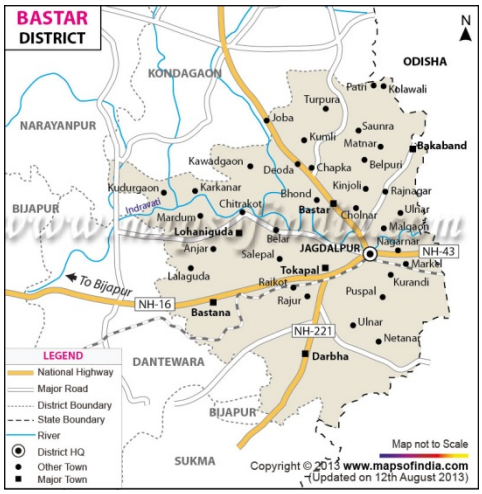
Contents

1. District Snapshot: 2
2. Statistical snapshot of the district: 2
3. Economic profile of district: 3
4. Livelihood Profile of the district: 3
4.1. Agriculture based livelihood: 4
4.2. Forest based livelihood: 4
5. Flora and Fauna 4
6. Topography of the district: 5
7. Tourism and places of attraction: 6
8. Handicraft (Art and Culture): 6
9. Concept: 8
10. Objective: 9
11. Approach and Methodology 9
12. Strategies and outcomes: 9
12.1. Water conservation and irrigation: 10
12.2. Agriculture and allied sector: 12

Section –I: District Overview

1. District Snapshot:



Baster is a district in state of Chhattisgarh having Jagdalpurits district head quarter.The district headquarters Jagdalpur is located at a distance of 305 kilometers from the capital city Raipur. The district is endowed with the beautiful landscape, tourist spots, natural and mineral resources.Located in the southern part of the state the district covers an area of around 6596.90 sq km. 70 percentof the total population is tribe. Gond, Maria, Muria ,Dhruva, Bhatra, Halba etc. constitutes the tribal population of the district. Owing to tribal culture, district is also called as the cultural capital of the state. However, better management and optimal utilization of the wide spectrum resources of the district are underutilized. Be it forest management, arts and handicrafts, Khadi, or kosa silk, herbs and plants of medicinal properties still needs strategic interventions.

A large number of **Bastar** tribal are still living in deep forests and avoid mixing with outsiders in order to protect their own unique culture. The tribes of **Bastar** are also known for their colorful festivals and arts and crafts. The **Bastar** Dussehra is the most **famous** festival of the region.

Starting from Orissa, the riverIndrāvatiflows 2through Dantewadaand Bijapur before it merges in Godavari near Bhadrakali, which is a symbol of faith and devotion for the people of Bastar. Jagdalpur is a major cultural and handicraft center. Historical and entertainment related items of Bastar's tribal people have been displayed in the Anthropological Museum at Dharampura. Dancing Cactus Art Center, an outstanding gift of the renowned art world of Bastar. The people of Bastar district are rich in rare artwork, liberal culture and innate nature.

2. Statisticalsnapshot of the district:

Particulars	Details
Area	4030 Sq. Km
Division	Bastar
Sub division	3
Blocks	7
Village	618
No. of Panchayats	317
Municipality	2
Total Population	835000

Particulars	Details
Total Female	421000(50.42%)
Total Male	414000(49.58%)
Urban Population	139000 (16.65%)
Rural Population	699000 (83.71%)
Schedule Tribe Population	521000 (62.40%).
Schedule Tribe Population-Female	265000
Schedule Tribe Population-Male	256000
Schedule Caste Population	15000 (1.8%)
Schedule Caste Population-Female	8000
Schedule Caste Population-Male	7000
Rate of increase of Population	18.07
Male Female Ratio	1017
Literacy rate	53.15
Male Literates Rate in %	63.02
Female Literates Rate in %	43.49
Main tribes of the district	Gond, Maria, Muriya, Bhatra, Halba, Dhruva community

Data Source: Census 2011

3. Economic profile of district:

Mono crop and rain fed agriculture, followed by collection of forest produce and handicrafts are the key contributors to the economy of the district. The contribution of tourism sector to districts economy is as minimal as 0.5-2 % despite huge potential. Similarly, the contribution of other sectors like industrial, allied sectors of agriculture, medicinal and aromatic plants, etc are minimal. Rearing of milking cattle has found to be very low, while the population of OX and buffalos is comparatively high. District is deprived of skilled work forces despite 11 industrial training institutes (ITIs). This gets a clear reflection in upcoming **Nagarnar steel plant**where 70-80% of the work force is from Orissa and other adjoining states,while district has got only 20-25% representation. The prime reason as suggested by local community the during discussion is lack of skill.

4. Livelihood Profile of the district:

The pattern of livelihood is fully dependant on the geography. The landforms, soil texture and the climatic features are fully interlinked. The forty percent of livelihoods are forest based, 30 percent are agriculture based and 15 percent of livelihoods are dependent on animal husbandry.

Another 15 percent of the income of people comes from wage labor.

4.1. Agriculture based livelihood:

The main crop of the district is paddy which is grown on 2.39 lakh hectare. The production of Paddy in the district is significantly low. The production of Paddy per hectare is 8.53 quintals which is approx. one third of the national average production of Paddy which ranges between 3-5.5 tons. Irrigated area constitutes 1.67% of the total sown area while use of fertilizer is 4.6 kg / ha, which is inadequate to provide adequate nutrients to the crop leading to low production of the paddy in the district.

Maize and pulses are mainly rabi crops.The agricultural practices are traditional. Use of wooden ploughs is overwhelming while the number of iron ploughs is negligible. The same is true of bullock carts. The number of tractors is negligible while the bullock carts are all pervasive. The usage of traditional agricultural implements has lowered the production of agriculture. The kharif crops grown here are paddy, Urad, Arhar, Jowar and maize. The rabi crops include til, alsi, moong, mustard and gram. The collection and sale of forest produce and other forest-related work supplements meager agricultural incomes.

4.2. Forest based livelihood:

The forests play an important role in the lives of the people, providing food security and livelihood through the collection of minor forest produce, and employment (as casual labour) in the Forest Department of Chhattisgarh. The forests provide for people's consumption needs - fuel and firewood, medicines, food and drink, implements and housing materials. Forest produce providing the livelihood to tribal communities include Trees, Tandu Leaf, Lakh, Dhup, Year Seed, Tamarind, Amchoor, Tuber, Origin, Drugs etc.Pathar, Gitti, Murum, Flouri stone, Sand mining are also the allied elements of economy.

5. Flora and Fauna

The National Park is situated in a transition zone where southern limit of sal forests and northern limit of teak forests overlap (ecotone region) and both sal and teak are seen in their best growth form. Kanger Valley is in fact, one of the last pockets of almost virgin forests still left in the peninsular region.

The steep lush green panoramic wild view of Kanger valley is unique of its kind. Kanger valley represents best example of moist peninsular valley of sal forests and is one of the densest parks in India. The National Park is known for its high floristic diversity. It has thickets of bamboo, climbers, ground flora and tall trees. Tree branches are dotted with epiphytes. The ground is thickly covered with medicinal plants, herbs, shrubs and tubers.

The valley is representative of old growth moist forests of Bastar. The terrain is hilly and offers spectacular landscape. Floral diversity includes in-situ gene bank of medicinal plants, grasses, climbers, wild sugarcane, canes, ferns, epiphytes, Sal, teak, bamboo and their rich associates.

The National park has 553 floral species out of which 12 species are new to Chhattisgarh, 43 species are reported rare. Faunal diversity includes leopard, wolf, jackal, wild dog, sloth bear, wild boar, barking deer, chital, civet cat, otter, spiders, butterflies, fishes, snakes, tortoise, crocodiles and different kind of birds including Bastar Hill Myna. The Park has rare civet "Binturong", giant squirrel and the famous State Bird of Chhattisgarh "Bastar Hill Myna".

6. Topography of the district:

Topographically undivided Bastarhas 3 agro climatic zones i.e. the hills, the plateau and the plains. Socio-economically, villages in the plain zones have better exposure to modernity and development, while hills are remote and traditional and platue are intermediary in nature. The district is characterized by its vast natural forest area and prominent rivers. The forest area constitutes 75 per cent (7112 sq km) of the total area of the district. **Indrāvati** is the largest and the most important river having numerous tributaries, the largest being the **PamerChinta**. The Indravati River rises from Rampur Thuamul in Orissa and flowing through the Bastar division for around 240 miles finally merges into Godavari River in Dantewadadistrict. Owing to its rocky bed the river is not navigable. **Interestingly, neither the river nor its tributaries dry up in the hot summer season.** District is very rich in its forest resources. The forests can be divided in to four belts, namely, Northern Mixed forests, Central Moist Region comprising of Sal belts, Teak belt zone and the dry region comprising mixed forests.

7. Tourism and places of attraction:

Tourism plays an important role in the development of any region and contributes significantly to the economy of district, state and region. The strategic planning of the sector can impact the socio economic profile of the region and has immense growth potential. There are numerous examples were the sector is key contributor to the state economy. The floating population of tourist besides providing sustainable sources of livelihood to almost every section of community can be a potential consumer to things of regional importance, be it food, local handicraft, herbs, or any other.

Baster is endowed with a wide spectrum of places of tourist attraction. Jagdalpur the district capital has earned its importance as the tourism capital of Chhattisgarh state and known for list of nearby tourist attractions, adventure tourism, Kailash Caves, waterfalls and KangerGhati National Park. The city of Jagdalpur is listed as one of the must visit places to in Chhattisgarh.

8. Handicraft(Art and Culture):

Arts and handicrafts of tribal community has always been a center of attraction for tourists and visitors. It varies from community to community and place to place and basically depicts their tradition, values, culture, deities and their affiliation to nature. Bastar art has been recognized around all over the world. The art is beingpractisized and protected from generation to generation by specific section of tribalcommunity of Bastar region. The essence of Baster art lies in its process of preparation which mainly include use of conventional tools not the modern machines.

Bastar art can be classified into woodwork, bamboo art, soil art, and metal arts. Wood art works are mainly used in wooden material to make Bastar culture, festivals, and creatures of gods, statues of gods and goddesses and decorations. Bamboo art uses bamboo sheets and includes chairs, living room table, baskets, mat and home furnishings. In soil art, the statues of goddesses, decorative utensils, vases, pots, and household furnishings are made. In the metal arts, artifacts of copper and tin mixed metal are made, mainly in which statues of goddesses, idols of worship, idols of tribal culture, and home furnishings are made.

The home decor wall hangings profiles of different style and sizes have now caught the attention of the world of arts and crafts and hence find eager buyers worldwide.The

Bastardistrict specializes in the preparation of items from the Dhokra Handicraft. This process calls for a great deal of precision and skill. The artifacts prepared from Dhokra technique of this art use the cow dung, paddy husk and red soil in the preparation, beeswax being the most important one. Apart from contouring, wax wires are also used for decoration purpose and for giving a finishing touch to artifacts. From the Bell Metal Handicraft of Chhattisgarh in India, the real genius and creative faculty of the artisans come into picture and thus make for some of the most wonderful pieces of art.The Dhokra and Bell Metal Handicraft can be found all over the world but the way in which the artisans of Chhattisgarh carve the things by the impression of their sheer dexterity is worth watching.

Section-II- Samarth Baster- Concept, Objective, approach& Methodology, strategies and outcomes

9. Concept:

Despite the decentralization and upcoming of 73rd&74th CAA allowing bottom up planning process to replace the top down planning, need based and outcome oriented planning has remained a challenge to the planning bodies in India. This may primarily be attributed to lack of real time data, generic nature of planning by key sectors like Agriculture & allied, health, education and infrastructure development sectors etc. This has resulted into dilution of community interest and their accountable involvement in the entire process. The community has little interest and ownership of social infrastructures created for the use and benefit of community. The ignorance of local resources be it geographical, natural, social, human etc. has affected the performances of key sectors of human development indexes, and failed to provide quality and decent living condition to the majority of the population in India. The process of development thus followed in India has resulted in lop-sided spatial development along with a rural-urban divide which has led to large scale migration and rural poverty- induced urbanisation. We thus witness rural areas, without basic infrastructure or amenities, stripped of their capacities to provide decent livelihoods to the people on the one hand and overburdened urban areas with growing slums where the urban poor live in dismal conditions.

To address the developmental imbalances and provide qualitative outcome of the developmental initiatives, Rajiv Gandhi Institute for Contemporary Studies (RGICS) New Delhi is undertaking a research study in order to develop a framework for integrated district development and planning, called the Samarth Zillaframework that uses a regional approach. It borrows substantially from Sustainability Livelihoods Framework (SLF) so far as to include five types of capital (i.e. Natural, Human, Social, Physical, and Financial) and the constraints by which these five types of capital are bound. For an overview, please refer to Policy Watch Vol. VIII Issue 6. The study has been undertaken in at least two each districts in eight states viz. J&K, Punjab, Rajasthan, Uttar Pradesh, Chhattisgarh, Orissa, Assam and Tamil Nadu. Two districts selected for study in Chhattisgarh were Bastar and Bilaspur. A full research report on Samarth Zila framework is forthcoming.

The framework was planned to be developed in three phases viz. i) the policy observatory phase entailing which is largely field based to capture ground realities ii) the policy repertory phase in which is problem identification, analysis and solution development iii) Policy Laboratory or Policy Lab to test finally selected policy prescriptions in a real-life situation, wherever feasible. In Policy Lab, the expertise of researchers and policymakers is leveraged

with the understanding of the local officials, political and civil society leaders including those from the media and academia, as also the community members and policy users to co-design and co-implement solutions which are problem focused and people centred.

10. Objective:

To developa vibrant, self sustainable and community centric ecosystem, where all the components are self driven and focussed towards sustainable development.

11. Approach and Methodology

Bastar district of Chhattisgarh was chosen for testing the implementation of the concept of policy laboratory. The Policy Lab is to play the role of an independent actor in analysis, action and advocacy. Analysis would be based on observation, consultations with a wide range of stakeholders and research. Action entails the pilot testing of possible solutions and evaluation of results besides capacity building before scaling up. Lastly, the Policy Lab would take up advocacy for scaling up through pentagonal partnerships of (1) communities (2) civil society institutions, including NGOs, academia and the media (3) political leaders (4) business and industry (5) government agencies.

The methodology adopted for the Samarth Zilla study was simple and flexible, starting with assessment of status and potential of each district under each type of capital under SLF. Along with this, three dimensions of constraints over these five types of capital viz. political economy of the district, institutional capability, and financial feasibility, presented a reasonable picture of the nature of development or underdevelopment of the district along with the requirements to reach the assessed potential.

12. Strategies and outcomes:

A Sustainable livelihood framework (SLF) was designed in consultation with experts of planning process, consultants, academia, community leaders, officials, NGOs and civil societies. The key sectors identified under SLF after several rounds of discussion include;

- Water conservation and irrigation
- Agriculture
- Management of forest & its Produce
- Responsible tourism
- Handicrafts and garments
- Entrepreneurship development
- Education and skill development, sports of local interest
- Public participation and governance

The consultation were focused around the following to make it objective oriented;

- Political Economy
- Financial allocation
- Functionality of support system and
- Capacity needs

Widespread discussions were held with various stakeholders in the district to get an insight in the dynamics of the development process. Besides individual discussions, community based consultations, physical survey of selected areas, a meeting was convened in Jagdalpur on the 24th June, 2019 where the RGICS team from Delhi and the state interacted with a cross section of people. Discussions were held with people from all walks of life such as agriculturists from villages, members of women self help groups in tribal and other areas, local artisans, businessmen and officials of the chamber of commerce, young entrepreneurs, students, agricultural scientists, lawyers, members from academia and the media, officials of non-profit organisations, social and political leaders and government officials, including the District Collector and the Chief Conservator of Forests. Visits were made to the farms of the horticultural university and to the office of the Coconut Development Board as also to individual farms of progressive farmers.

Accordingly, the issues were analysed as per the framework provided as a part of the study and as a preliminary step towards the rolling out of the Policy Lab. Considering space limitations, all types of constraints are bunched in following sections. Finally, some suggestions to make Bastar a more Samarth district are included.

The sector specific outcomes have been briefed here for reference;

12.1. Water conservation and irrigation:

Statistical snapshots of irrigation coverage: (Area in Ha)

Total area available for irrigation (NIA+ Fallow)	217016
Irrigation potential created	41846 (19%)
Net irrigated area (Total area irrigated at least once)	27221 (12.5%)
Area irrigated by canal/Channels	6073 (2.8%)
Area irrigated by wells	465 (0.2%)
Area irrigated by Tanks	2750 (1.26%)
Area irrigated by tube wells & other sources	17933 (8.26%)

Political economy:

The above table clearly reflects the outreach of irrigation facility in the district. This outreach has been obtained through a period of 10-20 years. The data related to functionality of these facilities is missing. During the community discussions we observed that most of the facilities have become non functional due to poor maintenance and lack of community ownership. The community treat these facilities especially canals, channels, tanks and other sources as property of govt. and Panchayats. The wells and tube wells are mostly used by the farmers near to these sources. The small and marginal farmers of the district which constitutes the larger segment of community are mostly deprived of these facilities and are forced to depend upon the rain. Tanks and tube wells have mostly been installed near farm lands of influential persons of the community. Despite potential the generic planning approach has restricted the performance of irrigation sector to only 12-15% in terms of net irrigated area.

The district is blessed with rivers like Indrāvati and its tributaries which providewater for irrigation and other uses even during the summer. The average annual rainfall of the district is very nearer to normal prescribed rainfall for the region. The community shared that the ground water is available at 70-80 fts which supports the agriculture activities during kharif significantly. The mono cropping pattern of agriculture may be attributed to this.

No significant activities under water conservation have been observed in the district. Rain water either irrigates the farm lands or wasted due to lack of water conservation initiatives. Most of the ponds available in the district either dries up or provide muddy water during summer restricting its use for limited purpose.

Financial allocation& Functionality of support system:

During discussion and stakeholder's consultation it emerged that except department other stakeholders are unaware about the budget provisions for sectors. The finances are allotted to the department by the district magistrate with list of activities to be completed in the respective financial year. Mainly two departments PHED and irrigation departments are responsible for irrigation and water needs of the community. The schematic convergence has been found to be missing grossly among the two departments leading wastage of resources. The process of work allocation is also very complicated and does not provide any space for community involvement. The real work starts on ground after the lapses of third quarter. The limited time, lack of community involvement and other constraints affects the quality of work substantially.

Capacity needs:

During the community discussion and stakeholder's consultation, it emerged that there is huge gaps among community and local officials of the department on needs of water management and conservation. Larger percentage of water at different sources is wasted which could have been utilized for productive outcomes. To quote a few, Water logging has been observed at most the hand pumps,

wells, tanks and ponds. This has resulted into spread of epidemics like malaria, jaundice; fever etc. issues of water logging can be addressed through construction of soak pit near water sources. This besides recharging ground water can also address the issues of health and environmental conservation. Te waste water at sources can also be channelized to irrigate back yard farms or kitchen gardens. There are numerous such uses of waste water which can be done through capacity building and community involvement.

Way forward:

- Formation of Water user groups and build their capacity on water management & conservation
- Community should be involved right from planning to execution
- Planning should start through community consultation
- Annual plan shouldcategorically contain the status of existing water bodies, survival cost, repair & maintenance costetc. and finalized through community consultation
- Budget constraints should be shared with community with all transparency
- Budget planning should include cost of maintenance of existing water bodies and cost of creation of new infrastructures in ratio of 20:80
- Rejuvenation and recharge of existing water bodies involving community on wages basis
- Creation of new community ponds of smaller capacities to cater the needs of 3-4 farmers

12.2. Agriculture and allied sector:

Statistical snapshots of Agriculture and allied sector: (Area in Ha)

Total area reported	403003
Cultivable waste land	46210 (11.44%)
Current fallow	15780 (3.90%)
Other fallow	12500 (3.10%)
Net sown area	217016 (53.84%)
Total Cropped area	226410 (56.18%)
Area cultivated more than once	16685 (7.68%)
Cropping intensity	118

Political economy:

The district falls in the Agro climatic zone-VIII, eastern plateau & hills. The climate is moderate and soil type is predominantly sandy loam and clay providing good opportunity for the growth of Agriculture and allied sector. The statistics above itself explain the existing condition of Agriculture in the district. The agriculture provides 30% f the livelihood to rural community. The nature of agriculture is mostly rain fed and mono cropped in more than 80% of the village and cultivation is done on the own land or rented land. Owing to rain fed character the cultivation is done during kharif season. Paddy is the main crop of the district and cultivated by more than 80% of the farming community for their own consumption. Commercial cultivation of Paddy is substantially low to 5-8%. However the famer community is skilled

and know the distress cultivation techniques. Maize is cultivated just after the harvesting of paddy to better utilization of land moisture. Famers are also skilled on multi cropping. Urd, arhar, maize etc. are cultivated along with the paddy. Majority of crops are cultivated for self and family consumptions. Farmers do not have any idea about the commercial use and value of crops like maize. The small land holding and use of fertilizers and pesticides are minimal (Approx.4.65 kg/Ha) leading to low production of crops.

Tribes constitute 62.40% of the total rural population having strong faith and affiliation to nature. They prefer traditional practices and values. They are reluctant towards adoption of new technologies, practices and innovations. Their habitations are sparsely located and plasticize agriculture activities on lands adjoin to habitations. They largely depend on the seeds grown either by themselves or community. They still prepare their farm land by bullock and wooden plough. All the traditional cultivation, harvesting and storage practices are visible in the rural areas. These all together have contributed to low production (8.53 Quintals/ha) of paddy which less than one thirdof national average of paddy production (3-5.5 tns).

Financial allocation& Functionality of support system:

The economy of India is largely agrigarian, as livelihood of more than 70% of the total population is based on agriculture and allied activities. Thus sector enjoys larger berth in the budget and each five year plan. Multiple sectors either directly or indirectly contribute to Agriculture or allied sectors. The lack of unified approach and sectoral convergence the contribution of agriculture and allied sectors to GDP has been restricted to only 17-18%. The total financial allocation is divided among multiple sectors which utilizes the funds as per their departmental mandate. Every department prepares schemes as per their departmental mandate and schemes are implanted just to utilize the fund and achieve their annual target. Community needs and involvement has been found to be missing grossly during preparation of developmental schemes. The inadequate financial allocation for creation of new PHM infrastructure and maintenance of existing PHM infrastructures has significantly restricted the production of agriculture and horticulture crops in the district and their access to potential markets.

Capacity needs:

Large gaps have been observed among the key stakeholders of the sectors on farm preparation, crop planning, crop diversification, soil health management, supply chain management and post harvest management etc. Larger population of the district belongs to tribes who have strong affiliation to their age old cultivation practices. However, they have sound knowledge of crop management and scientific storage with use of locally available resources. This can be used to customize the design of PHM infrastructures as per the local needs. The youth segment of the community seems to have exposure of new technology, farm mechanization, innovation etc.to some extent. However they substantially lack capacities on the above.

Way forward:

- Encouraging and incentivizing youth involvement in the agriculture activities
- Incentivizing their crop diversification efforts
- Building capacities of farming community on the multi cropping system
- Shifting traditional crops by cultivation of high value and low perishability horticulture crops like, Elephants Yam, Turmeric, Ginger etc
- Promoting organic farming
- Encourage cultivation of medicinal and herbal plants
- Encourage community farming
- Providing market support to farm outputs
- Promoting organic farming
- Providing training on value addition to farm output to fetch better returns
- Linking farming community youths to units of agri extension services
- Providing PHM infrastructures and processing units