

CRISIL Risk and Infrastructure Solutions Limited

Commerce and Industries Department

Development of Special Investment Region at Dharwad

Concept Note

April 2012





Abbreviations

Acronym	Definition
ASI	Annual Survey of Industries
ASIDE	Assistance to States for Developing Export Infrastructure and other Allied Activities
ASSOCHAM	Associated Chambers of Commerce and Industry of India
BPO	Business Process Outsourcing
CEDOK	Centre for Entrepreneurship Development of Karnataka (CEDOK)
CRIS	CRISIL Risk and Infrastructure Solutions Limited
CRISIL	Credit Rating and Information Services India Limited
DIPP	Department of Industrial Policy and Promotion, Government of India
EIA	Environmental Impact Assessment
EPP	Environment Protection Plan
GDP	Gross Domestic Product
GTTC	Government Tool Room and Training Centre
ICT	Information, Communication and Technology
ISO	International Standards Organization
ITES	Information Technology Enabled Services
JSW	Jindal South-West
KCTU	Karnataka Council for Technological Upgradation
KIAD	Karnataka Industrial Areas Development Act
KIADB	Karnataka Industrial Areas Development Board
KILT	Karnataka Institute of Leather Technology
KSCCF	Karnataka State Coir Co-operatives Federation
KSCDC	Karnataka State Coir Development Corporation



Acronym	Definition
KSFC	Karnataka State Financial Corporation
KSHDC	Karnataka State Handicrafts Development Corporation
KSIIDC	Karnataka State Industrial Investment Development Corporation
KSSIDC	Karnataka State Small Industries Development Corporation
KUM	Karnataka Udyog Mitra
KVIB	Karnataka State Khadi and Village Industries Board
LIDKAR	Leather Industries Development Corporation of Karnataka
MISP	Master Infrastructure Service Provider
NDDP	Net District Domestic Product
NIMZ	National Investment and Manufacturing Zone
NMP	National Manufacturing Policy
PIA	Programme Implementing Agency
PPP	Public Private Partnership
RCC	Reinforced Cement Concrete
RMB	Renminbi (currency of People's Republic of China)
SBU	Special Business Unit
SEZ	Special Economic Zone
SIA	Social Impact Assessment
SKDC	Suvarna Karnataka Development Corridor (Project)
SPP	Social Protection Plan
SPV	Special Purpose Vehicle
TECSOK	Technical Consultancy Services Organisation of Karnataka
VGf	Viability Gap Funding
VITC	Visvesvaraya Industrial Trade Centre



Contents

1. Executive Summary.....	1
2. Introduction.....	3
2.1 Project Idea.....	3
2.2 Approach & methodology	3
2.3 Study of earlier reports in this sector in the relevant area	4
3. Sector profile	5
3.1 Department of Industries and Commerce.....	5
3.2 Industry outlook.....	5
3.3 Key issues.....	6
4. Project.....	8
4.1 Description of the Project.....	8
4.2 Components of the Project	8
4.3 Description of the Site	8
4.3.1 Connectivity	9
4.3.2 Economic profile and regional strengths	9
4.4 Development Needs, Public needs & Planning Considerations	10
4.5 Best Case Studies for similar projects in India/ world	10
4.5.1 Dholera SIR, Gujarat, India.....	10
4.5.2 Shanghai region, China	11
5. Market Assessment	13
5.1 Industry sector in Karnataka.....	13
5.2 Opportunities & Demand projections.....	13
6. Project financials	15
6.1 Cost Estimation	15
6.1.1 Land related costs	15
6.1.2 Infrastructure costs.....	15
6.1.3 Commercial and residential development costs	15
6.1.4 Social infrastructure costs.....	15
6.2 Revenue streams	16
6.3 Funding available under various schemes	16
6.4 Discussions on the report	16



7.	Regulatory & Legal Framework.....	17
7.1	Applicable laws & Act and Legal Cover for the project	17
7.2	Legal & Regulatory framework.....	17
7.3	Key Issues	18
8.	Indicative environmental & social impacts	19
8.1	Environmental impacts	19
8.2	Social impacts.....	19
8.3	Mitigation measures	19
9.	Operating Framework	20
9.1	Risks and mitigation	20
9.2	Indicative Project Structure.....	21
9.2.1	Option 1: Multiple private sector partners.....	21
9.2.2	Option 2: Master Service Providers.....	22
10.	Way Ahead.....	23
10.1	Procurement Plan.....	24
11.	Annexure 1 – Agencies under the Commerce and Industries Department.....	25
11.1	Directorate of Industries and Commerce.....	25
11.2	District Industries Centres.....	25
11.3	Industrial wing of Zilla Panchayats.....	25
11.4	Boards and Corporations.....	26
11.5	Karnataka State Industrial and Infrastructure Development Corporation (KSIIDC).....	27
11.6	Karnataka Industrial Areas Development Board (KIADB)	27
11.7	Karnataka Small Scale Industrial Development Corporation (KSSIDC)	28





List of Figures

Figure 3-1: Investment approvals by SHLCC and SLSWCC in last 4 years	6
Figure 9-1: Multiple SBUs and multiple private sector partners.....	21
Figure 9-2: Master developers for infrastructure and land development.....	22
Figure 10-1: Project development framework for SIR	23



1. Executive Summary

Karnataka is at the forefront of industrialization in the country. Today, the state is one of the most attractive locations for future investments. In order to consolidate its leadership position, Karnataka now intends to provide a major thrust to infrastructure development through increased public private partnerships (PPP). In pursuance of this objective, CRISIL Risk and Infrastructure Solutions Limited has been mandated to work closely with the Commerce and Industries Department in identifying and mainstreaming PPP projects. The C & I Department has identified 5 priority projects one of which is the development of Special Investment Region (SIR) in Dharwad region.

Special Investment Region (SIR) is a concept which envisages developing an industrial eco-system which is backed by state of the art infrastructure and a regulatory regime that fosters rapid growth and development by instituting mechanisms that are founded in Good Governance. The SIR will be set up over an area of more than 50 sq. kms and would house all facilities that provide for the development of an entire ecosystem of industrial investment led development.

Dharwad region is approximately 450 kms from Bangalore. Typically, Dharwad has an agro-based economy and is a key centre for food processing activities. Dharwad is located on the proposed peninsular region industrial development corridor (PRIDe) and will derive benefits of the link between Bangalore and Mumbai. The development of the SIR would be fuelled with the development of this industrial corridor.

The current report examines the possibility of developing an SIR in the Dharwad region and also evolves a development framework to initiate the development of the SIR. The report observes that the most critical decision with respect to SIR development will to put in place a legislative framework to enable the development of the SIR. The legislative framework would typically outline the institutional framework for the SIR viz. the approval authority for all investments within the SIR, the planning and regulatory authority, the mechanism for developing infrastructure, the regulation of development, the agency responsible for developing infrastructure, the tariff regime (bulk infrastructure in case public private partnerships are sought in downstream infrastructure development). The development of SIR would require the following institutional framework:

- The **approving authority** shall consider all proposals for investments within the SIR and would provide approvals for the same. This authority can reside within the Commerce and Industries Department or can be formed through a joint representation of the C & I and the Infrastructure Development Department.
- The **planning and regulatory authority** shall prepare master plan with land use zoning for the entire SIR and will define the overall development mix for the SIR. Further this authority shall also lay down norms for development in the form of development control regulations. An appropriate authority should be constituted for the SIR. This authority shall also regulate developments within the SIR
- The **project implementing agency** shall be responsible for the development of trunk and downstream infrastructure within the SIR. The trunk infrastructure shall include roads, water supply systems, sewerage and storm water drainage and any other supporting facility as may be necessary. This agency shall also undertake development of transportation systems for the SIR viz. Bus Rapid Transit Systems, Metro Rail, Airport (if necessary), Helipads etc.

The proposed project development framework envisages that the project implementing agency will house special business units (SBU) for infrastructure development as well as land development



functions which would in turn rope in private sector partner for development of the said services. Options for the SBUs have been analyzed in the following manner:

- Separate SBU for each infrastructure component and an SBU for land development – this option will require that a lot of synergy is brought between the SBUs in order to deliver services in an integrated manner. This option will also mean that the tenants would have to approach separate entities for service provisioning related issues.
- Two SBUs for infrastructure services and land development services – this option will ensure that services are developed in an integrated manner and the tenants will have only one single point of contact in case of service issues.

It is recommended that the second option be chosen for ensuring seamless service provisioning in the SIR.

The potential cost components and the revenue components have been studied and have been identified. No actual cost identification is possible at this stage since the nature and scale of projects is unknown at this juncture.

The immediate task for kick starting the development of the SIR will be to delineate an SIR and draft an SIR Act. While the act is in the final stages of formulation, the constitution of the planning authority can be initiated along with the constitution of the project implementing agency (PIA). Once the PIA has been constituted, technical consultants should be hired to prepare a master plan and infrastructure plan for the SIR. Post this, bidding can be initiated for the selection of private sector partners as master infrastructure service providers and master developer for land services.

The report also outlines a procurement plan for the SIR which focuses upon the key steps that are required to be undertaken.



2. Introduction

2.1 Project Idea

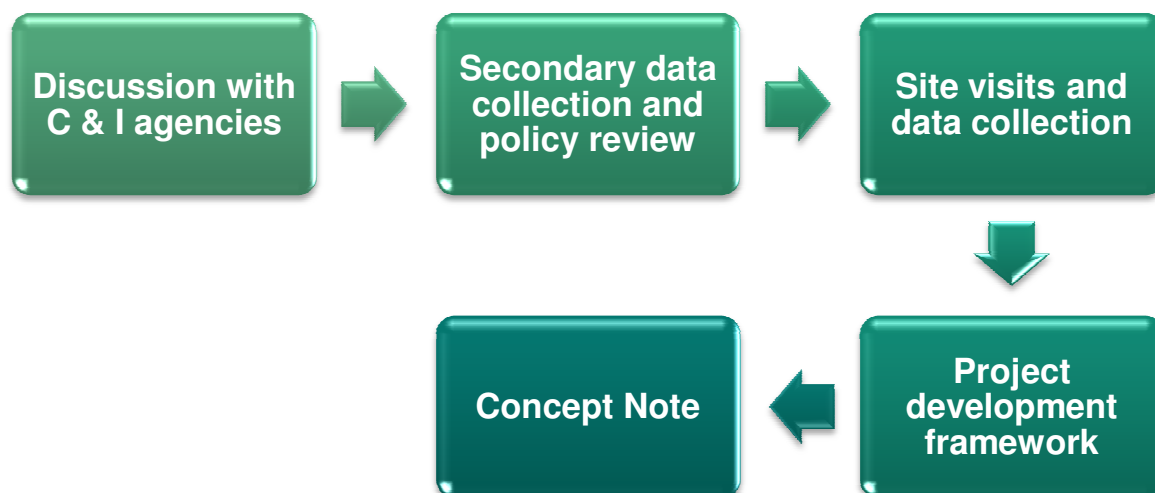
Special Investment Region (SIR) is a concept which envisages developing an industrial eco-system which is backed by state of the art infrastructure and a regulatory regime that fosters rapid growth and development by instituting mechanisms that are founded in Good Governance.

An SIR, by definition, targets specific sectoral investments which could be from the spectrum of industries or service sector. The SIR concept is derived from the original Petro-chemicals and Petroleum Investment Region (PCPIR) policy of the Government of India. The salient features of an SIR may be:

- A specifically delineated investment region for domestic and export led production
- Area: 50 square kilometres and above – large processing area earmarking
- May include one or more SEZs, Industrial Parks, Free Trade & Warehousing Zones, Export Oriented Units, or Growth Centres
- Could cover existing settlements/industries & estates/ services. The State government may not acquire the entire area but notify the same for proper planning and zoning to ensure coordinated development
- Depending on regional strengths and the nature of investments sought, an anchor tenant may be chosen
- Internal infrastructure may be developed and managed by a Developer or a group of Co-developers
- External linkages will be provided by Govt. of India and the concerned state government
- The development and investments in an SIR will greatly hinge upon the state government creating an enabling regulatory framework that can foster development and growth.

2.2 Approach & methodology

The approach and methodology adopted for the development of this concept note has been outlined in the diagram below.





2.3 Study of earlier reports in this sector in the relevant area

Since the Special Investment Region (SIR) is a new concept, there are no previous studies that are available as a reference source that may have been prepared by the state. We have, however, reviewed studies and documents available in the public domain for the SIR being developed by Gujarat.



3. Sector profile

3.1 Department of Industries and Commerce

The Department of Industries and Commerce acts as a catalyst for the overall development of the industrial sector through effective discharge of developmental and facilitation roles. With a view to promote investment and trade, the Department formulates and implements the Policies of the State, Identification of Sectoral Advantages of the State and Human resource development for sustainable and growth-oriented industrialization has been a crucial role of the Department. Facilitating the take off of infrastructure projects that boost the industrial growth has also been the Department's forte. The Department helps enhance the competitiveness of domestic industry through modernization, technology upgradation and adoption of best practices. It also provides a forum for entrepreneurs and industrialists through their associations to represent their needs to the Government, which translates into Policies of the State.

Some of the crucial infrastructure projects facilitated by the Department include Growth Centers across the State, Export Promotion Industrial Parks, International Technology Park Ltd., Electronic city, Food and Agro-technology parks, Agro Export zones, Special Economic Zones, Bengaluru International Airport, etc.

The Department is able to reach out to the small businesses as well as Industrial Houses by a great degree of decentralization within the organizational structure. The Department functions through the Districts Industries Centres, various Boards Corporations and Special purpose vehicles. The implementation of Policies of the Government is done through various schemes and the implementation of these schemes is decentralized for faster delivery of services.

The Department has established the Single Window Mechanism for faster, single point clearances to be given to projects seeking infrastructure facilities/incentives/concessions and help in establishing industries and businesses in Karnataka. Karnataka Udyog Mitra is the nodal agency under the Single window set up.

The Department operates through several administrative units viz. the Directorate of Industries and Commerce at the state level, District Industries Centres at the district level, Industrial wings of the Zilla Panchayats and various Boards and Corporations. A brief on each of the wings of the department has been included in Annexure 1.

3.2 Industry outlook

Karnataka is considered as one of the most desired destinations for industrial investments in the country. The State has been able to adapt to the continually changing investment climate and has been well prepared to meet needs of the investors. Karnataka is also home to large public sector industrial undertakings, large privately owned industries like steel sugar, textiles etc., In recent times, Karnataka has emerged as the leader in IT & BT and knowledge based industrial sector, making rapid strides in IT & computer related industries and biotechnology with a strong research and development base. The State has a number of traditional cottage, handicrafts, micro enterprises like handlooms, power looms, silk weavers, khadi and village industries etc.,

The state, in pursuance of its investment solicitation agenda, organizes a Global Investors Meet (GIM) every 2 years which is a mechanism to reach out and solicit investments from across the world. The



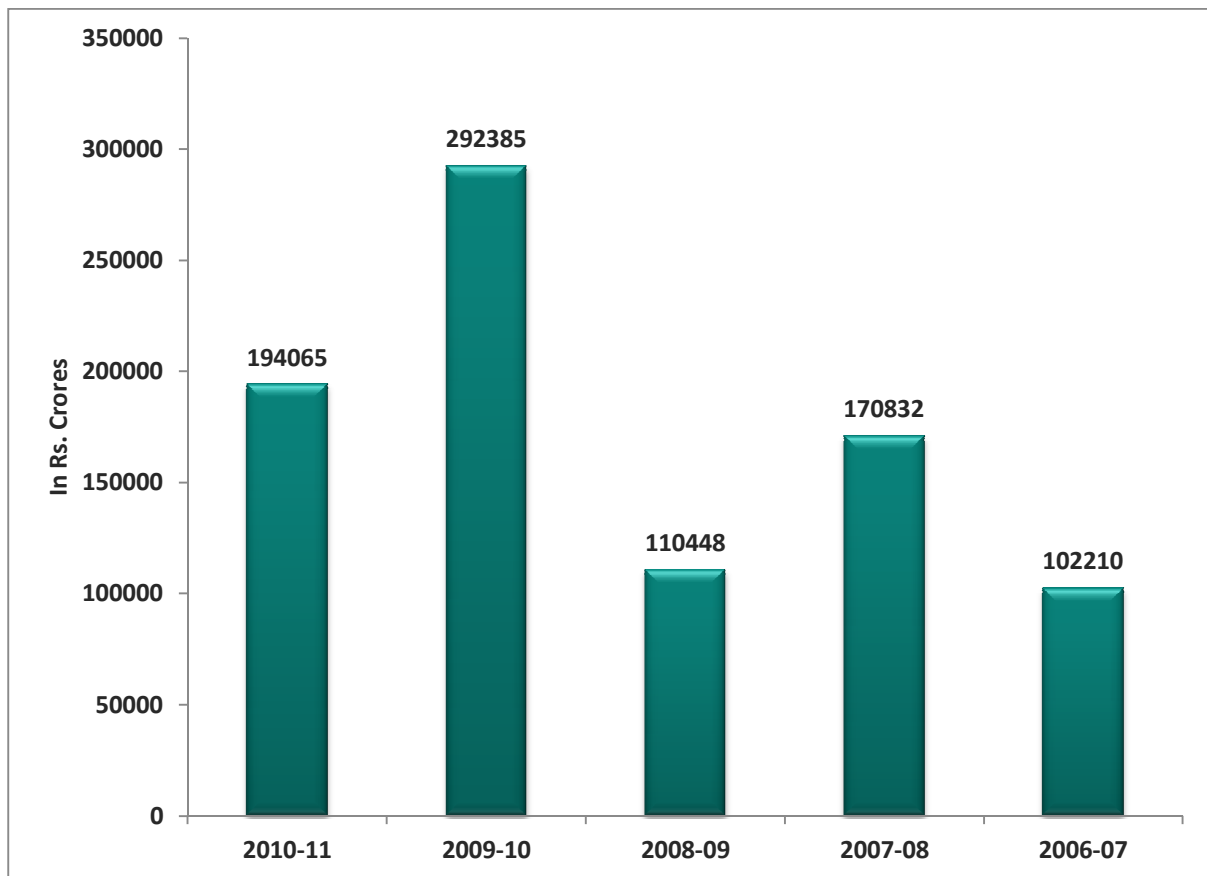
last GIM was organized in 2010 and was a major success wherein MOUs worth Rs. 3.92 lakh crores were signed with 389 companies which would provide employment for 710000 people.

The investment proposals in Karnataka are handled by a two-fold mechanism. The State High Level Clearance Committee (SHLCC) approves projects worth more than Rs. 50 crores and is headed by the Honourable Chief Minister of the state. The State level Single Window Clearance Committee approves projects with investments between Rs. 3 crores to Rs. 50 crores and is headed by the Honourable Minister for Large & Medium Industries.

The SHLCC, in the last 3 years, accorded approvals for a total of 340 projects with a total investment of Rs. 577,000 crores. These projects would create employment for 1.2 million people.

The SLSWCC, in the last 3 years, accorded approvals for a total of 1112 projects with a total investment of Rs. 19898 crores. These projects would create employment for over 360,000 people.

Figure 3-1: Investment approvals by SHLCC and SLSWCC in last 4 years



It is evident that the state has been continuously attracting investments and is gradually begging to consolidate its position as a leader on the industrial landscape of the country.

3.3 Key issues

Since the Commerce and Industries Department operates through a host of agencies that are mandated to carry out various tasks specified in their business rules. This creates a complicated institutional framework where sometimes coordinating the activities of all the agencies becomes cumbersome and thereby agencies work in silos and the intra-agency communication does not occur.



Also, not all agencies of the C & I are accustomed to undertake projects on a PPP basis. Thus far, KSIIDC, KIADB and KSSIDC (only in a very limited manner) have attempted projects under the PPP mode with varying degrees of success. The institutional capacity and preparedness of the agencies for managing projects under the PPP mode is, at best, limited¹. Capacity building of the agencies to successfully develop and manage PPP projects is a critical area that the Department should focus upon.

¹ KSIIDC is the only agency that has successfully undertaken projects under the PPP mode. KIADB's and KSSIDC's attempts have met with limited success



4. Project

4.1 Description of the Project

The project envisages developing an SIR in the Dharwad region. The SIR will attract specialized industries and entrepreneurs will be provided with state of the art infrastructure facilities in order to set up their units. The SIR will be an integrated development with an amalgamation of several types of industries which may be focused both on the domestic segment as well as the export segment. The SIR will also provide a platform for captive developments which may be required for specific industry types with large footprints.

4.2 Components of the Project

The SIR will be an integrated development which can include, but not limited to, following components:

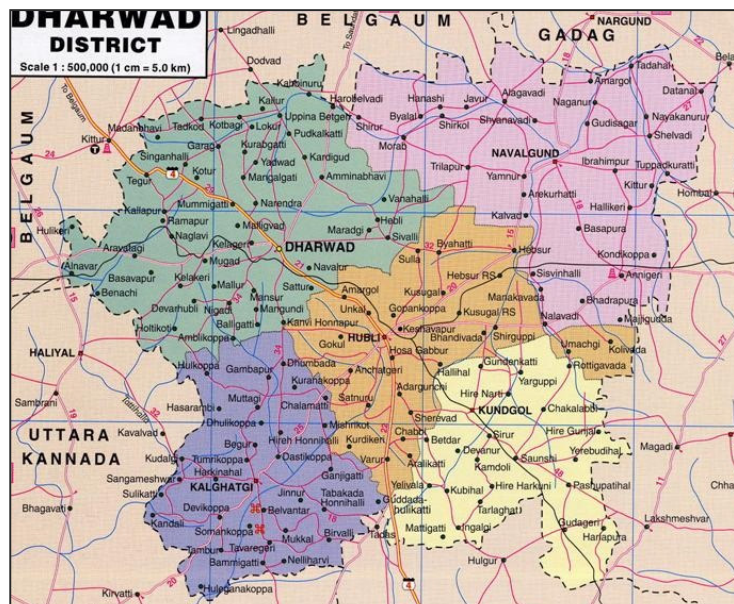
- Residential zones
- Industrial zones
- Recreation zones
- Education zones
- Central business district
- State of the art transport and other infrastructure facilities

4.3 Description of the Site

Dharwad is located over 400 km northwest of Bangalore, on the edge of the Western Ghats. Dharwad city is the administrative capital of the district. Hubli, the twin city of Dharwad is also an important industrial centre of the district. It consists of 5 Talukas and has a population of 1,846,993 according to the 2011 census.

The district has the second highest percentage of urban population in Karnataka after Bangalore, and enjoys a healthy literacy rate of 71%. Agriculture is the mainstay of the economy of Dharwad. The district is famous for the Dharwad Cotton Hybrid (DCH) variety of cotton. Apart from this, sugarcane, wheat, variety of pulses and fruits like Alphonso mangoes and Guavas are also cultivated.

Dharwad is fast growing in industrial prominence with the setting up of a 30000 unit manufacturing facility for buses in 2009 which is a joint venture between Tata Motors and Marcopolo of Brazil. Hero group is also contemplating making a large investment in the region.





4.3.1 Connectivity

- **Road:** The district is well connected by national NH-4 and NH 63 and NH 218 to the State capital Bangalore, Goa, Pune, Mumbai. NH4 through Dharwad taluk connects to Hubli – Bangalore on one side and Belgaum – Mumbai on the other
- **Rail:** Both Dharwad and Hubli are well connected by rail to other parts of the country. Hubli is a major rail junction on the Mumbai to Bangalore route and for trains to Bijapur & Hospet. Hubli is an important junction in the rail route between Bangalore and Goa
- **Air:** Air connectivity at Hubli is available at a distance of 25kms and flights are operating between Hubli and Bangalore. Efforts are being made for air connectivity from Hubli – Mumbai
- **Port:** The nearest seaport is located at a distance of 172kms at Karwar. Another important port the region can take advantage of is the one at Mangalore (350 kms away)

4.3.2 Economic profile and regional strengths

Hubli is an important industrial centre with more than 3,000 small & medium industries. It is also the main trading centre for agriculture produce. Farmers from all over the state sell their produce here. The district has many industrial sectors - engineering items, Industrial Valves, Electrical goods and agricultural implements, machine tools industries, electrical, steel furniture, food products, etc. Industrial valves manufactured in Hubli, meet the nation’s major share of requirement.

The Net District Domestic Product (NDDP) of Dharwad district at current prices is Rs. 10645 crores which is roughly 3.4% of the State Domestic Product.

Karnataka Industrial Areas Development Board (KIADB) has developed several industrial areas in the Dharwad region.

Dharwad is located on the Bangalore-Pune 4 lane National Highway, at a distance of 410 kms from Bangalore and 675 Kms from Mumbai. National Highway No 63 connects to Karwar and Hyderabad. National Highway 218 connects to Solapur. The Hubli airport is at a distance of 20 kms, Belgaum airport at a distance of 50 Kms and Goa airport at a distance of 135 kms.

The Karwar port at a distance of 140 Kms from Dharwad is connected by a national highway. Goa port is at a distance of 135 kms from Dharwad. Dharwad also has broad guage rail connectivity to Bangalore, Mumbai and Hyderabad and Goa.

Industrial Area	Area (in acres)
Mummigatti, Kalegeri and Belur	3383
Lakamanahalli	79
Raipura (Phase I &II)	366
Gokula	36
Sattur	93
Gamangatti	510
Tharihalla	315
Total	4782

Hubli, the twin city of Dharwad, a growing Commercial, Industrial and Educational Centre has an STPI and an electronic city to cater to the needs of electronics and IT industries. Dharwad is also an education hub with the presence of Karnataka University and the University of Agricultural sciences. Presence of graduate and post graduate colleges provides skilled manpower.



Major industrial investments include investments from Kirloskar Electric, Telcon, Murdeshwar Ceramics. There are 8 Industrial Areas with 3294 acres of developed land in the district including Growth Centre at Belur, 12 kms from Dharwad on NH-4.

4.4 Development Needs, Public needs & Planning Considerations

In an increasingly competitive environment across the world, attracting investments often proves to be a challenge. Several countries as well as states within India are vying for investments and are constantly innovating to develop lucrative propositions to attract investments.

The SIR concept is one such innovation which envisages developing a region targeted on providing comprehensive enabling services for industries. Karnataka has been a leading state in terms of attracting investments. The development of the SIR will further boost the consolidation of this leadership position.

The regional disparities in development within Karnataka have been highlighted in several analyses over a period of time. The development of the SIR will serve to dissipate some of this disparity and would bring development and investments to other parts of the state which have otherwise been concentrated in and around Bengaluru.

The development of the SIR will also provide large employment avenues to the populace in the Dharwad region with several investments being concentrated in the SIR. Thus the overall benefit will also accrue to the public at large.

4.5 Best Case Studies for similar projects in India/ world

4.5.1 Dholera SIR, Gujarat, India

For the purpose of deepening the understanding of how an SIR would grow, we have extensively studied the Dholera SIR model which the Government of Gujarat is actively promoting and developing.

The Dholera SIR is proposed over an area of over 900 sq. kms and is largely Greenfield in nature. The developable area is earmarked to be over 500 sq. kms. The Economic activity area would be spread over 360 sq. kms. The Unique Selling Proposition (USP) of the Dholera SIR is that it will be a integrated development area which would provide world-class infrastructure and connectivity to the investors in the region. It is proposed that a new International Airport will be developed within the SIR and the road and port connectivity would also be enhanced.



Total Area : 903 sq. kms – green field
Developable area: 547 sq. kms.
Economic activity area : 360 sq. kms
World-class infrastructure & connectivity
Central spine express way & Metro Rail to link the SIR with mega cities
Airport & Sea Port in the vicinity
Proximity to mega cities: Ahmedabad, Bhavnagar, Vadodara
Benefit of sea coast, nature park, golf course
Premium civic amenities
Logistic support of the Dedicated Freight Corridor (DMIC)
Benefits of high impact Delhi Mumbai Industrial Corridor (DMIC)

The institutional and regulatory framework for the SIR has been defined through an SIR Act. The act proposes to plan, develop and regulate the development within the SIR through a three tier institutional mechanism which allows for various levels of governance interventions.

4.5.2 Shanghai region, China

Shanghai stands at the epicentre of China's extraordinary economic development. China has experienced double figure growth over the last decade: the Chinese economy has quadrupled since 1978 and is set to become the world's largest economy by 2020. Shanghai has consistently outperformed this growth rate, standing at 19% in 2003.

As China's commercial hub, Shanghai exerts a magnetic attraction on foreign investment. This is done through development of various targeted investment zones which provides multiple incentives for industries to invest. The following zones have been developed in the Shanghai region:

- Waigaoqiao Free Trade Zone
- Zhangjiang Hi-Tech Park
- Shanghai Zizhu Science-based Industrial Park
- Qingpu Industrial Zone
- Jinqiao Export Processing Zone
- Lujiazui Finance & Trade Zone
- Songjiang Industrial Zone
- Jiading Industrial Zone
- Pudong Kangqiao Industrial Zone
- Baoshan Urban Industrial Zone



Each of these zones provides unique feature and thereby attracts foreign investments at a very large scale.

4.5.2.1 Pudong New Area – a case in point

Pudong is an area of Shanghai, China, located along the east side of the Huangpu River, across from the historic city center of Shanghai in Puxi. Formerly a little-developed agricultural area linked only by ferries, Pudong has grown rapidly since the 1990s and emerged as China's financial and commercial hub. It is principally administered as the Pudong New Area, a district of Shanghai.



The area is divided into four distinct economic districts. Apart from Lujiazui Trade and Finance Zone, Waigaoqiao Free Trade Zone, the largest free trade zone in mainland China covering approximately 10 km² in north-east Pudong. The Jinqiao Export Processing Zone is another major industrial area in Pudong covering 19 km². Zhangjiang Hi-tech Park is a special area for technology-oriented businesses, covering 17 km² in central Pudong.



The Pudong area continues to experience rapid development, especially in the commercial sector, with 1.3 million square meters of prime office space reaching completion in 2008, more than the previous two years combined.

Pudong has also attracted considerable fixed asset and real estate investment, reporting 87.268 billion RMB in fixed asset investment and 27.997 billion RMB in real estate investment in 2008. The newest Disney Theme Park is now under construction in Pudong. It is planned to be operational by 2016.



5. Market Assessment

5.1 Industry sector in Karnataka

Karnataka is considered a pioneer in the field of industrialization in India. The state has been in the forefront of industrial growth of our country since independence. In the era of economic liberalization since 1991, the state has been spearheading the growth of Indian industry, particularly in terms of high-technology industries such as Electrical and Electronics industries, Information & Communication Technology (ICT) industries, Biotechnology industries and more recently in terms of Nanotechnology industries.

The Highlights of Karnataka's Industrial Growth performance are as follows:

- The annual survey of industries (ASI) figures indicate that Karnataka accounted for 5.53% of the total registered factories in the country, 7.10% of the fixed capital investment and 7.23% of the total Gross Value Added by the registered factories in the country
- Karnataka compared favourably to All-India in terms of labour productivity, input per worker, output per worker and wages per worker during 2005-06 to 2007-08
- Karnataka accounted for 5.64% of the total number of unorganized manufacturing enterprises and 5.42% of the total unorganized manufacturing employment in the country in 2005-06. In terms of gross value added per enterprise as well as per worker, Karnataka performed better than All-India and stood fourth among the states of India
- Under service sector, Karnataka accounted for 4.9% of the total enterprises and 4.8% of the total enterprise workers in the country. In terms of both gross value added per enterprise and gross value added per worker, Karnataka stood first in the country
- Karnataka has registered more than 12000 MSMEs and generated employment for more than 75000 persons during April-December 2010
- Karnataka is making rapid strides in terms of its important industry sectors such as food processing industries, textiles, sericulture, Information Technology and Bio-Technology industries
- Karnataka has been making impressive progress in e-Governance. Its e-procurement project won Futuregov Award 2010 for Best Business Practices in Asia's Public Sector for the year 2010.
- Growing number of SEZs presents another dimension of Karnataka's industrialization. This is however skewed towards IT/ITES sectors.
- Karnataka is an industrially peaceful State and therefore has salubrious industrial climate in the country. Naturally, therefore, according to the Investment Assessment Report of ASSOCHAM, Karnataka is the most favoured investment destination in the country today.

5.2 Opportunities & Demand projections

There are limited reference points available to outline the demand projections for the industrial sector. However, several references are available to the manner in which the industrial growth of the nation should span out. These have been described both in the Planning Commissions "Approach Paper to the 12th Five Year Plan" as well as the National Manufacturing Policy floated by the Department of Industrial Policy and Promotion (DIPP).

Planning Commission's approach paper observes that though the Eleventh Plan targeted growth in manufacturing at 10.0-11.0 per cent, actual performance is estimated to be only about 7.7 per cent. It is a matter of concern that the manufacturing sector has not shared in the dynamism of the economy



not just in the Eleventh Plan, but even in preceding Plan periods. As a result, the share of the manufacturing sector in GDP is only 15.0 per cent in India, compared with 34.0 per cent in China and 40.0 per cent in Thailand. It further observes that the manufacturing sector manufacturing must provide a large portion of the additional employment opportunities as opposed to agriculture for India's increasing number of youth. On the contrary it should be releasing labour which has very low productivity in agriculture to be absorbed in other sectors. While the services sector has been growing fast, it alone cannot absorb the 250 million additional income-seekers that are expected to join the workforce in the next 15 years. Unless manufacturing becomes an engine of growth, providing at least 100 million additional decent jobs, it will be difficult for India's growth to be inclusive.

In order to further the manufacturing sector growth, the Planning Commission has recommended the following strategic objectives for bringing change in the manufacturing sector in the next 15 years:

- Increase manufacturing sector growth to 12.0–14.0 per cent over the medium term to make it the engine of growth for the economy. The 2.0 to 4.0 per cent differential over the medium term growth rate of the overall economy will enable manufacturing to contribute at least 25.0 per cent of GDP by 2025
- Increase the rate of job creation in manufacturing to create 100 million additional jobs by 2025
- Emphasis should be given to creation of appropriate skill sets among the rural migrant and urban poor to make growth inclusive
- Increase domestic value addition and technological 'depth' in manufacturing
- Enhance global competitiveness of Indian manufacturing through appropriate policy support
- Ensure sustainability of growth, particularly with regard to the environment

The Karnataka Industrial Policy 2009-14 also lays down emphasis on promoting industrial development. The mission statement of the policy states the following:

- To create enabling environment for robust industrial growth
- To ensure inclusive industrial development in the State
- To provide additional employment for about 10 lakh persons by 2014
- To enhance the contribution of manufacturing sector to the State's GDP from the current level of 17% to 20% by the end of policy period

Thus it is amply clear that the industrial sector will receive significant push in the future from both the central government as well as the state government. It is expected that the Indian economy will reach the US \$ 6 trillion mark by the year 2020. In order to aid the achievement of this size of GDP, the key growth drivers will be industry and services. Industry is expected to increase its share in the GDP from the current 15% to over 25% by 2020.



6. Project financials

Given the fact that the SIR will be akin to an urban industrial area, it will be pre-mature to develop cost estimates for the SIR. Instead, it will be prudent to identify a set of cost components and potential revenue streams that may be available for infrastructure and land development. The following sections focus on identifying such cost and revenue components.

6.1 Cost Estimation

The scale of development of the SIR is akin to developing a new urban industrial area almost from scratch. Hence the cost components have been identified based on the guidance from the National Manufacturing Policy and also from our previous experience of working in urban areas.

6.1.1 Land related costs

The following land related costs are anticipated for the SIR:

- Land acquisition costs (wherever private lands are to be acquired)
- Land development costs

6.1.2 Infrastructure costs

The following infrastructure development related costs are anticipated for the SIR:

- Road development
- Water supply system
- Sewerage system
- Storm water drains
- Energy supply systems
- Telecom systems

6.1.3 Commercial and residential development costs

The following commercial and residential development costs are anticipated for the SIR:

- Neighbourhood shopping facilities
- Central shopping facilities
- Hotels and restaurants
- Convention centre
- Dormitory facilities for temporary workers
- Residential units for employees

6.1.4 Social infrastructure costs

The following social infrastructure development costs are anticipated for the SIR:

- Schools and colleges
- Hospital, dispensaries and clinics
- Community centres
- Cultural centres



The above mentioned cost components are indicative based on developments seen within similar industrial areas. There may be additional cost components involved depending on the development configuration of areas envisaged within the SIR. It is assumed that most of a these components will be developed on a public private partnership basis through Master Developers or even further downstream concessions.

6.2 Revenue streams

Based on the above components some of the revenue streams that are possible have been outlined below:

- Land sale and lease realization
- User charges for water supply (cross subsidy for sewerage), energy and telecom services
- Operation and maintenance costs for roads
- Lease rentals or use rentals for convention centre
- Lease rentals or sale realization for commercial facilities
- Lease rentals or sale realization for residential facilities
- Nominal lease rentals for social infrastructure viz. schools, colleges, hospitals, community centres etc.

6.3 Funding available under various schemes

The central government's viability gap funding mechanism allows for funding of up to 20% of the total project for projects under the PPP mode for projects that are otherwise financial unviable.

The state government also has a VGF mechanism which provides an additional 20% of the project cost over and above the central government's VGF funding.

6.4 Discussions on the report

While we have developed the report and have provided recommendations based on our assessment of the projects, we would like to further discuss the recommendations with the C & I Department officials and factor in their suggestions and recommendations as well.



7. Regulatory & Legal Framework

7.1 Applicable laws & Act and Legal Cover for the project

Currently, the Karnataka Industrial Area Development Act is perhaps the only legislative instrument available for provision of integrated industrial infrastructure across Karnataka. The instrument in its current form is unlikely to facilitate the development of the SIR.

For the development of an SIR, an enabling legislative instrument will need to be formulated, either as a separate Act or as an enabling amendment to existing instruments, which will lay the roadmap for the development of an SIR.

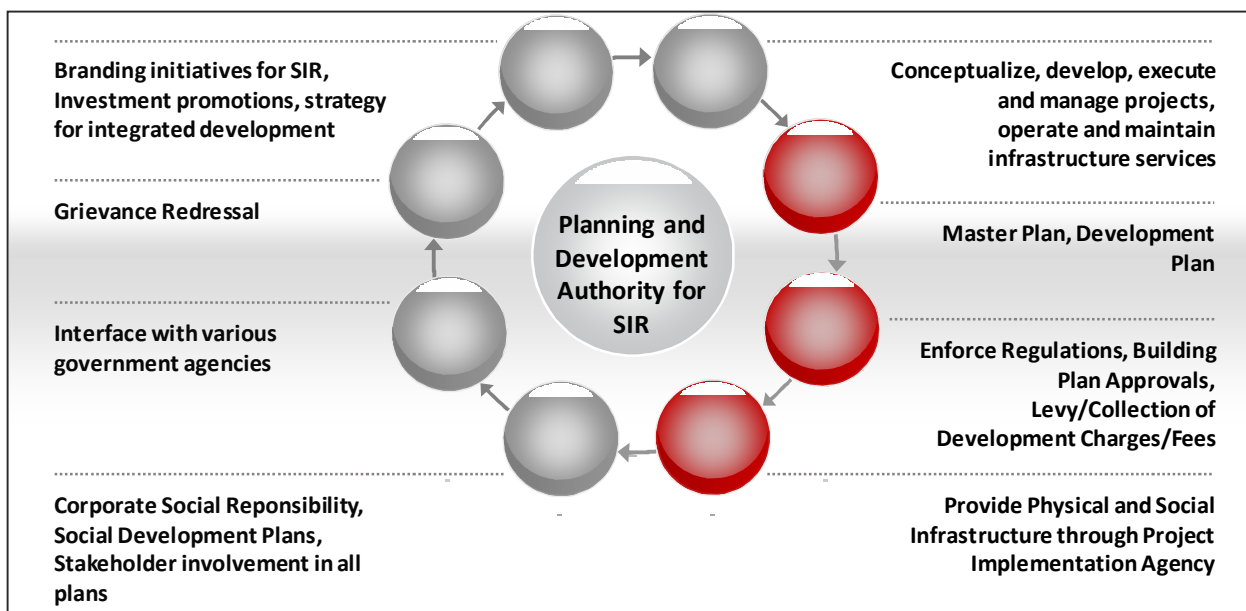
Since the SIR will be a specialized development, it is imperative that the necessary institutional framework is defined to ensure that integrated development of SIR is facilitated in a smooth manner.

The following section outlines a framework for the required legislative changes that can facilitate the development of the SIR.

7.2 Legal & Regulatory framework

The SIR development can be facilitated through an SIR Act which will primarily define the following:

- The institutional framework for the SIR viz. the approval authority for all investments within the SIR, the planning and regulatory authority, the mechanism for developing infrastructure, the regulation of development, the agency responsible for developing infrastructure, the tariff regime (bulk infrastructure in case public private partnerships are sought in downstream infrastructure development)
- The **approving authority** shall consider all proposals for investments within the SIR and would provide approvals for the same. This authority can reside within the Commerce and Industries Department or can be formed through a joint representation of the C & I and the Infrastructure Development Department
- The **planning and regulatory authority** shall prepare master plan with land use zoning for the entire SIR and will define the overall development mix for the SIR. Further this authority shall also lay down norms for development in the form of development control regulations. An appropriate authority should be constituted for the SIR. This authority shall also regulate developments within the SIR
- The **project implementing agency** shall be responsible for the development of trunk and downstream infrastructure within the SIR. The trunk infrastructure shall include roads, water supply systems, sewerage and storm water drainage and any other supporting facility as may be necessary. This agency shall also undertake development of transportation systems for the SIR viz. Bus Rapid Transit Systems, Metro Rail, Airport (if necessary), Helipads etc. The agency shall endeavour to bring in private sector partners for all developments within its scope of work. The private sector partner will be allowed to collect user charges (to be defined by the regulator authority in consultation with the executing agency)



7.3 Key Issues

The key issue for the development of the SIR is the creation of an enabling legislative framework. It is proposed that an SIR Act be promulgated in order to ensure that SIR development progresses without any legal and regulatory hurdles.

It is also critical that the environmental clearances for the industrial areas defined in the master plan should be secure upfront so that the entrepreneurs investing in the region do not have to go through the hassle of securing environmental clearances all over again.

The regulatory framework should also be designed in a manner where a “single window system” for statutory and other clearances is developed so as to facilitate setting up of industrial establishment in a quick and timely manner.



8. Indicative environmental & social impacts

8.1 Environmental impacts

The environmental impacts due to the development of the SIR would largely be in the form air pollution due to heavy construction and development activity. The development of SIR may also impact the ground water availability and quality due to tapping of ground water for use in SIR and discharge of effluents respectively.

8.2 Social impacts

The social impacts due to the development of the SIR are likely to be in the following categories:

- Loss of livelihoods – the development of SIR will be spread over a very large area and in order to bring consonance in accordance with the master plan, many agriculture lands may need to be acquired (only to the extent that fall within the SIR and have to be acquired for ensuring contiguous and continuous development). This will result in the loss of livelihood of the farmers
- Displacement – since the SIR will be spread over a very large area, it may become necessary to acquire lands which were otherwise being used for residential purposes by people. This will result in the displacement of people

8.3 Mitigation measures

The NMP mandates that a prior environmental clearance is obtained under the environmental impact assessment (EIA) rules, 2006. This will ensure that an EIA is carried out which will further distil various environmental impacts that are likely to occur. This EIA should also clearly layout an environment protection plan (EPP) in order to ensure that the impacts are mitigated right from the start.

Further, it will also be critical to carry out a social impact assessment (SIA) to clearly determine the extent and nature of the social impacts due to the development of the SIR. The SIA should also clearly mandate the preparation of a social protection plan (SPP) which should focus upon the rehabilitation and relocation of displaced person as well as provision of alternative livelihood for the project affected people.



9. Operating Framework

9.1 Risks and mitigation

The risk framework for this project has been outlined below:

Table 9-1: Risk mitigation measures

Risk Category	Risk implication	Mitigation measure
Sponsor risk	Department scraps projects under PPP mode	Termination payments in case of Department scrapping projects
Environment risk	Adverse impact on surrounding environment	Penalty clauses in case of default on Concessionaire’s part Environmental Impact Assessment to identify all risks in advance
Political risk	Change in government may put project in jeopardy	Termination payments in case of project being scrapped
Force majeure risk	Project is abandoned	Force majeure clauses in the concession agreement
Operating risk	Operations of the SIR are impacted (infrastructure service failures etc.)	Penalty clauses for stalled operations on account of concessionaire’s fault
Revenue risk	Revenue realization is sub-par	Protection clauses for the developer in case the revenues fall below threshold limit (depending on the nature of project)
Demand risk	Demand within SIR is low	Protection clauses for the developer in case the demand is lower than anticipated
Design risk	Overdesign of the project	Project design to be finalized in mutual agreement of concessionaire and department/SPV/appropriate agency
Completion risk	Completion of project is delayed	Penalty clauses for time overrun in the concession agreement
Cost over-run risk	Cost of projects are higher than anticipated	Developer to be responsible for cost controls; clauses for non-payment of additional costs on account of concessionaire’s fault



9.2 Indicative Project Structure

The planning and regulatory authority shall prepare a development/master plan for the area which will define the broad land use zoning as well as development control regulations.

The project implementing agency will develop an infrastructure master plan for the SIR and would develop the trunk infrastructure through the Public Private Partnership (PPP) route.

9.2.1 Option 1: Multiple private sector partners

To enable increased private sector participation, the executing agency may create Special Business Units (SBUs) which shall be focused upon a specific component of infrastructure development. These SBUs shall remain responsible for development and operation & maintenance of the trunk as well as downstream infrastructure developed within the SIR. The SBUs may invite private sector players to partner with them in the development and operation and maintenance of the infrastructure services.

Figure 9-1: Multiple SBUs and multiple private sector partners



The advantage with this option is that since all service are segmented across SBUs and private sector partners, the issue of overlap of roles and responsibilities will not arise. Each of the SBU has a specific business to maintain and hence can focus closely on improving service levels to match international standards.



The drawback with this structure is that this will require very high coordination efforts across SBUs as well as private sector partners which can impact services negatively at times. For the end-user of the services, this structure means interacting with several agencies which can be frustrating at times.

9.2.2 Option 2: Master Service Providers

The second alternative is that only two special business units are developed i.e. SBU for infrastructure services and SBU for land development and these SBUs in turn will appoint Master Infrastructure Service Provider (MISP) and Master Developer for large land parcels.

Figure 9-2: Master developers for infrastructure and land development



The advantage of this project structure is that there is a single entity responsible for all infrastructure services as well as land development services. This curtails the coordination efforts and provides for a single point entity that is held accountable for services. The end-user also has a single point of contact for all service issues that may come up.

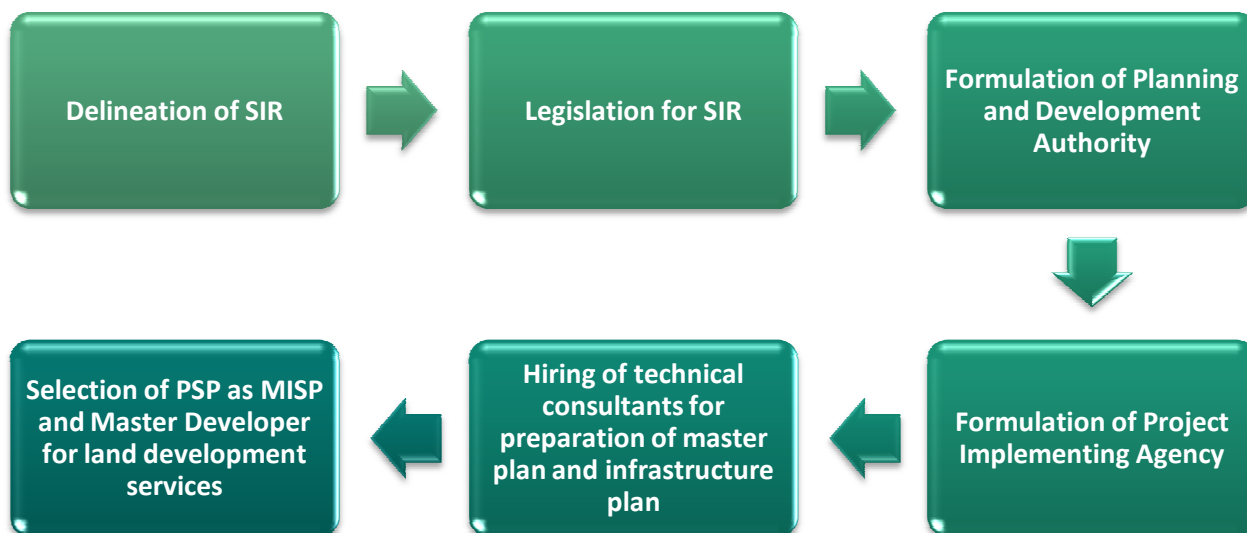




10. Way Ahead

In order to realize the development of an SIR, the first imperative is that an enabling legislation is formulated for development of an SIR. Once the legislation has been instituted, a Planning and Development Authority for the SIR should be appointed to provide an overall framework for development. Also, a Project Implementing Agency should be constituted to undertake infrastructure projects.

Figure 10-1: Project development framework for SIR



The Planning and Development Authority, upon constitution, shall hire a Technical Consultant to prepare a Master Plan (as per Karnataka Town and Country Planning Act) and also an infrastructure master plan. Meanwhile, the PIA shall float tenders for appointment of master infrastructure service provider and master developer for land development.



10.1 Procurement Plan

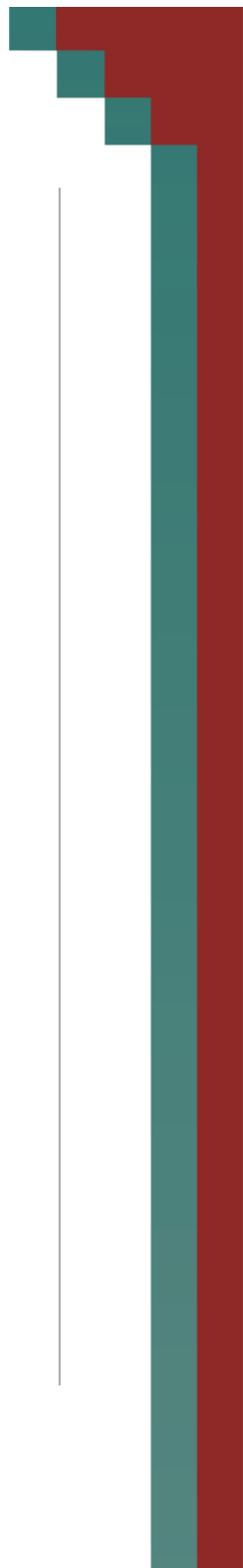
The procurement plan for the project assumes that the SIR legislation formation will consume a bulk of timeline for procurement of any services on this project. It is assumed that the SIR legislation may take about 8 to 10 months to come through.

While the SIR legislation formulation may be in the final stages, it will be useful to start constituting the Planning and Development Authority as well as the Project Implementing Agency. Once these are in place, a Technical Consultant may be hired for the preparation of a master plan (as per KTCP Act) and an infrastructure master plan.

Activity	M1	M2	M3	M4	M5	M6	M7	M8	M9	M10	M11	M12	M13	M14	M15	M16	M17	M18	M19	M20	M21	
Legislation for SIR		●	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Constitution of Planning and Development Authority								●	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Constitution of Project Implementing Agency								●	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Technical consultants for master plan and infrastructure plan																						
Selection of transaction advisors for project structuring and bid process management																						
Selection of master developers for infrastructre and land development																						

While the master plans are being prepared, the project implementing agency may invite bids for appointment of Transaction Advisors for facilitating appointment of master developers for infrastructure services as well as land development services.

The current procurement plan is spread over 21 months which can be shortened if the legislation for SIR can be mooted quickly.





11. Annexure 1 – Agencies under the Commerce and Industries Department

11.1 Directorate of Industries and Commerce

The main function of Directorate of Industries and Commerce is to carry out industrial development in the state and implement policies and schemes of Government of India and Government of Karnataka. The functions are grouped as under:

- Policy Initiatives for Industrial Development
- Industrial Promotion and Monitoring
- Project clearance and monitoring through Single Window and High level committees
- New scheme approvals
- Monitoring of Employment Generation programmes
- Institutional support to Institutions associated with industrial development
- Monitoring and Implementation of Government Orders issued by the State and Central Government
- Co-ordination with other Departments and Offices of the Government
- Participation in national and international trades and exhibitions to showcase the state in attracting investment
- Administrative issues of the Department

11.2 District Industries Centres

The District Industries Centres were created to become a key agency for promotion of small scale, village and cottage industries. The functions of the District Industries Centres are as follows:

- Registration of MSMEs
- Infrastructure assistance to entrepreneurs
- Implementation of incentive schemes of both state and central governments
- Employment generation programmes
- Implementation of sub-component plan and tribal sub-plan
- Entrepreneurship development and awareness programmes

11.3 Industrial wing of Zilla Panchayats

The main function of Industrial wing of Zilla Panchayath at the District level is to promote the village and cottage industries and to assist the artisans. The main functions are to:

- Provide training through various programmes
- Provide living cum work-sheds to artisans
- Provide seed capital to micro and small industries in rural areas
- Organize promotional campaigns in rural to assist artisans
- Provision of toolkits to artisans
- Undertake artisan survey
- Effect recovery of loans



11.4 Boards and Corporations

The Industries and Commerce Department has 16 Boards/Corporation functioning under it. These have been listed out below:

Sr. No	Name of the Board or Corporation/ Society	Website
1	Karnataka State Financial Corporation (KSFC)	www.ksfc.in
2	Karnataka State Industrial Investment Development Corporation (KSIIDC)	www.ksiidc.com
3	Karnataka State Small Industries Development Corporation (KSSIDC)	www.kssidc.kar.nic.in
4	Karnataka State Handicrafts Development Corporation (KSHDC)	www.cauverycrafts.com
5	Karnataka Industrial Areas Development Board (KIADB)	www.kiadb.in
6	Karnataka Udyog Mitra (KUM)	www.kumbangalore.com
7	Karnataka Council for Technological Upgradation (KCTU)	www.kctu.kar.nic.in
8	Karnataka State Coir Development Corporation (KSCDC)	www.karnatakacoir.com
9	Centre for Entrepreneurship Development of Karnataka (CEDOK)	www.cedok.kar.nic.in
10	Technical Consultancy Services Organisation of Karnataka (TECSOK)	www.tecsok.com
11	Visvesvaraya Industrial Trade Centre (VITC)	www.vitcblr.org
12	Leather Industries Development Corporation of Karnataka (LIDKAR)	www.lidkar.com
13	Karnataka State Khadi and Village Industries Board (KVIB)	
14	Karnataka Institute of Leather Technology (KILT)	www.kiltbangalore.com
15	Government Tool Room and Training Centre (GTTC)	
16	Karnataka State Coir Co-operatives Federation (KSCCF)	www.karcoirfed.com

Source: Industries and Commerce Department, Govt. of Karnataka website www.karnatakaindustry.gov.in accessed between 23rd January, 2012 and 23rd February, 2012



Of these Boards and Corporations, there are 3 key institutions that have experience undertaking Public Private Partnership (PPP) projects. These are KSIIDC, KSSIDC and KIADB. The following sections will provide a brief on these key institutions.

11.5 Karnataka State Industrial and Infrastructure Development Corporation (KSIIDC)

Established in 1964, Karnataka State Industrial & Infrastructure Development Corporation Limited (KSIIDC) has been greatly instrumental in the industrialisation of the State, especially in the large and medium sector. An important arm of the state in bringing industrial boom in various sectors, KSIIDC has assisted 135 start-up ventures through equity participation to the extent of Rs. 118.28 crores spread over the length and breadth of the State. KSIIDC has also extended financial assistance in the form of debt to core sector industries like Steel, Cement, Mining and Textiles and modern sector industries like Information Technology, Aviation, Tele-communication and other infrastructure projects to the extent of around Rs. 2223 crores. KSIIDC has been instrumental in establishing Jindal Vijayanagar Limited (presently JSW Limited), Vikrant Tyres Limited, Karnataka Antibiotics and Pharmaceuticals Limited, to name a few.

Over the years, the KSIIDC has broken beyond its conventional roles and has initiated implementation of infrastructure projects. One of the most significant projects is the development of the Bengaluru International Airport at Devenahalli which was executed under the PPP mode. Additionally, KSIIDC has also been entrusted to implement projects of Bengaluru Airport Rail Link, development of Devanahalli Business Park and development of tourism projects across the state in collaboration with IL & FS.

11.6 Karnataka Industrial Areas Development Board (KIADB)

Karnataka Industrial Areas Development Board (KIADB) is a wholly owned infrastructure agency of Government of Karnataka, set up under Karnataka Industrial Areas Development Act of 1966. This Board functions as per statutory provisions, rules and regulations enacted there under. The Board comprises of senior government officers in their ex-officio capacities. The Board of members meet regularly to take decisions and monitor the functions. KIADB holds pride in being the first government organisation in Karnataka to obtain ISO 9001 certification in the year 1997.

The key objectives of KIADB are:

- Promote rapid and orderly development of industries in the state
- Assist in implementation of policies of Government within the purview of KIAD Act
- Facilitate in establishing infrastructure projects
- Function on “No Profit – No Loss” basis

The functions that KIADB performs are:

- Land acquisition and development of industrial areas in the state
- Provision of basic infrastructure in the industrial areas
- Land acquisition for Single Unit Complexes
- Land acquisition for Government agencies for their schemes and infrastructure projects

Till date, KIADB has formed 132 industrial areas spread over 40000 acres across the State, and acquired land for nearly 400 Single Unit Complexes ensuring balanced industrial development in all regions with well thought out infrastructure and unique features. Additionally, KIADB has envisaged



several innovative projects like Agro -Tech Parks, Apparel Parks, Food Parks, Auto Parks, Hardware Park, Bio-Tech Park, EPIPs, Sector Specific SEZs, and Growth Centres.

KIADB is also the implementing agency for the ambitious Suvarna Karnataka Development Corridor (SKDC) project.

11.7 Karnataka Small Scale Industrial Development Corporation (KSSIDC)

A positive programme for assistance of small-scale industries was initiated towards the end of 1954 on the basis of a suggestion made by the international planning team sponsored by the Ford Foundation at the request of Govt. of India. Further, on the basis of the recommendations of the Central Small Scale Industries Advisory Board, state level organisations, to assist the small scale industries for procurement of scarce raw materials establishment of industrial estates etc., have been set up in all states. KSSIDC is one of such Corporations, established on 29th April 1960. The registered office of the Company started functioning at Bangalore in the State of Karnataka. The Company framed comprehensive and well-defined Memorandum of Association and Articles of Association which permit the Corporation to take up any activity aimed at the rapid development of small-scale industry.

The Corporation's principal objective is the promotion and development of Small Industries in the State. Construction and utilisation of infrastructure, especially in backward areas, procurement and marketing of Raw Materials, technical support and assistance are means to reach the goals.

The specific functions it undertakes are:

- Land acquisition for industrial estates
- Procurement and distribution of raw materials
- Marketing assistance to SSIs
- Supply of machinery under hire purchase scheme
- Participation in exhibitions



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