

CRISIL Risk and Infrastructure Solutions Limited

Commerce and Industries Department

Development of National Investment and Manufacturing Zone (NIMZ) at Tumkur

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



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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 National Investment and Manufacturing Zone (NIMZ) in Tumkur region.

The NIMZ will be akin to an integrated urban industrial township and will be accorded the status of an industrial township under the constitution. The NIMZ 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. The NIMZ would be a flagship region providing state of the art facilities to enterprises through an efficient governance framework.

Tumkur region is approximately 70 kms from Bangalore and is already developing into an extension of industrial activity which otherwise cannot afford to develop facilities in Bangalore due to the non-availability of reasonably priced serviced industrial land. Tumkur is an ideal location since the proximity to Bangalore and the connectivity to all major areas in the state and outside already exists.

The current report examines the possibility of developing an NIMZ in the Tumkur region and also evolves a development framework to initiate the development of the NIMZ. The report observes that the most critical decision with respect to NIMZ development will be delineation of the NIMZ and constitution of the Special Purpose Company (SPC). The SPC can initially be formed with government representative participation and later on a private sector developer can be roped in.

Once the area has been delineated and an SPC has been formed, the immediate task would be to commission the preparation of a master plan for the area which would be funded by the Department of Industrial Policy and Promotion, Ministry of Commerce, Government of India.

The project development framework proposed envisages that the SPC 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 NIMZ.

Further, 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.



Having identified the overall project structure, the report also outlines the next steps that are required to be undertaken in order to kick start the NIMZ development process. The report also outlines a procurement plan for the NIMZ which focuses upon the key steps that are required to be undertaken.



2. Introduction

2.1 Project Idea

The National Manufacturing Policy observes that the concern about the stagnant and low share of the manufacturing sector in India's GDP has necessitated a dedicated policy for the sector to accelerate development, provide for inclusive growth and increase availability of gainful employment. To this end, the Department of Industrial Policy and Promotion (DIPP) has formulated the "National Manufacturing Policy". The Planning Commission's "Approach Paper to the 12th Five Year Plan" has also mooted a National Manufacturing Plan. Both these policy instruments aim fuelling industrial growth through a holistic approach.

Under the National Manufacturing Policy (NMP), it is proposed to set up National Investment and Manufacturing Zone (NIMZ). The National Investment and Manufacturing Zones (NIMZs) will be developed as integrated industrial townships with state-of-the art infrastructure and land use on the basis of zoning; clean and energy efficient technology; necessary social infrastructure; skill development facilities, etc., to provide a productive environment to persons transitioning from the primary sector to the secondary and tertiary sectors. These NIMZs would be managed by SPVs which would ensure master planning of the Zone; pre-clearances for setting up the industrial units to be located within the zone and undertake such other functions as specified in the various sections of this policy. To enable the NIMZ to function as a self governing and autonomous body, it will be declared by the State Government as an Industrial Township under Art 243 Q(c) of the Constitution. In sum, the NIMZs would be large areas of developed land, with the requisite eco-system for promoting world class manufacturing activity. They would be different from SEZs in terms of size, level of infrastructure planning, and governance structures related to regulatory procedures and exit policies.

It is proposed to develop the Tumkur region as an NIMZ. Tumkur, which is fairly near to Bangalore, will be an ideal place since it is already acting as an extension for Bangalore as far as industrial development is concerned. The NIMZ will house all facilities such as dedicated industrial zones, residential zones, commercial zones, education zones, healthcare zones etc.

It is proposed that the NIMZ will be spread over an area of 50 to 100 sq. kms initially and will be developed adjacent to the Tumkur town. The proximity to Tumkur town will be critical during the initial development period as backstop arrangement.

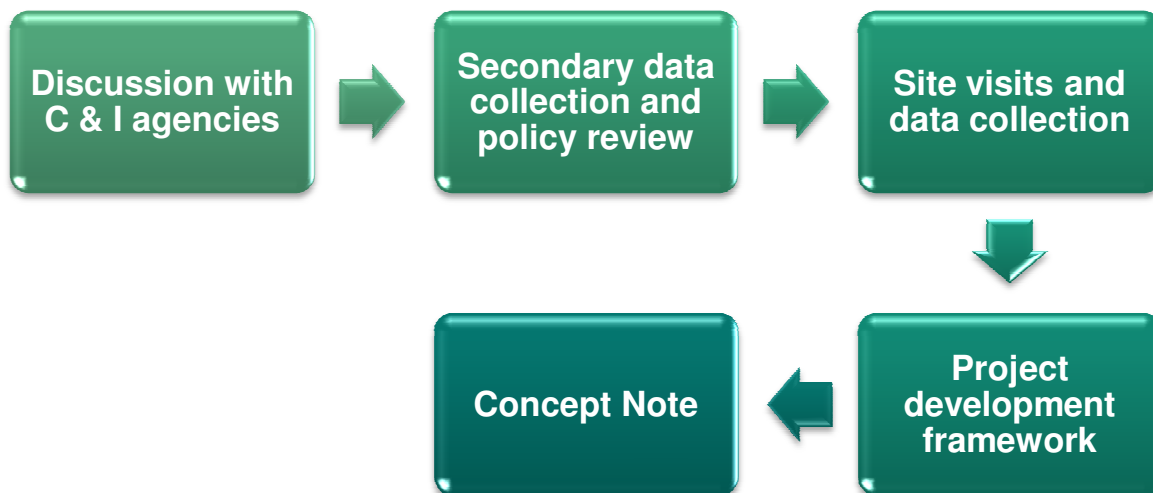
The KIADB is already in the process of land acquisition to the extent of 45 sq. kms (11025 acres). Of these, approximately 23 sq. kms is within the Tumkur taluk and Gubbi taluk. This is a very positive development since the National Manufacturing Policy (NMP) stipulates that the land requirement for the NIMZ may be drawn from any of the options below:

- Preferably in waste lands; infertile and dry lands not suitable for cultivation
- Use of agricultural land to the minimum
- All acquisition proceedings to specify a viable resettlement and rehabilitation plan
- Reasonable access to basic resources like water
- It should not be within any ecologically sensitive area or closer than the minimum distance specified for such an area



2.2 Approach & Methodology, studies, surveys including Data collection, analysis

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 National Investment and Manufacturing Zone is a new concept recently floated by the Department of Industrial Policy and Promotion under the NMP, there are no previous studies that are available as a reference source. We have, however, studied various industrial area development projects, specifically SEZ, projects.



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 Centers, 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 2.

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



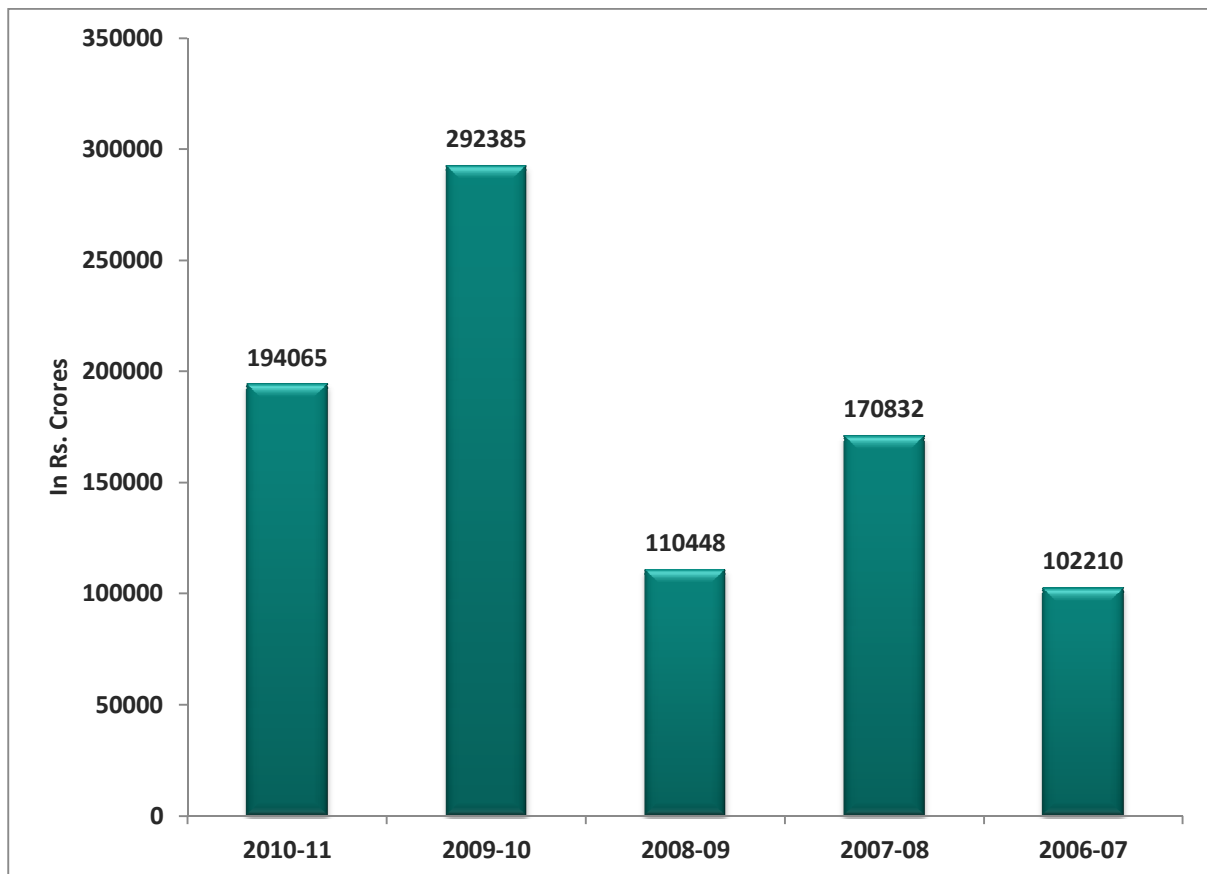
last GIM was organized in 2010 and was a major success wherein MOUs worth Rs. 3.92 lakh crores were signed with 389 companies which would provide employment for 710000 people.

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.



Commerce and Industries Department, Government of Karnataka

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 NIMZ in the Tumkur region. The NIMZ will act as an Industrial Cluster and would provide state of the art integrated infrastructure facilities which will act as a magnet for investments. The NIMZ will be an integrated development with an amalgamation of industries which may be focused both on the domestic segment as well as the export segment. The NIMZ 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 NIMZ will be an integrated industrial township which can include, but may not be limited to, the following components:

- Industrial zones
- Residential zones
- Recreation zones
- Education zones
- Commercial zones
- Healthcare zones
- State of the art transport and other infrastructure facilities

4.3 Description of the Site

Tumkur district is located north-west of Bangalore at a distance of about 70 kms. Tumkur spreads across 10 Talukas - Tumkur, Koratagere, Sira, Gubbi, Pavagada, Turuvekere, Kunigal, Madhugiri, Tiptur & Chikkanayakanahalli and is bounded by Mandya district in the South; Chitradurga and Hassan districts in the west; Chikamagalur in the northeast and Ananthapura district of Andhra Pradesh State in the southeast direction. The district houses a population of 26,81,449 (2011 census) with Tumkur and Sira accounting for 32% of the total population.



The district has a university and is famous for its technical educational institutes. Over 2,000 beds are available across Public and Private Hospitals.

The NIMZ will be developed over an area of not less than 50 sq. kms. The delineation may include existing industrial areas within its spread.



4.3.1 Connectivity

- **Road:** The following are the three major roads that pass through the district (195km)
 - ◆ NH-4 (Bangalore-Pune) connects Tumkur with Bangalore, Dharwar, Pune and Mumbai
 - ◆ NH-48 (Bangalore-Mangalore) connects Tumkur with Bangalore and Mangalore on either side. This road also connects Bangalore with Chennai
 - ◆ Banagalore Honnavar State Highway connects Tumkur with Kadur, Birur, Tarikere, Shimoga, Sagar and Honnavara
- **Rail:** A Broad guage Railway line also passes through the District and connects Tumkur city with Hubli, Dadar , Pune and Bombay at North-West and Birur, Bhadravathi, Shimoga and Talguppa at South – West and Banglore and Chennai at East. Sira presently is not accessible by rail
- **Air:** The nearest Airport is the Bengaluru International Airport which is 75 km from Tumkur
- **Port:** The nearest port is the Mangalore port located at a distance of approximately 300 kms

4.3.2 Economic profile and regional strengths

Agriculture is the key economic activity in the region. The major crops are Paddy, Ragi and Groundnut. The Net District Domestic Product (NDDP) of Tumkur at current prices is Rs. 9694 crores which is roughly 3.2% of the State Domestic Product.

Tumkur District is home to 24 large scale industries with an investment of 911.42 crores and generating employment for 6445 persons. The existing 8 medium scale and 23804 employ 132994 persons and account for an investment of close to 790 crores as of March 2012.

The existing small and medium industrial units are resource based industries such as rice mills, dolomite power industries, granite cutting and polishing, cement hollow bricks, RCC spun pipes, poha mills, oil mills, vermicelli, condiments, coir products, briquetted fuel, coconut shell powder and wire cut bricks

Further, the Karnataka Small Scale Industries Development Corporation has developed 8 industrial estates.

The proximity to Bangalore is one of the biggest strengths of Tumkur which makes it a natural extension point for industries that may have been forced to look at alternative locations due to the large influx of the Information Technology (IT) and BPO related entities which has put intense pressure on land prices in Bangalore.

Tumkur also has a large iron ore deposit which is the most important ingredient for the steel industry. The mining activity in Tumkur will also pick up due to limitations on the mining of iron ore from Bellary region.

Industrial Area	Area in Acres
Antharanasalli – Phase 1	208
Antharanasalli – Phase 2	256
Hirehalli	160
Kunigal	113
Satyamangala	54
Vasanthapura	782
Vasanthapura II/III	1435
Total	3008

Figure 4-1: Industrial estates of KSSIDC

Sl. No	Industrial Estate	No. of Sheds constructed	Sheds Allotted	No. of Plots Formed	Plots allotted
1.	Tumkur	32	32	32	32
2.	Hirehalli	20	20	17	17
3.	Tiptur	20	20	36	36
4.	Kunigal	16	16	32	32
5.	Sira	15	15	13	13
6.	Madhugiri	14	10	21	21
7.	KHT – 1	18	18	04	04
8.	KHT – 2	09	09	130	130
	Total	144	140	285	285



4.4 Development Needs, Public needs & Planning Considerations

The industrial output in India has been languishing over the past couple of years. Despite being a key sector of the economy, the industrial segment contributes only 15% of the Gross Domestic Product (GDP). This indicates that the value addition of the industrial sector is still low and requires concentrated efforts in order to push industrialization and thereby value addition and employment generation on a large scale. The National Manufacturing Policy provides a window of opportunity to focus on soliciting industrial investments through the establishment of National Investment and Manufacturing Zone.

Karnataka has been one of the pioneers in the industrialization. In order to further consolidate its leadership position in soliciting investments, Karnataka should provide an enabling environment to potential investments in the industrial sector.

The National Investment and Manufacturing Zone (NIMZ) will be an ecosystem which can become a model for industrial investments in the country. It will provide for a perfect environment for industrial investments and will also become a demonstration model for achieving industrial growth in consonance with holistic growth.

The establishment of an NIMZ will spur development which will provide a boost of economic activity in the vicinity of the NIMZ and will also translate into an array of employment opportunities for the people at large. The concentrated investments will also provide a boost to the economy of the state through the multiplier effect and will also help the state showcase the success and thereby solicit more investments.

4.5 Best Case Studies for similar projects in India/ world

4.5.1 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.



4.5.1.1 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 centre 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 NIMZ will be akin to an urban industrial area, it will be pre-mature to develop cost estimates for the NIMZ. 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 NIMZ 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 NIMZ:

- 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 NIMZ:

- 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 NIMZ:

- 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 NIMZ:

- 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 NIMZ. It is assumed that most of 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 development of NIMZ can seek funding from various central and state government schemes which has been discussed in the following sections.

6.3.1 Funding available under NMP

Under the NMP, the central government will provide funding for the following components.

- Funding for preparation of the Master Plan of the NIMZ
- Funding for developing polytechnic institution within the NIMZ
- Funding for PPP projects under the viability gap funding mechanism of the central government
- Funding in the form of long-term soft loans from multi-lateral institutions will also be explored

6.3.2 Viability gap funding

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.

6.3.3 External commercial borrowings

The developers of NIMZ will be allowed to raise ECBs for developing the internal infrastructure of the NIMZs.



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 NIMZ.

For the development of an NIMZ, the central government, at the request of the state government, will have to declare the delineated area around Tumkur as an Industrial Township under the article 243 Q (c).

7.2 Legal & Regulatory framework

Besides the benefits under the National Manufacturing Policy, several state government policies will also apply on the NIMZ i.e. the tenants therein. These will be:

- Karnataka Industrial Policy 2009 – 14
- Karnataka Infrastructure Policy 2007
- Karnataka Industrial Area Development Act 1966
- Karnataka Renewable Energy Policy
- Karnataka State SEZ Policy 2009

The industrial units within NIMZ will benefit from the following sector-specific schemes and policies:

- State Millenium Biotechnology Policy 2001
- Suvarna Vastra Neethi for textiles 2008 – 13
- Karnataka Semiconductor Policy 2010
- ASIDE, Credit Guarantee Fund Trust Scheme, Cluster Development Programme for MSMEs, Credit Linked Capital Subsidy Scheme, Technology Upgradation Scheme

7.3 Key Issues

The key issue for the development of the NIMZ is the creation of an enabling framework. The state government will need to notify the area which will fall under the NIMZ at the earliest. Once the area has been identified, a master plan will need to be prepared.

Also, the state government will need to deliberate on the formation of the special purpose vehicle (SPV) which will be the regulatory authority for the NIMZ.



8. Indicative environmental & social impacts

8.1 Environmental impacts

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

8.2 Social impacts

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

- Loss of livelihoods – the development of NIMZ 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 NIMZ 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 NIMZ 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 NIMZ. The SIA should also clearly mandate the preparation of an 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 NIMZ are impacted (infrastructure service failures etc.)	Performance security clauses and 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 NIMZ 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



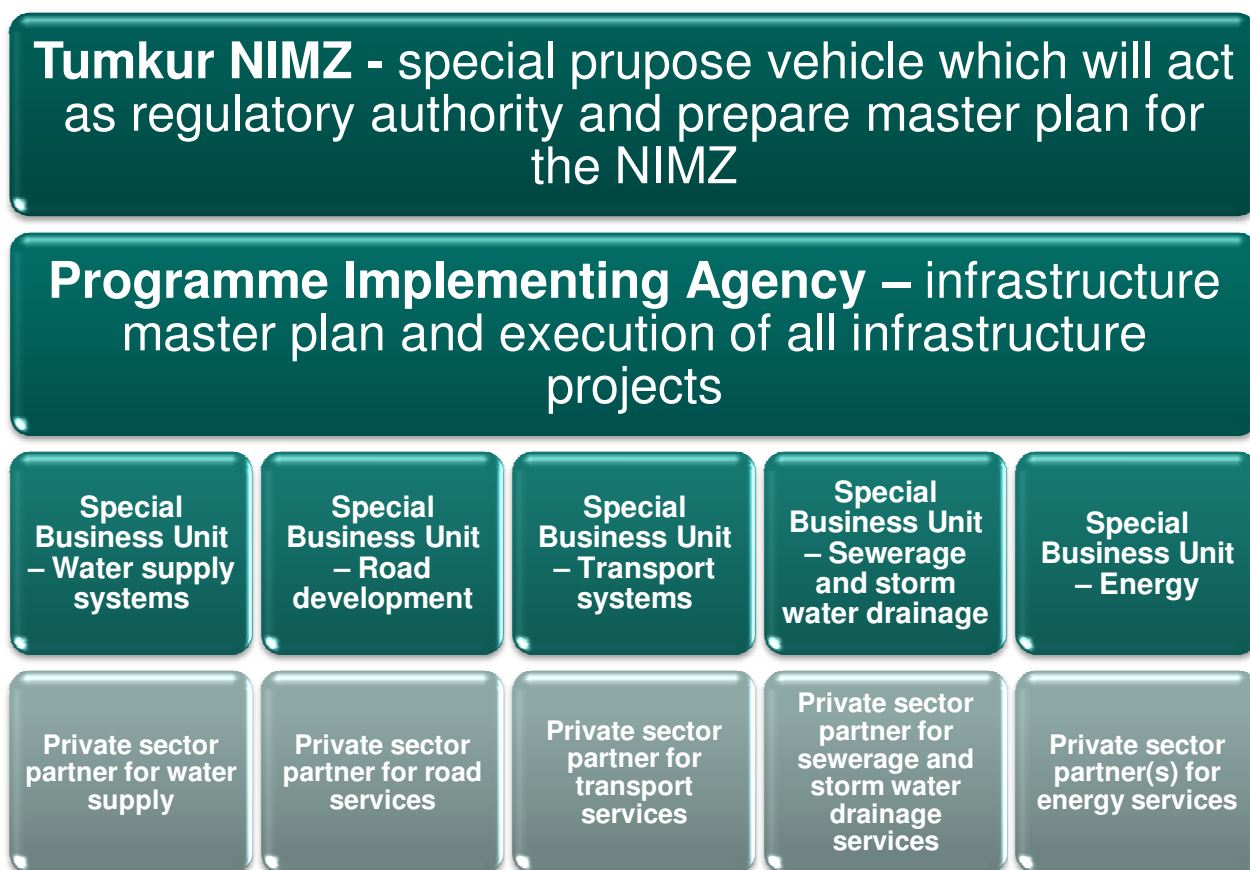
9.2 Indicative Project Structure

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 (a strategic business unit of the SPV) will develop an infrastructure master plan for the NIMZ 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 NIMZ. 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.

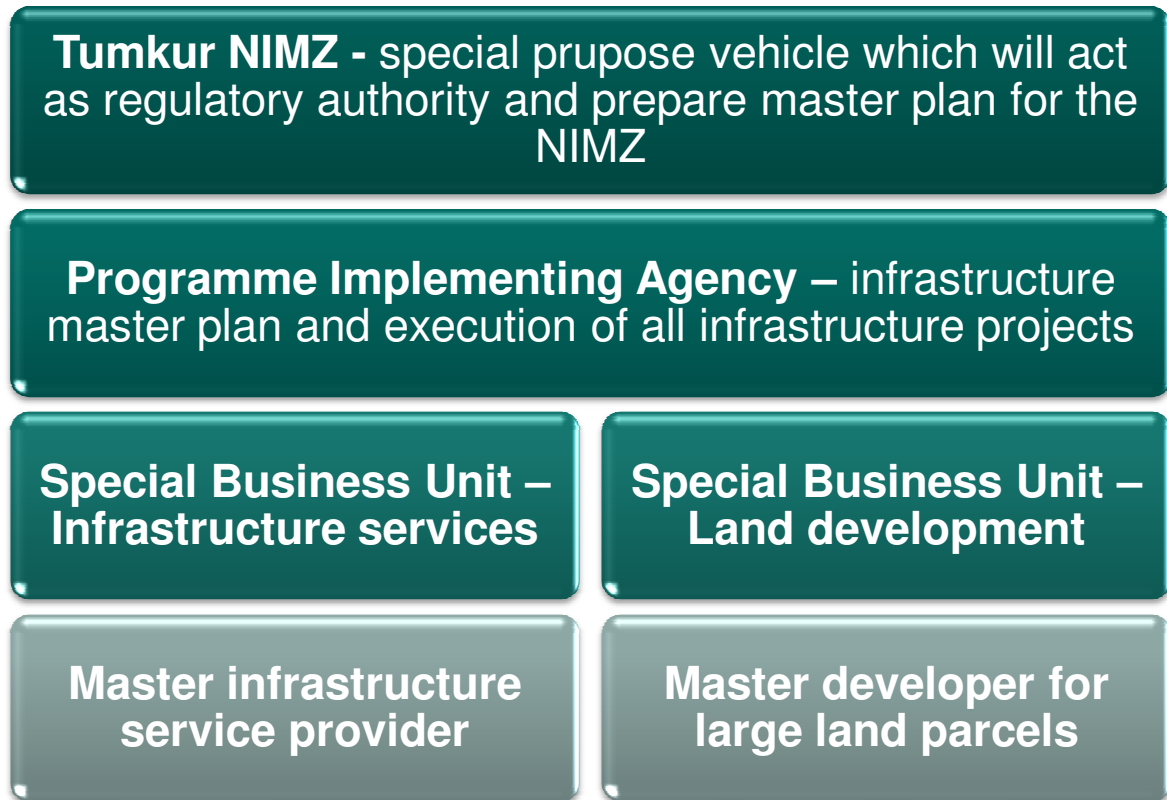
The drawback with this structure is that this will require very high coordination efforts across SBUs as well as private sector partners which can impact services negatively at times. For the end-user of the services, this structure means interacting with several agencies which can be frustrating at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

It is recommended the second option i.e. selection of master developers be adopted since it creates a single point mechanism for project development and execution.

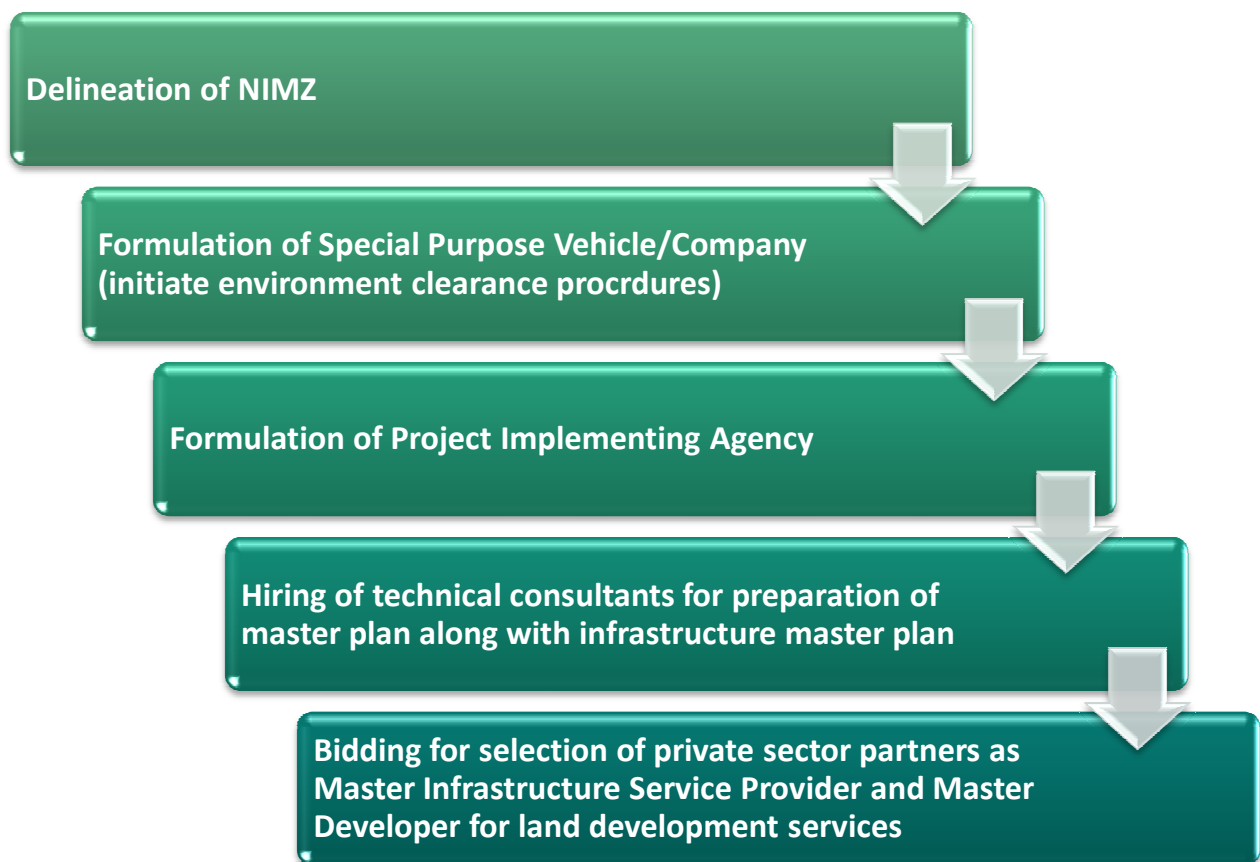


10. Way Ahead

10.1 Project Development Framework

In order to realize the development of an NIMZ, the first imperative is that the area for the NIMZ is delineated. Once the area has been delineated, a Special Purpose Vehicle (SPV) for the NIMZ will need to be constituted with appropriate participation from central government, state government and private sector partners. Once the SPV has been formulated, a Programme Implementing Agency will need to be formulated which will act a project execution wing for the SPV. The PIA in turn will float strategic business units for infrastructure provision and land development.

Figure 10-1: Project development framework for NIMZ



The Special Purpose Vehicle/Company, upon constitution, shall hire a Technical Consultant to prepare a Master Plan 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.



10.2 Procurement Plan

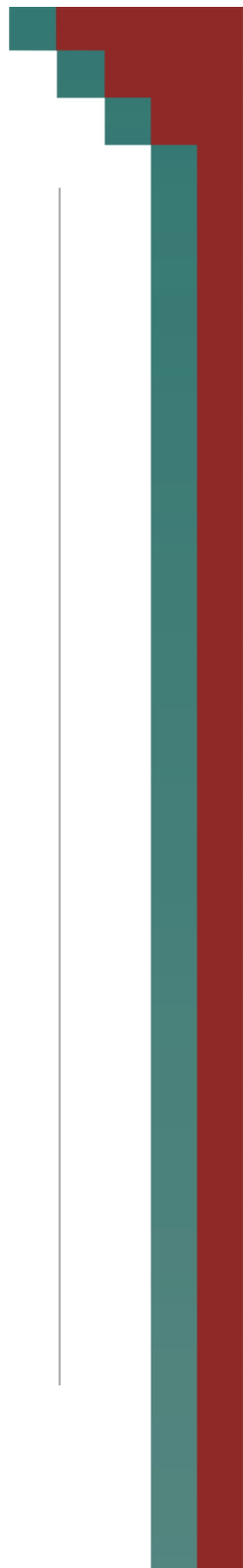
The first and foremost task will be two-fold i.e. delineation of the NIMZ and the formation of the Special Purpose Vehicle. For the initial period, the SPV may be constituted with appropriate representation from the state government and the central government. A private sector partner may then be roped in for the SPV.

Upon constitution of the SPV, the state government should also formulate the Programme Implementing Agency. Once the PIA is in place, it can then appoint technical consultant for preparation of master plan and infrastructure plan for the NIMZ. Once these plans are ready, appointment of transaction advisors should be initiated in order to work out technical and financial feasibility of the proposed projects.

The transaction advisor should also provide services for selection of master developers through a global competitive bidding process to ensure that the best of the agencies can be roped in.

Activity	M1	M2	M3	M4	M5	M6	M7	M8	M9	M10	M11	M12	M13	M14
Delineation of NIMZ		◆	◆											
Constitution of Special Purpose Vehicle		◆	◆											
Constitution of Programme 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 infrastructure and land development									◆	◆				

The current procurement plan is spread over 14 months which can be shortened depending on the manner in which state government makes decision relating to delineation, formation of SPV and PIA.



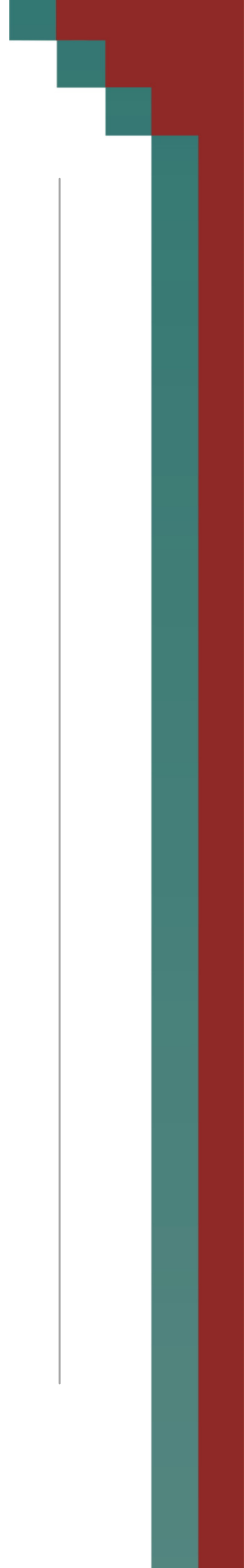
11. Annexure 1 – List of areas under acquisition by KIADB in Tumkur

Location of Industrial Area	Name of the District	Name of the Taluk	Total Area acquired / proposed for acquisition (in acres)	Status
Vasanta Narasapura 2nd and 3rd Phase	Tumkur	Tumkur	2734.35	Preliminary notification done, compensation to be settled
Vasanta Narasapura 4th Phase	Tumkur	Tumkur	1725.35	Preliminary notification done, compensation to be settled
Madenur and Madhihalli	Tumkur	Tiptur	211.35	Joint Measurement Committee (JMC) work in progress
Bhuvanhalli Ind Area	Tumkur	Sira	1801.14	Joint Measurement Committee (JMC) work in progress
Bidharehalli Kaval	Tumkur	Gubbi	792.29	Joint Measurement Committee (JMC) work in progress
Gottigere	Tumkur	Kunigal	290.00	Identified



Commerce and Industries Department, Government of Karnataka

Location of Industrial Area	Name of the District	Name of the Taluk	Total Area acquired / proposed for acquisition (in acres)	Status
Mudhigere Kaval	Tumkur	Sira	2051.24	Identified
Aladhakatte, Salukatte, Tonnalupura, Uddinahalli	Tumkur	Chikkanayakanahalli	1000.00	Identified
Hirehalli, Manchakalkuppe, Kolihalli, Pandithanahalli	Tumkur	Tumkur	600.00	
Total			11205.72	





12. Annexure 2 – Agencies under the Commerce and Industries Department

12.1 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

12.2 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

12.3 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



12.4 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.

12.5 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.

12.6 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, EIPs, Sector Specific SEZs, and Growth Centres.

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

12.7 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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