	2	91.3
Maithang	5	10	15	0	100
Dirak	6	16	22	0	100
Tongana	5	5	10	0	100
Kumchang	14	3	17	0	100
Rangajan	10	0	10	0	100
Gabharubhetti	8	5	13	0	100
Bordubi	8	2	10	1	90.9
Mankhowa	6	0	6	0	100
Buridihing	14	4	18	0	100
Bijuliban	7	4	11	2	84.6
Kakojan	19	3	22	1	95.7
Kailashpur	21	3	24	0	100
Duarmara	15	0	15	0	100
Puronipukhuri	11	14	25	0	100
Total	156	82	238	6	97.1

Table 26:	Status	of	electrification	in	Kakopathar Block
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Source: Census of India, 2011



Map 15: Distribution of electricity in Kakopathar Block

 Despite of good distribution of power supply, the coverage of electricity is low in the block, particularly in educational institutions across the panchayats.

3.4 Block Planning in Kakopathar

Rural governance has taken lot of changes in planning and development in Assam. Three tier hierarchy of governance was popular during 1950-70's. During 80's two tiers of governance was also introduced in Assam. After the enactment of CAAs at central level three tier hierarchy at district, block and village level was made effective through Assam Panchayati Act, 1994. At present Tinsukia District has Tinsukia Municipal Board, Digboi Muncipality and three town committees Margherita, Doomdooma and Makum. The other local self-governing bodies are the Gram Panchayats, seven Anchalik Samities and Tinsukia Zila Parishad.

The Office of the Block Development Officer is situated in Kakopathar. The building was established in 1969 and presently is functioning in the same campus with other line department offices. The office is well equipped with modern technology and staffs.

3.4.1 Institutional Framework

The apex body for local governance in Kakopathar block is Kakopathar Anchalik (Block) (Block Samiti). At the grassroots level there are Gram Sabhas at revenue villages. Under the Anchalik Samiti, there are 15 Gram Panchayats namely Bijuliban, Bordubi, Buridihing, Dirak, Duarmara, Gabharubhetti, Kakojan, Kakopathar, Kailashpur, Kumchang, Maithang, Mankhowa, Puronipukhuri, Rangajan and Tongana are constituted to look after the development activities in 245 villages of the block.

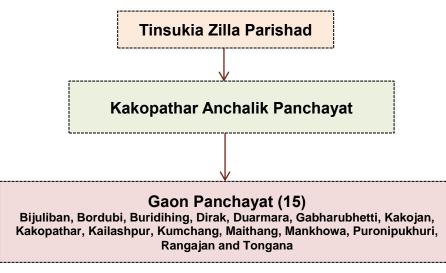


Figure 14: Institutional hierarchy of Kakopathar Block

The following are the local bodies present in Kakopathar block.

a. Anchalik Panchayat, Kakopathar

The Kakopathar Anchalik Panchayat consists of both official and non-official members. Block Development Officer, Kakopathar and State Officers in line departments working at Kakopathar Block are official members of the Anchalik Panchayat. Elected members from Gaon Panchayat, Presidents of Gaon Panchayat and members of Legislative Assembly are non-official members. Duration of their work is generally five years subjected to the instable political situation. The recent Anchalik Panchayat was constituted in 2013 as per state panchayat election.

b. Gaon Panchayats

Gaon panchayats are the village level panchayati raj institutions. Each Gaon Panchayat has a committee of ten members elected from the villages falling under their constituencies. The president of Gaon Panchayat is elected directly by the villagers. Gaon Sabhas are conducted at Panchayats concerning the matters of responsibilities.

All plans and programmes suggested in Gaon Panchayats are approved by Kakopathar Anchalik Samiti and forwarded to Tinsukia Zilla Parishad for approval.

3.4.2 **Extent of Decentralization**

Decentralization in Tinsukia district has just started after District Planning Committee (DPC) set up in 2013. It has not been in function till the study was made thereby Zilla Parishad sends their plans directly to State Government through District Commissioner who is the administrator of the district. Zilla Parishad receives action plans from Anchalik Panchayats as financial estimates without spatial contents. For the time being, there is no authority for the review of the plan proposals at district level. Therefore, rural – urban integration component is absent in the District Development Plan of Tinsukia.

At block level, Anchalik Panchayat gathers project proposals from panchayats and prioritizes the possible schemes for the development of both villages and panchayats.

Each Gaon Panchayat of Kakopathar Block has been divided in 10 wards. Thus, the existing villages are grouped in different wards. Hence, the urban and rural governance

has taken place at same point with the responsibilities divided within ward committees and gaon panchayats. Ward Sabha and Gram Sabha are conducted at regular intervals to address the issues in villages.

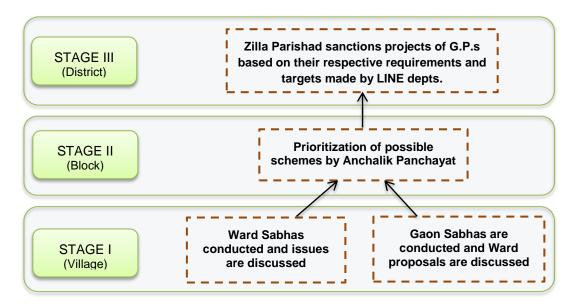


Figure 15: Bottom up decision making process in Kakopathar

Once the proposals are made public during both Sabhas' they are finalized and passed on to the Anchalik Panchayat. Some small schemes are approved and implemented in the panchayats by Zilla Parishad. Funds for implementation of schemes come to Gaon panchayats through Block Development Officer.

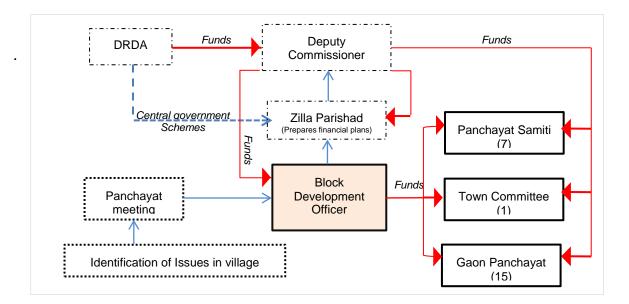


Figure 16: Formation of schemes and flow of funds in Kakopathar Block

Department of Architecture and Planning, IIT Roorkee

Funds are deposited in the bank in their respective accounts of the 15 panchayats in the block. The following table presents the financial devolutions made to each Gaon Panchayats.

GP	Populati on	DDP proposals		13th Finance Commissio	MnREG A	Total devolutio ns made in 2012-	Total mandays generated	Mandays generate d per
		AP	GP	n Award		13	in 2012-13	capita
Bijuliban	9351	1.5	2.3	0.9	17.3	22.0	5276	0.56
Bordubi	14945	1.5	2.5	0.9	14.8	19.7	6768	0.45
Buridihing	17683	1.8	3.1	0.9	13.6	19.4	4164	0.24
Dirak	13813	1.5	2.8	1.0	16.7	21.9	6036	0.44
Duarmara	8214	1.5	1.6	0.9	13.2	17.2	4911	0.60
Gabharubhetti	7836	1.4	4.0	1.5	16.4	23.2	4514	0.58
Kailashpur	46837	1.8	3.2	0.9	25.2	31.0	8029	0.17
Kakojan	15701	2.3	5.0	0.9	17.7	25.9	6223	0.40
Kakopathar	16943	4.3	3.9	0.9	16.2	25.2	5442	0.32
Mankhowa	11045	1.5	2.1	2.0	14.6	20.2	5710	0.52
Kumchang	18233	1.8	3.2	2.1	14.2	21.2	6025	0.33
Maithang	6320	1.5	2.3	0.9	11.7	16.4	5317	0.84
Puronipukhuri	15380	1.8	3.6	1.0	12.0	18.3	5081	0.33
Rongajan	9950	1.8	3.5	0.9	18.8	24.9	7437	0.75
Tongana	14725	1.8	3.5	1.0	16.7	22.9	6857	0.47
Total	226976	27.4	46.6	16.7	238.9	329.6	87790	0.39

Table 27: Financial devolutions in 2012-13

Source: Office of the BDO, Kakopathar

3.4.3 Planning and governance

A Town Committee has been set up for governance of the urban cluster in Kakopathar under Assam Municipal Act, 1956. The area has yet to be notified as census town. Therefore the town does not have any centrally funded schemes for urban development in general.

The town committee has yet to understand the responsibilities in urban planning and fully utilize its capacities. Ward plans and village prepared by panchayats are generally concentrated towards road connectivity while other sectors are left behind.

Haphazard growth has created conflicting landuse patterns in the town which needs immediate planning attentions. Following issues come prominent.



Landuse conflict in Kakopathar town



Small distance rural transportation modes need separate space for convenient functioning



Clogged drain in the market area



An Upcoming mall without proper authorization and planning

Inferences:

- Institutions at panchayat level are constituted as per the 73rd amendments.
- Plans and schemes made with public participation at panchayats gets no integration at district level; as the present DPC is not functioning.
- The average duration between two gram sabhas is almost 4 months which according to the Assam Panchayati Raj Act, 1992; should be not more than three mnopnths.
- The town committee has yet to understand the responsibilities in urban planning and fully utilize its capacities.

3.5 **Conclusion**

The study area has high density of tribal population, larger part of which falls under the poverty line. There is serious lack in employment generation schemes for the block.

Target group oriented schemes can be handy for the block. Majority of the available worker HH are agricultural labourers. As the cropping pattern of the district is low they can be engaged in other activities like plantations in orange orchards

High share of cultivators in Kakopathar suggests availability of small land owners. High expenditure in MnREGA suggests active participation of people and government and cann be associated with addition of employment and infrastructure as a resultant.

Highest net sown area and gross cropped area showcase heavy pressure on cultivable land when analysed against highest percentage of cultivators. Cognizable fertiliser usage implies intensive usage of cropping land but at the same time suggests a good access to fertilizer facilities. Owing to heavy agricultural acitivity, largest investment is being diverted to Kakopathar which is in turn is intensifying exploitation of fertile land.

Lowest irrigated land suggests heavy dependance on rainfall and comparatively shorter croppig period (180 days). Area irrigated by canals is appreciable suggesting good utilization of available technology. But least irrigated land suggests the canal facility is immensely limited. Highest percentage of electrified villages indicates a more developed block and higher standard of living. Appreciable educational infrastructure exists in Kakopathar block but health facilities in Kakopathar are limited.

Institutions at panchayat level are constituted as per the 73rd ammendments in the block. Plans and schemes made with public participation at panchayats gets no integration at district level; as the present DPC is not functioning. The average duration between two Gram Sabhas is almost 4 months which according to the Assam Panchayati Raj Act, 1992; should be not more than three months. The town committee has yet to understand the responsibilities in urban planning and fully utilize its capacities.

CHAPTER IV – ISSUES, GAPS AND PROBLEMS

4.1 **Findings from the study**

The block Kakopathar has a unique nature of growth. In many spheres of development, the block has in relatively good position such as agriculture, connectivity and linkages, health etc. In this chapter the study will identify the issues and problems in development.

Following observations could be made from the analysis of the study area. SWOT analysis of the study area is given below under four parameters Demography, Economic Base, Social and Physical infrastructure.

Sector	Strength	Weakness	Opportunities	Threat
Demography	Kakopathar block has comparatively low population densities and a good gender mixture mixture of 969:1000 Despite of low literacy of the block, some gram panchayats within the study area achieved higher literacy.	Massive outmigration have resulted considerable drop of population (15.4%) in the last decade. High percentage of BPL population shows meager income and employment opportunities in the panchayats.	Growth has occurred at block headquarter and Kailashpur owing to good connectivity and strategic locations. These areas have potentials to be developed as agro based growth centres High literacy in the growth areas shows more opportunities in development.	Instable political situation, Maoist activities and insurgencies have threatened human lives in the study area. Female literacy is significantly low in all the panchayats.
		The performances of the GPs in literacy are not coherent with the availability of infrastructures.		
Economic Base	Female workers are higher in Panchayats dominated by tea communities which can be inferred as regular availability of work in tea plucking	Per capita investments made in skilled and semi-skilled work under MnREGA shows less expenditure in	High percentage of agricultural laborers signifies skilled workforce for developmental activities under rural employment and	Workforce consists of 60:40 male and female workers thereby less credit to females.

Table 28: SWOT analysis of Kakopathar Block

	1	· · ·	Γ	1
	which needs tender	areas of eminent	wage programme	
	hands like females.	non-working	such as MnREGA.	
		population.		
	Though government	High share of	The cultivable lands	No land use
	irrigation projects are	cultivators in	need nominal	zoning at district
	dried up at district,	Kakopathar	fertilizer use.	level.
	46% of the the land	suggests		
	irrigated through	availability of small	Orange productivity	Highest net sown
	government canal is	land owners within	can be increased in	area and gross
	present in the block.	panchayats.	an organized manner	cropped area
			to give inputs to the	showcase heavy
		Irrigation facilities	agro based centres.	pressure on
		cover only three		cultivable land
		Gram Panchayats	Culturable land which	when analyzed
		and extension serv	has little cost in	against highest
		Rangajan,	developing can	percentage of
		receives one third	increase the	cultivators.
		of the irrigation	production of crops.	
		facilities (only 3		The block thus
		Panchayats have		paints a grim
		government		picture of the
		irrigation facilities)		fate of cultivable
		but contains		land that is
		highest		constantly put
		percentage of total		under strain with
		culturable waste		repeated
		area (27%)		cultivation,
		showing restricted		fertilizer addition
		priviledge of		and small
		irrigation.		holding size
		Ũ		
Social	Primary schools and	Coverage is	Some of the	Low accessibility
Infrastructure	upper primary	uneven in the	Panchayats	to educational
	schools are present	panchayats like		facilities is also
	in a good content in	Bordubi Rangajan,		contributing to
	the panchayats	Kailashpur and		the growing anti-
		Puronipukhuri,		national
		which might be the		sentiments.
		cause of low		
		performances in		Three of the
		iteracy.		Panchayats has
				no health
				facilities
Physical	Higher percentage of	But, percentages	Electrification to	Availability and
Infrastructure	electrified villages in	of partially covered	schools might have	duration of
	panchayats indicates	villages show	been a major	power in rural
	a more developed	limited coverage of	parameter in	areas is limited
	block and higher	facilities within	attainment of higher	
	standard of living.	gaon panchayats.	literacy, as showed	
	5		by Dirak and	
	1	1	,	

			Maithang panchayat.	
	Central government schemes are present in the panchayats regarding rural sanitation. Panchayats have been investing huge amounts in rural connectivity projects in each panchayat.	The performances in service deliveries shows lack of accountability in inter panchayats as Puronipukhuri achieved 100 percent against its target but neighbouring panchayat Kailashpur has achieved only 39 percent		Only 28% of total individual households have toilets which imply unhygienic condition and greater exposure to diseases.
Block Planning and development	Planning at block level in Kakopathar follow the integrated district planning methodology.	DPC set up in 2013 is not functioning for the time being. Therefore, Plans prepared by ZP goes directly to State Government via District Collector.	Schemes forwarded from GPs are generally concentrated towards road connectivity while other sectors are left behind.	State government has very less share in the source of funds that comes to the block.

4.2 Development status of Kakopathar

The method used in the following table is a convenient and quick way of understanding the comparative status of development in the different panchayats. The comparative analysis was done against some indicators that were found important index for guaging development. The nos. 1 to 15 have been assigned to the different panchayats as per their current quantity of produce, values etc. against the indicators. The highest value corresponding to a particular indicator is ranked "15" and the lowest being "1".

The scores were categorized in three classes as low developed (score 1 to 6), Mid developed (score 7 - 12), and High developed (13 - 15) and then plotted against each panchayats. The following table gives the status of development in each panchayat.

Table 29: indicators and development status of panchayats in Kakopathar

Sector	Indicators	Rank	Bijuli ban	Bordubi	Buridihing	Dirak	Duarmara	Gabharubhetti	Kakojan	Kakopathar	Kailashpur	Kumchang	Maithang	Mankhowa	Puronipukhuri	Rangajan	Tongana	Remarks
		1-6																
	Population density (persons/sq.km.)	7 - 12																
	(persons/sq.km.)	13 - 15																
Demography		1-6																
	Literacy rate	7 - 12																
		13 - 15																
		1-6																
	Percentage of BPL	7 - 12																Ranking: highest to the lowest
		13 - 15																
		1-6																
	WorkForce Participation Rate	7 - 12																
E	Fariicipation Rate	13 - 15																
Economic base	Per capita	1-6																
	expenditure under	7 - 12																
	MnREGA	13 - 15																
	% to Total	1 - 6																
	Culturable waste	7 - 12																Ranking: highest to the lowest
	Land	13 - 15																
		1-6																
	Health Facilities per 5000 persons	7 - 12																
Social	, ,	13 - 15																
Infrastructure		1 - 6																
	Middle schools per 500 population	7 - 12																
		13 - 15																
	Percentage of	1 - 6																
	achievement against targetted	7 - 12																
	against targetted sanitation	13 - 15																
	Safe source point	1 - 6																
Physical Infrastructure	deliveries per 500 population	7 - 12																
	population	13 - 15																
	Percentage of	1 - 6																
	ongoing road projects to total	7 - 12																
		13 - 15																
	Generation of	1 - 6																
Planning and governance	mandays per capita (for 2012-	7 - 12																
Source: Author	13)	13 - 15																

Source: Author, 2014

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4.3 **Issues and gaps in development**

The following table is showing the classification of panchayats in various stages of development within the study area.

indicators/ Panchayats	Kakopathar	Maithang	Dirak	Rangajan	Gabharubhe tti	Duarmara	Bordubi	Kailashpur	Puronipukh uri	Mankhowa	Kumchang	Buridihing	Kakojan	Bijuli ban	Tongana
ratio of ongoing road projects to total cpmpleted															
Per capita expenditure under MnREGA															
Literacy rate															
Middle schools per 500 population															
Population density (persons/sq.km.)															
WorkForce Participation Rate															
Generation of mandays per capita (for 2012-13)															
Safe source point deliveries per 500 population															
Percentage of achievement against targeted sanitation															
% to Total Culturable waste Land*															
Health Facilities per 5000 persons															
Percentage of BPL															
Status of development	dev	High elopm	ent		Mid	level d	evelopi	nent		Low level development					
Strong sectors	Educ force, infra emplo	pulatio ated la educat astructu oyment ncome	bour tional ire,		High growth rate, work force, health facilities, income and good governance,					Utilization of land, health facilities, population			ulation		
Weak Sectors	infrast emp delaye of	Health tructure ployme ed exec project	nt, ution	Wate	r supply	, literac <u>y</u>	ý				orkforce		cy, deper /ment, e		

Table 20. Classification	~ 6	Denchavata	1.00	vorious	otogoo	~ 6	dovolonmont
Table 30: Classification	U	ranchayats		various	Slayes	U	development

Source: Author, 2014

The study found that three panchayats are highly developed such as Dirak, Maithang and Kakopathar. The mid developed panchayats are Duarmara, Rangajan, Gabharubhetti, Bordubi, Kailashpur, Puronipukhuri. The least developed are Mankhowa, Kumchang, Buridihing, Kakojan, Bijuliban and Tongana.

It shows that the panchayats from eastern part of the block is most developed. The middle part of the block is least developed.

4.4 **Development of alternatives**

High Developed Panchayats:

The highly developed panchayats can support the urbanization, required for the block. The strong sectors of these panchayats viz. population, Educated labour force, educational infrastructure will harness the growth of the region.

Small level service centres can be developed in these panchayats which will also help in decongesting the existing growth centre Tinsukia, and lead to the balanced development of the region. Separate infrastructure package has to be provided to support the expected growth. These centres would act as multi-functional node with administrative and market facilities.

Mid developed Panchayats

The higher skilled workforce suggests that agricultural expansion of the block can take place in these panchayats. There areas have unculturable lands which can be developed in little efforts. They can be integrated with the collection and distribution centres with seed & fertilizer facilities. Such, these panchayats would act as major agricultural production centres in the district as well as the block.

The major sectors impeding the development of these panchayats are infrastructure services. Therefore schemes regarding infrastructure facilities (schools, public water supply) have to be taken up by the gram panchayats within their jurisdictions. The interpanchayati plan needs to be made to help with the distribution and coverage of services.

Low developed Panchayats

These panchayats are the most backward regions in the block. Therefore special care is required in all aspects of development. Access points for basic services of health and education for nearby unconnected villages should immediately be provided. Also some of the panchayat have no healthcare facilities.

The panchayats will be encouraged to take large scale employment generation schemes for their respective areas.

CHAPTER V – RECOMMENDATIONS

5.1 Suggestions for integrated development

The following policies have been suggested for development of the study area and fill the gaps in services and infrastructure.

Recommendations	High developed	Mid developed	Low developed
	To develop block headquarter as multi- functional agro based centre To support the administration, market, economy, unemployed educated youths and bring harmony of development in the region (Kakopathar Block)	To expand the agricultural production in the block.	Creation of infrastructure and services in gap areas To promote alternative income generating schemes for the low income groups
	package to strengthen capacity urban development and social security system. To promote local area and need specific industries like	To utilize the irrigation potentials of the panchayats Distribution of HYV seeds to farmers Integration of mandis in markets Seed & fertilizer depot for the farmers to receive their inputs	Inter Panchayati Plans for low developed panchayats for equitable distribution of services Establishment of educational institutions to reduce the female illiteracy
,	Kakopathar - Light manufacturing industries like printing & publishing, knitted goods, basic metal	Expansion of 348.5 Ha. cultutarble waste area in Kailashpur and Puronipukhuri Panchayats under cultivation Vaterinary Hospital in Kailashpur	Tea tourism can be encouraged in the tea gardens under the Panchayats Tongana, Kumchang and Buridihing

Table 31: Suggestion for development

5.2 **Conclusion**

In the whole process of evaluation Kakopathar showed development in many spheres of development. It clearly signifies that there are ample of opportunities in the block. Resource, agriculture and infrastructure are the major strengths of the block. The major occupation of people is agriculture and other agro-based trade and businesses. Therefore future development of the block should move towards a development scenario which ensures huge agriculture based economy. In conclusion the study wants to state that the planning and development of Kakopathar is in good health.

Bibliography

- 1. Sundaram K. (1992), *Decentralized Multi-level planning: Principles and Practice,* Concept publishing, New Delhi
- 2. Jana A. (2004) Administering District plans in India: Issues, Constraints and Choices, Concept publishing, New Delhi
- 3. Mishra R. & Achyutha R. (1990), *Micro level rural planning,* Concept publishing, New Delhi
- 4. Planning Commission (1979), Guidelines for block planning, Government of India
- 5. Bagchee S. & A.(1980), Dantwala Committee and after, Economic and political weekly
- 6. Aziz A (1983), Studies in Block Planning, Concept publishing, New Delhi-110015

Websites

- http://www.censusindia.gov.in/pca/final_pca.aspx
- http://indiawater.gov.in/imisreports/NRDWPMain.aspx
- http://www.tinsukia.nic.in/index.asp
- http://www.tinsukiazp.in/
- http://www.schoolsworld.in/schools/showschoolsinarea.php?block_name=KAKA
 PATHAR&district_code=1814
- tinsukiajudiciary.gov.in
- tinsukia.gov.in/subpages/kakopathar.html
- shodhganga.inflibnet.ac.in