

BIHAR@ 2047

Morally, Economically & Technologically Advanced



VISION DOCUMENT

From the Chairman’s Desk

Friends,

CII, India@75 Foundation in collaboration with BCG-India recently embarked on the visioning exercise for India@100. The vision was developed by extensive interactions from a wide cross section of stakeholders.

It has been decided to adopt a similar approach again; however, the differentiator this time will be that the vision will be for 25 years with a provision for validation / course correction every five years.

Tagline for the vision is proposed to be – Morally, Economically & Technologically Advanced (META) Bihar by 2047. In our State, The spectrum covered politician to students, bureaucrats to academia and civil society leaders to common men, farmers to landless agricultural labourers.

The goal of Bihar@100 is to spark a movement that develops a vision for Bihar. In this process, CII is enlisting people who are passionate about and committed to nation-building

and carrying out the goal in a bottom-up manner.

This is a synopsis of Bihar’s “Vision 2047,” as put forth by the state’s residents. India is on the verge of a radical transformation. It is practically impossible to find a reliable association between historical economic patterns and current growth due to the statistical volatility caused by exponential economic expansion. This vision document has sought to identify potential and capture future aspirations of the state and its citizens in light of that recognition. This exercise, unlike similar ones in the past, did not try to predict the future using historical tendencies. Instead, it has attempted to predict the future using the feelings and hopes of the State’s citizens.

NARENDRA KUMAR
Chairman, Bihar State Council,
CII Eastern Region

Health

Vision

Easy access, affordable, best in class health services to the citizen of State. Ranking in top 5 states in terms of lower infant mortality rates and higher life expectancy. The VISION is on overall health improvement with special attention on achieving high and equitable coverage of material, new-born and child health interventions. The state will become one of the preferred choices of medical tourism (for bordering states & countries) and outsourced medical services.

Goals

Drastically improve the health infrastructure by increasing the number of hospital the beds per Lac population should increase from the current 6 to 25 beds per lac.

The number of doctors per thousand increases from 0.50 to 5 doctors graduating per year requirement is 17000 per year for the next 25 years.

The reach of Ayushman Bharat Scheme should be extensive. Health insurance to poorer communities through microfinance institution (MFI) and NGO could be initiated too. The number of medical colleges should be increased by 5 times.

Super specialty hospital under public private partnership should be opened at 8 district headquarters.

Action Points

- **Building institutions:** currently there are 14 colleges teaching medicines. This has to be 25 in the short run and increased to 45 by 2047. Other than establishing more colleges for doctors, institutes need to be set up in each district to train nurses, technicians & para medics to serve the aging population.
- **Increased spending & health care policies:** the state should increase the spending on health to Rs 8.5 Lac crores from the present level of INR 16134 crores. The

state should enact clear policies & guidelines on PPP in the healthcare sector which will enable to attract large private investment in the health care industry in the state.

- **Building Awareness:** Awareness on preventive medicines (hygiene, sanitation) should be increased through mass media and with the assistance of health care professionals and non governmental organizations. Also, there should be a standardized course on public health in schools.
- **Outsourcing medical services:** To aid outsourcing large infrastructure such as medi cities with research facilities service apartments, multi-organ transplant institutes and other specialties should be created.
- **Use of technologies:** With doctors per 1000 population poised to become 5 only in 2022, leveraging technologies will help achieve increased productivity. Remote diagnostic through tele medicines would increase penetration of healthcare in rural areas and drive productivity to world-class level.
- **Research:** Bihar needs to focus on medical research for incorporating nano technologies and bio technologies in the provision of medical services. This will help in yearly identification diseases resulting in a healthier population.

	Unit	2021	Vision 2047
Beds	Number	29,339	52,0000
Medical college	Number	14	58
Sub divisional hospital	Number	30	101
District hospitals	Number	36	38
Primary Health centres	Number	1,994	3,250
Doctors required	Number	11,9000	3,00,000



Governance

Vision

To establish the State as a brand for responsiveness and transparency, consistent execution of welfare schemes and efficient public spending by incorporating best practices, thereby positioning itself among the top 5 destinations for investment in Asia.

Goals

Transaction costs are among the key factors that determine the competitiveness in the globalised world.

Action Points

- **E-governance:** E-governance should be extended to all aspects of public service delivery. This will enable reduction of transaction costs, project monitoring and evaluation of projects thereby resulting in efficiency and transparency.
- **Re-engineering citizen services and outsourcing:** Procedures and approvals for various citizen services should be simplified leading to speedy delivery. Single window clearances of businesses should be reformed further to enable reduced transaction costs. Identification and outsourcing of non-critical government services would promote efficiency.

- **Decentralization:** Increased participation of local bodies in project conceptualization and implementation should be enabled.
- **Capacity Building:** To meet the challenges arising out of drastic increase in the demand for the services for ULBs, Periodic Training of officials should be carried out on a large scale. These courses could be designed after conducting capacity enhancement need assessment of ULBs.
- **Prevention of corruption:** The state government should start a systematic campaign against corrupt government officials and political leaders and those with assets disproportionate to their known sources of income.
- **Strengthening of administrative set up:** All vacancies in different dept to be filled up with proper training.
- **Law & order:** In the last three year there has been a significant fall in most of the major crimes such as murder, dacoity, kidnapping, road robbery etc. There is no political support to any criminal activities is the hallmark of the present govt and it should be continue without any exception.



Urbanisation

Vision

To Execute the Smart City Project on time. Developing the cities comparable as advanced Asian metropolises with special focus on Patna to be in Metro Category. Multimodal public transportation systems of international standards will be in place in all major cities. To rank Capital Patna in top 10 Cities to the category of The Best City to Live in.

Goals

- 1 unique Ultra Urban Region around Patna.
- Metro Project Completion in Patna.
- 4 Execution and Completion of proposed 4 Smart Cities on time–Bhagalpur, Biharsharif, Muzaffarpur and Patna.
- 25 urban centres should be upgraded to world class levels on Sub Divisional Level.
- Integrated transport systems to compress travel time within city limits to ½ hour.
- Building low cost housing for the urban poor.

Action Points

Planning the mega cities

- **Unified Urban Planning:** Integrated development of 100 square kilometers encompassed by Hajipur, Bakhtiyarpur, Jehanabad, Bihta around Patna. Infrastructure connectivity to be complemented with appropriate governance structure that allows for decentralized jurisdictional authorities to function under a common framework. Other four mega cities, namely Muzaffarpur, Bhagalpur, Biharsharif and Patna needs to be developed on the alignment of proposed Smart City.

Planning solutions

- **FSI for low cost Housing:** Higher FSI (Floor space index) for residential projects with a fixed minimum low cost housing component should be planned.

Urban environment

- **A wholesome urban environment:** Ensuring ample

green cover and well maintained water bodies should be planned and nurtured.

FSI Credits

- **Building FSI norms to be changed to zonal FSI norms based on the capacity of the roads in the zone:** Whenever the development authority acquires land to increase the capacity of the roads in the zone it compensates in the form of FSI credits which can be freely traded within that zone.

Transportation Solutions

- **Parking credit:** There is vast difference between parking requirement and provision for parking. Providing the required parking facility requires huge funding. The development authority can use parking credits system as a monetary mechanism to fund the growth required in parking capacity.
- **Digital traffic simulation planning:** Route planning for intra city transportation to be done in a manner that provides end to end connectivity as well as last mile connectivity for mass rapid transit. Digital traffic and development simulation will provide scientific solutions to transportation issues.
- **Transport traffic coordination:** A collaborative transport system coordination committee needs to be formed by the police, the development authority and the highways department under the unified metropolitan transport authority (UMTA).
- **Integrated multi model transport system:** urban centres should be planned with an efficient transportation system capable of ensuring faster movement of traffic. An integrated rail and bus transport system along with metro rail needs to be planned to sustain the growth potential of each of the urban centres. One of the first steps towards the integrated multimodal transport system will be the introduction of a high capacity bus service.



UNIT	Unit	2010	Current	Vision 2047
Mega urban Region	No.	0	4	10
Number of mega cities	No	0	1	5
World class urban centres	No	0	1	25
Urbanization	%	11.5%	NA	55%

Infrastructure

Vision

Building up strong and sustainable infrastructure in the State specially developing quality infrastructure in flood affected districts.

Power Sector

Status:

In 2015, electricity consumption per capita for Bihar was 257.7 kilowatt hours.

Electricity consumption per capita of Bihar increased from 117.5 kilowatt hours in 2009 to 257.7 kilowatt hours in 2015 growing at an average annual rate of 14.33%.

There are 6 Thermal Power Projects in Bihar having capacity of 6384.88 MW power generation.

There are 13 small Hydro power projects which generates around 60 MW of Power.

Future Power Scenario in Bihar (MW)

Energy Requirement Forecast:

Year	Per Load (MW)
2016-17	5,598
2016-17	9,567
2047	47,835

Action Points

New Proposed Power Plants:

- **12 Hydro Power Projects of 20 MW Power Generation.**
- **6 Thermal Power Projects for 7080 MW Power Generation.**
- **2 Nuclear power Generation Projects for generating 1,320 MW of power.**



Roads

Goals

Every remote village in Bihar will be connected through high quality road for the City.

Connecting all the districts to the capital with quality road infrastructure taking maximum of 4 hours to reach Patna.

Action points

- Four laning of the national highways (30,350 km)
- Four laning of the state highways (42,032 km)
- Two laning of all the rural roads (1,02,080 km)
- Providing all weather connectivity to all unconnected villages with a population over 500
- For bridges & Roads a separate board to be constituted to look after the work
- In road both rural roads & Highways board should be separate for the execution of the work



Tourism

Vision

Bihar's antiquity is evident from its name, which is derived from the ancient word "VIHARA" (monastery). It is indeed a land of monasteries. Hindu, Buddhist, Jain, Muslim and Sikh shrines abound in this ancient land where India's first major empires rose and fell. Where the ruins of the worlds' earliest university slumbers in the void of time.

Bihar has wide range of tourism attractions in the form of Religious Circuits, Heritage Cirtuits, Eco Circuits. The large number of historic monuments, ruins, temples, forests Nalanda and Mahabodhi, two world heritage sites and scenic beauty provide immense scope for the tourists to explore and rejuvenate.

The vision is to achieve its remarkable place on the tourism map of the world(which has not been utilised to the fullest so far).

Goals

- 2 Mega religious tourism circuits (Buddhism & Jainism)
- 2 Mega theme parks based on the life of Buddha and Mahavir to be constructed at Bodh Gaya and Rajgir
- 8 Mega centres for educational , cultural & religious tourism (Bodh Gaya , Rajgir, Patna city , Vaishali, Nalanda, Vikramasila, Ashok Dham, Yoga Sansthana, Munger)
- 100 lakh Indian & foreigner tourist per year by 2022.

Action Points

- **Air, rail, and road connectivity to all the tourism centres.**
- **Chain of luxury hotels in PPP mode to be constructed at all the location of educational , cultural & religious tourism.**
- **Awareness of the importance of Pinda Daan at Gaya to be created**
- **Tourism service centres to be opened under ppp mode for providing transport, accommodation & other services to the tourist**
- **Special tourist force to be created with the knowl- edge of foreign language to sort out the problem**



Industrialisation

Vision

Bihar will become the manufacturing hub of Asia that leverages skilled human capital.

Goals

- 65% of the GSDP contribution should come from manufacturing and services
- High performance sectors are expected to generate 1.8 crore direct and 1 crore indirect jobs.
- Skill training should be imparted to bridge employment gap
- Industrial clusters should be developed in all regions.
- Innovation and incubation Hub (especially for SMEs) to be set up
- Geographical indications of products and services of Bihar should be branded and preserved

Action points

High performance sectors

Moving up the value chain: Low cost labour advantage model for industrial growth will not be sustainable in the long run and the industry needs to move up the value chain and excel using innovation to retain its leadership in the high performance sectors such as Food processing /Auto ancillaries/Leather/ Textiles/ICT and construction .

Research & Development

Clusters of high quality research institutes should be established complementarily in Patna and other growth centres.

Push for new sectors

New sectors such as nanotechnology, biotechnology, food processing and pharmaceuticals hold promises for growth.

Industrial incubation Hubs / Ethanol hubs

Development of industrial hubs is necessary especially to assist new sectors and players to harness the potential of the sector in the state. Development of ethanol hubs based on sugar cane juice & maize are the potential area of investment and future potential to develop

Cluster development

Unique potential of all the areas in the state should be identified and clusters for industrial hub should be formed accordingly. These industrial hubs will be able to work together with the districts to mutually develop, grow, and share the prosperity.

Human capital

Develop skills that give upward social mobility.



Agriculture

Vision

Agriculture is the key to the overall development of the State economy. Agriculture is the backbone of Bihar's economy 77% of workforce and generating nearly 24.84% of the State Domestic Product. The percentage of population employed in agriculture production system in Bihar is estimated to 77%, which is much higher than the national average. Nearly 24.84% of GDP of the state (2011-12) has been from agriculture sector (including forestry and fishing). The state has attained self sufficiency in food grains production. Barring maize and pulses productivity of various farm produce in Bihar is much below the national average.

Goals

The vision of the agriculture policy in the state is to increase productivity of major crops so as to bring it close to national average. Opening up of markets has necessitated increased production at competitive prices. Adapting as well as popularizing proven Research and Development efforts is also important.

- **Improving quality and reducing costs**
- **Strengthening technology transfer**
- **Improving procurement & distribution chain**
- **Strengthening the core strength of agri crops - vegetable, lithchi, makhana maize, rice, wheat**
- **Linking the inter sectoral areas**
- **Flood management for better output**
- **Land reforms – updating the records**

Action points

- **Appropriate fertilizer use & quality seeds:** Balanced and integrated use of fertilizer will be promoted to achieve higher production on sustained basis. Soil testing infrastructure will be extended to the block level.
- **Strengthening Technology Transfer:** Rationalizing extensions systems with greater responsibility and accountability with an integrated approach towards all existing extension service providers with proper training to the trainers for special purpose and

not a general one. Wider role of agri clinic, extensive quality seed supply programme, support to Krishi Vigyan Kendra, farmers in extension approach with improved information and communication technology.

- **Improved Procurement & Distribution Infrastructure:** Every block of Bihar should have one agri business centre for one point transaction of every agriculture related procurement and selling point under ppp format.
- **Agriculture Credit And Crop Insurance:** Kisan credit card and crop insurance should be target based for each and every year till 2047. The transparency requirement for both the inputs is very important for the development of agriculture and providing food security to millions.



Education

Vision

Bihar will develop itself as an Innovation Hub by evolving an ecosystem of industries and education systems to encourage research and development (R&D) and entrepreneurship. Bihar will achieve universal secondary education. 50% of the students will enroll for colleges .Education will be accessible for all and not denied to any one. The education System should be able to nurture a minimum of one Noble laureate by 2022.

Goals

The strength of the state is not only the revenue it generates, but also the education and the character of the people it maintains. Hence, Department of Education , Bihar has been functioning hard with the ultimate goals to regain its past glory in the field of education so that the state can retain the meaning of Bihar, i.e. walk ahead with confidence and prosperity spreading the light of education as used to be in Buddha’s era.

- Achieve near zero drop out rate in secondary education.
- Build a base of 1.2 crore graduates & 1 crore certified technicians.
- Increase the capacity of the higher education institutions and vocational training institutions by 10 times.
- Bihar should focus on becoming an “education export hub” of the region by attracting students from within and outside India.
- Capacity of medical institutions should be triple immediately.
- To produce one Nobel laureate by 2047.

Action Points

School

- Access to schools should be increased by establishing schools within 1 km distance of every habitation.
- Access to schools regardless of the capacity to pay should be enabled.
- Upgraded school infrastructure and availability of adequate teachers should be fast tracked to improve

the quality of school education.

- Awareness campaigns and policy initiative to ensure compulsory enrollment and zero drop-outs.
- Model centers of excellence in primary education should be established in rural areas.
- Improve hygiene in schools and colleges to curtail drop outs, especially of girl students.

Vocational Training

- Collaborative efforts by government and industry to ensure access of vocational training institution to all. Initiative such as the “ICT academy” to provide vocational training through e-learning should be replicated.
- Close planning of the curriculum with industry to ensure minimum skills gap and employability.
- Special mention can be made here regarding the acute shortage of necessary technicians and para medicines. Private training facilities need a boost to train more nurses and paramedics. Presently large hospitals both government and private can be completed to train at last 30% of their nurses and Paramedics requirements.
- Short terms vocational courses with diploma for special skills like plumbing, housekeeping etc will ensure these skills are monetisable.

Higher Education

- The capacity and infrastructure of the higher institution needs to be quadrupled to accommodate projected 30 lacs students.
- Flexibility in college curriculum should be introduced to spur innovation.
- Capacity of medical colleges needs to be immediately tripled to ensure minimum provision of quality health-care to the population of the state. At present, it is projected that the required capacity will be 4 times the present capacity. Hence to meet the demand, speedy approval of medical colleges should be facilitated by the state.
- Collaboration of educational institutions & industry to ensure students are not only updated to the latest industrial processes and technology but also to ensure their employability.



Diaspora and Indian NRB

The state should position itself to positively tap the investment potential by capturing the non resident Bihari and engaging the Diaspora through Bihar Foundation, Department of Industries, Government of Bihar.

Goals

The past history of Bihar “Maurya Empire” and its role on educational and cultural field should be projected to capture the NRB synergy.

Bhojpuri and Mithila cultures are the powerful integrating force and the state should positively engage the 100 lacs Diaspora spread around the world recognizing their achievement.

Action points

- **World Bihar Council:** Formation of World Bihar Council to integrate all Biharis in a common platform is one of the primary initiatives the state should undertake to engage the Diaspora.
- **Awards:** Diaspora representative successful in various fields should be honored in the lines of padamshri awards presented by govt of Bihar.

- **Arts & Crafts:** Festival like Bihar foundation day should be started and conducted in more centres across the state. Arts & Crafts of various districts of Bihar should be show caused through events all over the world.
- **Preferred business destination:** Promotion of Muzaffarpur, Patna, Bhagalpur Gaya as preferred headquarters of business in the bordering area of the neighboring states.
- **Film City:** Development of film city on PPP format in the state to enable the creative minds to produce World class films in the state and need not go to other states due to lack of infrastructure.



Role of stakeholders

Towards realizing the vision 2022 the substantive roles of concerted efforts by the various key stakeholders viz., the state government, the industry, the organized bodies/ groups and individuals.

Role of government

- Facilitate development in the state through appropriate policy initiatives in various key sectors & taking steps to usher in administrative reforms and facilitate capacity building.
- To create world classes infrastructure that facilitated logistics and enables cost competitiveness.
- Market the capabilities and potential of the state to the external world

Role of Industry

- Focus on growth, operate efficiently and be globally competitive. Exhibit drive, ambition and capabilities to go global and be world leaders.
- Individual firms should become brand ambassador for the state & promote its growth.

Role of media/organized bodies/NGOs

- Media in Bihar is well entrenched has a wide spread reach and acknowledged capability in shaping public opinion. The media has a responsibility in ensuring the overall development of the state.

- The media should play positive role in the vision exercise in creating awareness about the vision for the state, mobilizing public opinion and providing a forum for people to discuss the vision. It should assist in mobilizing public opinion on the vision and act as a watch dog and monitor stake holders action on implementation of the vision

Role of individuals

- Individuals have a key role to help in the realization of the vision as they are the primary beneficiary of the development envisaged.
- Individuals need to involve themselves in the visioning exercise by providing feedback to the government during the initial stage when the vision is being discussed in the public forum. They should utilize the opportunities to voice their concern, if any, and suggest appropriate modification to the vision themes and the implementation plan.

Action agenda for CII

- To work with government and policy makers to ensure that barriers to growth are removed. An aspect of this includes making sure economic reforms rich small and medium enterprises, community owned business, proprietorship and cooperatives and the ordinary citizens. The agrarian sector still suffers from red tape, meeting the requirements of a large number of inspectors, archaic laws, rules and regulations. By realizing the energy of this sector, decentralized growth is much more likely.
- Another aspect is infrastructure development. Work needs to be done with the government and the industry, including overseas PPP players to ensure that infrastructure project are in public interest, contracts are drafted and signed on fair and equitable terms and collateral damage if any, is either completely eliminated through proper compensation or reduced substantially.
- A third barrier is the pool of well qualified workforce that needs to be increased. This includes technical and IT skills at a higher level & larger scale of vocational training, including farming skills. In short, the three barriers of over regulation, infrastructure and human skills needs to be overcome so that the outcome is fair to all concerned

