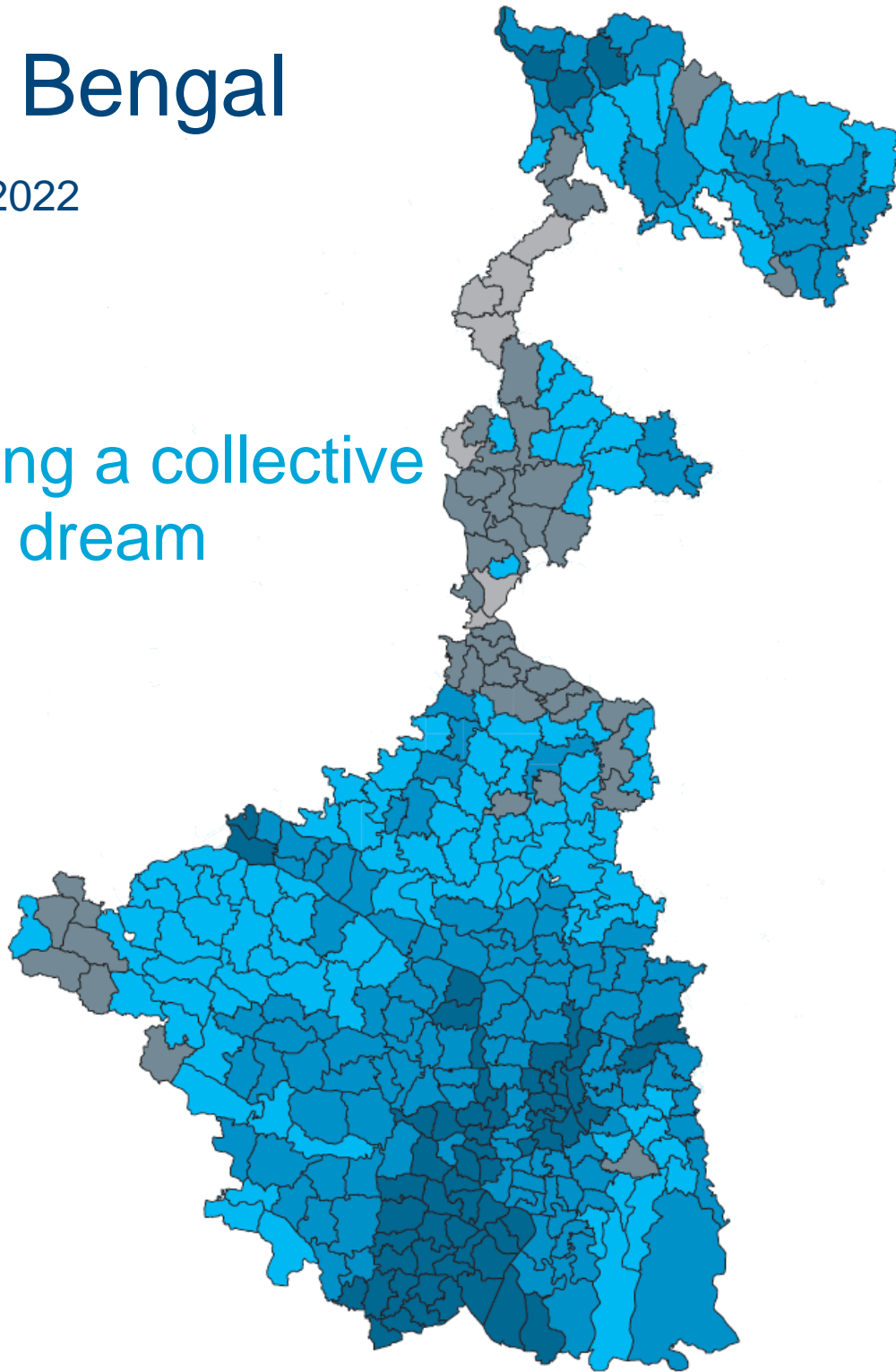


# West Bengal

Vision @ 2022

Realizing a collective  
dream



Confederation of Indian Industry

( ) /

## From the Chairman's desk

The year 2008 – 2009 was a year of promise and opportunity for the State of West Bengal and for West Bengal State Council. CII's theme for the year "India @ 75: the Emerging Agenda" reflects its aspirational role to facilitate the acceleration in India's transformation into an economically vital, technologically innovative, socially and ethically vibrant global leader by the year 2022. On a national level, CII, Young Indians and the Boston Consulting Group have embarked on an ambitious mission for evolving a comprehensive vision for India @ 75.

CII – Eastern Region is developing state visions for the Eastern Region states in alignment with India @ 75. This initiative is being carried forward by task force members, vision ambassadors and the facilitators. Vision 2022 in alignment with India @ 75 is being created in all the five states of Eastern Region - Bihar, Chhattisgarh, Jharkhand, Orissa and West Bengal.

CII West Bengal State Council organized 9 workshops with more than 300 people to take their views on West Bengal @ 2022. The 9 workshops were held in Kolkata, Durgapur, Haldia, Kharagpur, Siliguri, Barasat and North 24 Parganas.

PricewaterhouseCoopers (PwC) was the institutional partner and state facilitating agency for developing the state level vision elements in coordination with the Boston Group. A cross section of people from many walks of society participated in the workshop.

West Bengal faces an exciting, yet challenging period in which it's faced with the opportunity to make the State progressive and amongst the upper echelons of development. West Bengal is still at a crossroads in its development. The West Bengal government has been doing an admirable job of making the East a known quantity by offering a strong vision of economic opportunity in the State and successfully attracting foreign investment and business interests.

Progress is not a static process, it requires continual change or it falters and fails. More still needs to be done to enhance West Bengal as a destination for future investment. More reform needs to be initiated in a range of areas, such as investment in retail, agriculture, insurance, banking and infrastructure. This vision can only be realized through combined effort of all stakeholders. We look forward to cooperation and support from everyone to make the vision a reality.

### **Chairman**

CII – West Bengal State Council

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## Acknowledgement

CII wishes to thank the participants, facilitators and ambassadors who played an active and important role in the various visioning and brainstorming exercises held across the state. CII would also like to express its gratitude in the feedback received by various stakeholders at critical intervals during the formation of this vision. This has been a great collective exercise; this vision has been possible due to the passion, thoughtfulness, candidness and verve of all involved. In creating this vision document, a whole hearted attempt has been made to capture the pulse and the aspirations of the people of the state.

## Background

### Introduction

The state of West Bengal is at the crossroads of an exciting and challenging period in its history. As a multitude of avenues for growth and development emerge, it's of paramount importance that the state, as a collective identity, embark on a vibrant journey to realize dreams of a better future. This Vision Document provides a stepping stone for the state of West Bengal in its quest for future achievements across sectors.

## Approach

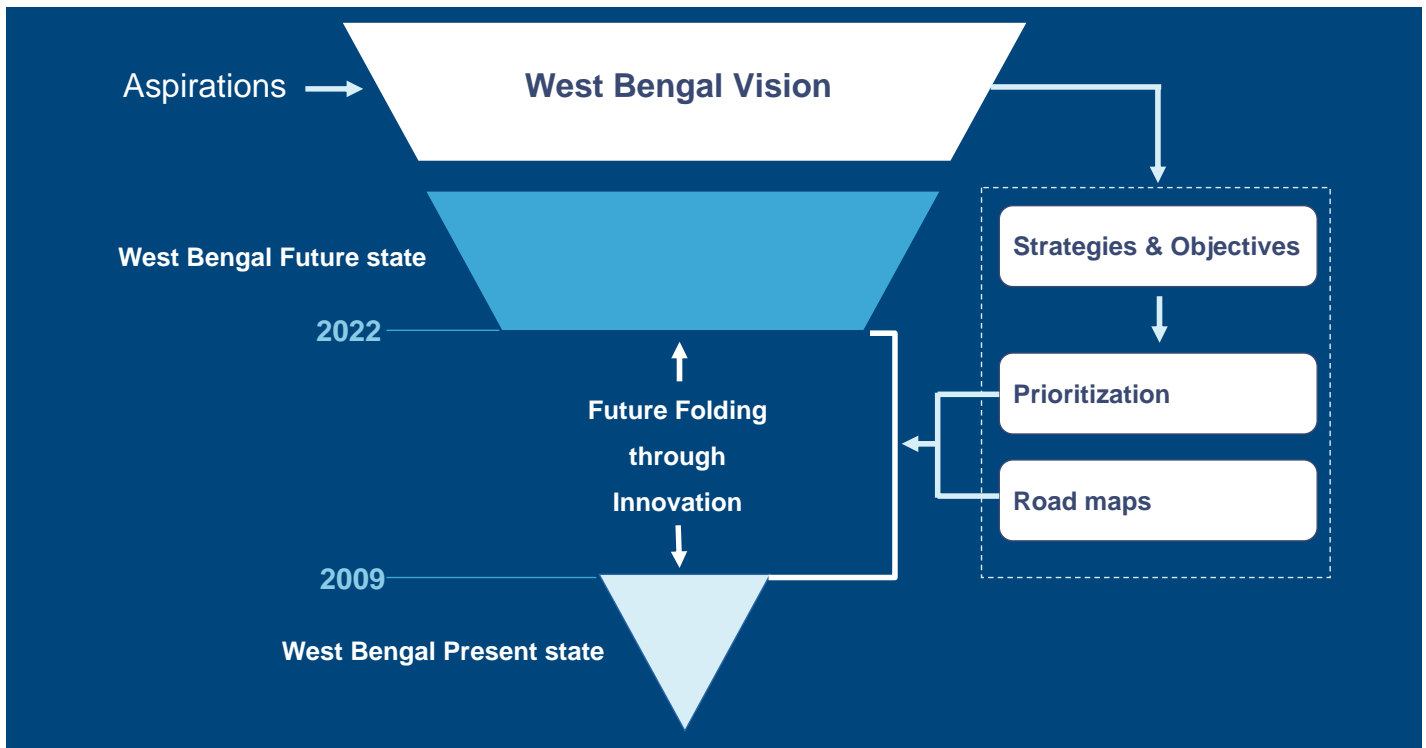
### Approach & Methodology

The vision document has been formulated by combining analytical research with deliberative democracy. Extensive interactions with stakeholders to identify action areas under the umbrella of various vision themes were complimented with largely quantitative benchmarking metrics to aid the Governance group to realize the vision through the achievement of cross-sectoral targets.

The themes and approach towards completing this vision has been based on a reverse pyramid methodology that forms the basis for the "India at 75" vision. The core fundamentals of the methodology are –

- **Aspirations:** The aspirations and envisioned state of West Bengal have to be depicted in an unconstrained manner. The aspirations should exceed present resources. *The aspirations are to form the basis of the vision document.*
- **Future folding:** The vision is not based on a past-extrapolation. The vision elements and future state of West Bengal shall be attained by "folding the future" and creating a suitable framework to achieve the desired state by a pro-active process of discovery. *Future folding will identify prioritized roadmaps, and form the basis for an unconstrained estimate to achieve the stated objectives.*
- **Innovations:** Benchmarked metrics within this vision document and devised roadmaps (to be formulated on the basis of this document) are not to be based on "best practices". The vision document should inspire innovative projects to realize the various strategies and objectives. *Innovative projects shall create "next practices" that form the core of various roadmaps to achieve the stated objectives.*

The vision document spans across multiple sectors and identifies "vision elements" across each of the sectors. The vision elements have been expanded into "action areas". Benchmarking metrics have been identified under each of the vision themes. These provide a snapshot of some of the quantitative metrics that need to be achieved by 2022.



What next?

### The Way Forward

The vision document provides a broad umbrella that houses the aspirations of the state of West Bengal. Based on observations, benchmarks and envisioned objectives, prioritized roadmaps are to be devised for each vision theme. The following strategy may be adopted to realize the collective vision of the state –

- **Vision Governance:** Identification and establishment of a governance structure to oversee all visioning exercises to meet the aspirations of the state as described in this vision.
- **Top Level Stakeholders:** Identification and communication with global stakeholders to drive the vision.
- **Roadmaps:** Identification of a thrust based & time bound prioritization roadmap of development for the vision themes under each vision element.
  - Granularization of vision themes into prioritized individual projects. This would include identification of projects time frame of implementation, their importance and also in terms of the necessary thrust needed to implement it.
  - Identification of implementation strategies through innovative interventions.

- Identification and establishment of governance structure, stakeholders & partners at each level.
- Identification and granularization of funding mechanisms of vision themes & individual projects.
- Identification of integrations, inter-linkages and dependencies between various projects.

## State of West Bengal

An executive summary

### Overview of West Bengal

The state of West Bengal is immersed in a potpourri of rich history, culture and heritage. In many ways, the state has a unique identity in the context of India. With a population of over 82 Million, West Bengal is the fourth most populous state in India, and ranks first in terms of population density. West Bengal is predominantly an agriculture driven state, however, there has been a rich tradition of industrial setups since the start of the industrial age in India. The state is actively engaging investments in industrial sectors to ensure resurgence in of a glorified past as a leader in industrialization in India. West Bengal is a state with progressive thought and forward vision. The people of the state are generally identified by a strong sense of culture and cognizance. West Bengal has earned the distinction of being one of the “food basket” states of India.

Select Indicators	Measure
Capital	Kolkata
Area	~ 89000 km <sup>2</sup> (2.7% of India's area)
Human Development Index (HDI)	0.61
No. of Districts	19
State Language	Bengali
Population	> 82 Million
Urban – Rural Breakup of Population	22.97 : 72.03 (%)
State's share in India's Population	7.28 %
Population Growth (1991-2001)	17.77%
Population Density	903 / km <sup>2</sup>

Table I

The state is endowed with strategic geographical standing - being the corridor to the North East, having access to the Bay of Bengal and being a hub of an important trade route; Kolkata forms the fulcrum of the state and is the third most populous urban agglomerate in India.

The development of the state will be realized in augmenting urbanization and literacy rates, a sound educational system and efficient infrastructure. Nevertheless, the challenges of inclusiveness, equitability, environmental sustainability, an alarming infrastructure deficit and skewed population

#### Source of data for Table I

1. Census Data, Gov't of India
2. Economic Review 2007-08, Gov't of West Bengal
3. Central Statistical Organization findings - 2008, Gov't of India



skills continue to constrain the state's forward march. This vision document seeks to identify the critical development challenges facing the state and sets out a goal-oriented vision backed by an action plan for each of the identified challenges. The vision is built to facilitate speed, scale, financing possibility, sustainability and entrepreneurship. The vision also represents a conscious break from the past, looking at quantum rather than gradual improvements.

## Economic Drivers

### Economic Drivers

The economic drivers of the state lie predominantly in a number of industrial thrust areas, both in the services and manufacturing sectors. The state is making an effort to regain its position as a critical hub for multifarious industries, notably iron & steel, petroleum sector, agro based industries, cutting edge technology and the services sector. West Bengal is home to one of the largest consumer markets in the nation. It is the third largest economy. The state's agricultural output ranks third in the nation. West Bengal has been a leader in ushering reforms in various sectors.

Economic Indicators	Measure
Gross State Domestic Product (GSDP)	US \$ 47.85 Billion 25.2 : 20.5 : 54.2 (breakup between primary, secondary and tertiary sectors in %)
Compound Annual Growth Rate (CAGR)	8.94% 4.79 : 11.55 : 12.86 (individual CAGR's of each primary, secondary & tertiary sectors respectively)
Airports	2
Road Infrastructure	1.04 (Length of road / km <sup>2</sup> of Area)
Air & Sea Port Cargo Handling Capacity	> 50 Million tonnes/ annum
Income Index	0.49
Power Generation	8034 MW
Rail Network	3681 Km
Major Ports	2

Table II

#### Source of data for Table II

1. Census Data, Gov't of India
2. Economic Review 2007-08, Gov't of West Bengal
3. Central Statistical Organization findings - 2008, Gov't of India

## Society Matrix

The Social Indicators for the state paint an unflattering picture. Despite the rich cultural heritage and historical importance that the state was endowed with, these have not translated in terms of a transformation in social indicators. Progress, while being made, has been at a slower than expected pace and can be attributed primarily to the lack of “a collective dream” of the people towards realizing a better today. The state lies in a non-descript spectrum of social matrix achievements, and a renewed zest is required to bring West Bengal to the forefront of social value streams.

Social Indicators	Measure
Human Development Index	0.69 (Rank - 8 <sup>th</sup> in Indian States)
Infant Mortality Rate	38 / 1000 people
Sex Ratio	934 (females/ 1000 males)
Life Expectancy	~ 69
Literacy Rate	68.64%
Primary and Secondary Schools	8640
Higher Educational Institutes	646
Rural Population below Poverty	32.91%
Hospitals/ Health Centers/ Sub Centers	2081/ 1269/ 10356
Full Immunization (within 12 months)	56.4%
Brick & cement dwellings (% of urban households) : (% of rural households)	68 : 16
Safe Drinking Water (% of households)	82
Electrification (% of households)	42
Population served per doctor	4727

Table III

### Source of data for Table III

1. Census Data, Gov't of India
2. Economic Review 2007-08, Gov't of West Bengal
3. Central Statistical Organization findings - 2008, Gov't of India

## **The Future**

West Bengal faces an exciting, yet challenging period in which it's faced with the opportunity to make the State progressive and amongst the upper echelons of development. West Bengal can achieve this based on a long-term multi-variable approach with impetus on various sectors. Vision based development is multi-faceted and multi-sectoral and involves not only changes but also transformations in the social, political, technological as well as economic realms. These realms are closely knit and interdependent. West Bengal stands on the cross roads of being in a position to formulate, implement and evaluate the overall upliftment from its existing state to an envisioned one; by reflecting on the past, understanding and overcoming limitations, but more importantly, bring about change by bold transformations that are not inhibited by present realities.

## Infrastructure & Urbanization

Urban Development

Universal Access

Communications Infrastructure

Power Generation & Sustenance

Disaster Management

Technology Enablement

Sanitation & Hygiene

## I. Infrastructure & Urbanization

### Vision Elements

- **Urban Development:** Roadmap for future urban development projects in the state are to be developed to ensure uniform, planned and world-class development of infrastructure and facilities. Metropolis and Megalopolis regions are to be defined and development work is to be carried out with due regard to ecosystem balance.
- **Universal access:** Have initiatives, laws and regulation that aim towards providing universal access to buildings, transportation terminals, sidewalks, paths, roads and vehicles.
- **Communications Infrastructure:** Optimization, upgradation and augmentation of Ground, Air & Waterways is to be assessed, studied & developed. An Integrated transportation system has to be developed.
- **Power Generation & Sustenance:** Capacity upgradation of existing power plants is to be carried out. Emphasis is to be laid on phasing out carbon/ fossil fuel based power generation techniques, while embracing sustainable and environment-friendly power generation methods.
- **Disaster Management:** An integrated and cohesive disaster management unit needs to be developed with proper communication and policies setup between various law enforcement, emergency services & other pertinent bodies.
- **Technology Enablement:** Infrastructure for seamless wired & wireless communications is to be developed across the state as a capital intensive exercise.
- **Sanitation & Hygiene:** Infrastructure to ensure proper and modern sanitation facilities are to be designed & developed. Comprehensive public hygiene policies have to be developed and implemented.

### Action Areas

- **Urban Development:**
  - **New Urban Development Planning:** An Integrated development of greater Kolkata & Howrah area is to be assessed. A roadmap is to be developed regarding new urban settlements, ensuring capacity assessments and infrastructure future-proofing for the next century. 3 new urban cities to be identified and 10 urban centers to be upgraded to modern contemporary standards. Emphasis has to be laid on environmental sustenance and future-proofing developments.
  - **Upgradation of existing Urban Infrastructure:** Roadmap to upgrade the existing urban infrastructure to ensure 21<sup>st</sup> century facilities to the populace should be conceived. Policies and frameworks need to be developed and implemented to ensure that existing urban areas conform to the demands of 21<sup>st</sup> century life. Universal Access infrastructure is to be built for all salient public areas. Special thrust has to be allocated to strengthening of road networks & supporting infrastructure to ensure an increase in the road densities.

- **Communication & Transportation Infrastructure:** Transportation & communication requirements are to be forecasted in accordance with pipelined urban development projects and envisaged population flow. An integrated transportation system is to be developed.
  - **Ground Transportation:** Ground transportation has to be augmented to meet the demands of the state's requirements. Novel mass transportation means are to be envisaged and developed. Emphasis is to be laid on viability and implementation of world-class mass transit systems intra and inter-connecting various urban areas. Transit hubs have to be created to manage envisaged mass transit systems. Road connectivity throughout the state is to be augmented to meet and exceed the demands of society for the next 20 years. Ground transportation infrastructure has to be augmented at the rate of 8% per annum.
  - **Air Transportation:** The existing International & National Airport in Kolkata has to be upgraded to a world-class airport, with stress on next generation services, logistics, efficiency & infrastructure. Traffic & cargo handling to be increased to meet capacity handling for next 30 years. 2 new airports have to be developed, one of which will primarily serve commercial traffic.
  - **Waterways:** Transformation of the state's ports to world-class facilities for container management and shipping has to be carried out. A roadmap has to be formulated for augmentation of services at various ports, enhancing port capacities to handle traffic demands, increasing cargo handling 7 times from present handling capacities. Due thought is to be given with respect to technology and infrastructural upgradation to ensure benchmarking with world class port hubs. Viable waterway transportation modes have to be assessed and implemented. Pertinent rail, road and air connectivity roadmaps are to be formulated to complement the ports. The proposed port at Kulpi, along with existing air & sea ports should be augmented with modern port facilities in order to enhance the marketability of West Bengal as an import/ export hub.
  - **Technology Enablement:** Emphasis is to be laid on digitization and intelligence enabled systems for maps with specific stress on advanced traffic management and e-transportation solutions. Policies & procedures, with the involvement and collaboration of various organizations are to be charted and developed.
  
- **Power Generation & Sustenance:**
  - **Capacity upgradation:** Reforms are to be initiated in the Power Sector to improve efficiency in production, transmission and distribution. Capacity building exercises are to be undertaken to ensure that power production meets target requirements from Industry & Urbanization. A detailed roadmap for new power generation ventures is to be initiated and implemented in a phase wise manner.
  - **Renewable energy:** A thrust should be given towards renewable and greener technologies for the new power plants that are to be developed in the state. Innovative and new technologies are to be explored while creating new power plants. An aggressive roadmap ensuring that power requirements of 50% of the population are being met by renewable sources has to be devised.
  - **Power Export:** The state is to continue to aggressively produce power over and above its immediate requirements and act as an exporter of power.
  
- **Disaster Management:** Formulation of an integrated disaster management unit to oversee natural/ man-caused disasters is to be developed and implemented. The roadmap is to include proper laid down policies and procedures of collaborative assistance between law enforcement, federal armed forces, municipalities, emergency services and other government and non-government organizations. Inter state and national agency collaborations are to be envisaged as well, with proper communication and operational procedures in place.

- **Technology Enablement:** A comprehensive roadmap for interconnecting the entire state with high speed internet services as well as wireless networking is to be developed. Viable economic options are to be investigated. Implementation work should be carried out hand in hand with urban development projects. Advanced intelligence enabled systems are to be looked at to provide solutions for various value added services.
- **Sanitation & Hygiene:** Sanitation & Hygiene infrastructure supporting urban development projects is to be developed. World class water treatment, waste management and waste disposal methodologies are to be proposed and implemented for all new urban projects, with strict enforcing performed by the relevant municipal & state bodies. Existing facilities and infrastructures are to be upgraded phase-wise to meet strict environmental norms and policies. Fresh water supply chain needs to be optimized and clean drinking water infrastructure has to be setup throughout the state, percolating to all rural areas. Safe drinking water should be available to 100% of the population.

## Benchmarks

Metric	Unit	Present	Vision
<b>Megalopolis Region</b>	Numeral	0	1
<b>World class mega urban regions</b>	Numeral	0	10
<b>Urbanization</b>	% of population dwelling in urban areas	27.97	50
<b>Installed Power Capacity</b>	MW	8034	32000
<b>Population served by renewable energy sources</b>	% of total population	-	50
<b>Air Travel</b>	Annual Passenger load	6 Million	30 Million
<b>Annual Mass Ground Transit infrastructure growth</b>	%	3.6	8
<b>Port Cargo Handling Capacity (Air &amp; Water)</b>	Million Tonnes	60	500
<b>Safe drinking water</b>	% of households	82	100
<b>Electrification</b>	% of households	42	100
<b>Village connectivity by road</b>	%	55.65	95

Table IV

### Source of data for Table IV

1. Economic Review 2007-08, Gov't of West Bengal
2. Kolkata Port Trust data - 2008
3. Dep't of Civil Aviation, Gov't of India
4. Dep't of Power – 2008, Gov't of West Bengal

## Agriculture

Infrastructure

Technology Enablement

Education

Marketing

Value Added Products

Policy Formulation

## II. Agriculture

### Vision Elements & Action Areas

Agricultural development roadmap is to be formulated and implemented to ensure sustenance. Next-generation food production technologies are to be researched and implemented.

- **Infrastructure:** Infrastructure is to be developed to aid the optimization of the supply chain. Apt transportation, irrigation and storage management solutions are to be envisaged and implemented. A roadmap is to be provided to further strengthen co-operatives and their feasibility.
- **Technology Enablement:** Due thrust is to be given towards modernization of agricultural techniques by technology enablement and penetration, usage of innovative crop production methods, research, new seed technologies. Scientific methods of crop production are to be implemented and these technologies are to be propagated downstream to all farming methods. Scientific methods have to be introduced in order to increase crop yield and crop density.
- **Education:** Special emphasis is to be laid on providing training to farmers with respect to scientific agricultural practices. A detailed skills assessment to map the training needs based on required skills and future opportunities should be carried out. Special emphasis has to be given towards providing basic education to farmers to improve literacy rates of the income group.
- **Marketing:** Food supply chain models are to be optimized throughout the state, and special stress is to be laid on profitability of agriculturists and farmers. Measures are to be introduced to enable income parity of farmers and agriculturists with other sectors. Poverty eradication measures are to be rigorously enforced.
- **Value Added Products:** A roadmap to create more value added agricultural products is to be laid, with special emphasis on value added agro-products and handicrafts. Brand management is to be pro-actively envisioned.
- **Policy formulation:** A comprehensive agricultural policy is to be formulated to ensure success of the agricultural sector. These may include but are not limited to providing subsidies to farmers, as well as providing attractive and feasible financing schemes. Procedures also have to be formulated to tackle irrigation and drainage requirements.

### Benchmarks

Metric	Unit	Present	Vision
<b>Agricultural population in poverty</b> (agricultural laborers & self employed agriculturists)	%	47.03 & 21.24	22 & 12
<b>Growth rate of rural employment</b>	% (decennial growth 1994-2004)	0.65	2.5
<b>Illiteracy amongst agricultural population</b> (agricultural laborers & self employed agriculturists)	%	52 & 28	5 & 5

<b>Metric</b>	<b>Unit</b>	<b>Present</b>	<b>Vision</b>
<b>Land degradation</b>	% (degraded land/ total non-forest land)	28.77	5
<b>Improper drainage</b>	% (arable land/ arable land having improper drainage facilities)	81	35
<b>Brick/ Cement Houses</b>	% (rural areas)	16	100
<b>Productivity per hectare of net area sown</b>	Numeral	238.7	300

*Table V*

**Source of data for Table V**

1. *Dep't of Soil Conservation – 2003, Gov't of West Bengal*
2. *Annual Financial Statement & 11<sup>th</sup> Five Year Plan – 2007-12, Gov't of West Bengal*
3. *Human Development Report for West Bengal – 2004, United Nations (UNHDR-WB)*
4. *Directorate of Agriculture – 2007, Gov't of West Bengal*



## Business Augmentation & Economic Development

Sectoral Development

Incubation

Human Capital

Social Security

### III. Business Augmentation & Economic Development

#### Vision Elements

- GSDP & Sectoral Development: The state is to create a niche for itself in providing value added services and products, with due roadmaps created for moving up the value chain in various industrial sectors and creating brands.
- Incubation: Incubation strategies are to be formulated for “high thrust areas”.

#### Action Areas

- GSDP & Sectoral Development: A roadmap is to be developed with due thought on cost-value assessment.
  - Value Chain Assessment: Special emphasis is to be laid on cost-value assessment and building a niche for the manufacturing and services sector in the state. Special thrust is to be given to moving industries up the value chain. Innovation and leadership programs are to be coupled to all sectors of industrial development to formulate and develop a roadmap of industrial sustenance and value addition. Stress is to be laid on facilitating research and development in various industry sectors.
  - High Thrust Sectors: High Thrust Sectors are to be identified and facilitation in terms of funding, incubation setups, infrastructure and land and logistical requirements.
  - Cluster Development: Industrial cluster partnerships and collaborations are to be developed across the state with emphasis on creating a marketable niche for these clusters. Thrust in terms of technology penetration, brand definition, design and moving up the value chain is to be provided for development of clusters. Marketability of cluster products has to be paid special attention towards.
- Incubation: Incubation strategies for new sectors are to be formulated and hubs created to facilitate augmentation of these sectors. Full potential of these sectors are to be harnessed by following aggressive roadmaps. Science Parks based on successful international models are to be developed for facilitation of these thrust sectors. A marked increase in Government expenditure in the sphere of Science & Technology enablement has to occur.
- Human Capital: A roadmap integrating the education system with the industry is to be devised, and stress is to be laid on skills augmentation, thought leadership and innovation to provide sufficient as well as value added human capital to the industries. The roadmap is to ensure that, not only is the gap between job requirements and employable workforce kept to an absolute minimum, but thought leadership opens newer avenues of work and employability.
- Social Security: An effective strategy is to be formulated and implemented to ensure adequate Social Security schemes for the population. A prioritized roadmap is to be created to ensure social security based on “need”.

## Benchmarks

Metric	Unit	Present	Vision
Income Index	Decimal (factor of HDI)	0.49	0.75
State 5 Year Budget – Expenditures	Rs (crores) [12 <sup>th</sup> plan : 13 <sup>th</sup> plan]	9683	14524 : 21786
CAGR of GSDP	%	8.94	9
CAGR breakup of Sectors	% (primary : secondary : tertiary)	4.79:11.55:12.86	5.5:14:15
GSDP breakup of Sectors	% (primary : secondary : tertiary)	25.2:20.5:54.2	18:25:57
Poverty stricken population	%	20.4	10
CAGR of Employment rate	%	2.52	5
Import & Exports (as a share of pan India values for Ports – both air & sea)	% (import : export)	7.42 : 3	15 : 10

Table VI

### Source of data for Table VI

1. Gov't of West Bengal, Economic Review 2007-08
2. Bureau of Applied Economics & Statistics – 2008, Gov't of West Bengal
3. Human Development Report for West Bengal – 2004, United Nations (UNHDR-WB)
4. Bureau of Commercial Intelligence & Statistics – 2007, Gov't of India

## Health

Health & Food Policies

Medical Infrastructure

Health Education

Pharmaceuticals

## IV. Health

### Vision Elements

- Health & Food Policies: A roadmap to ensure successful implementation of Social Security schemes and enforcing various health & food policies is to be implemented to make the state a model reference for other states to follow.
- Medical Infrastructure: Bring about a paradigm improvement in health infrastructure by increasing density of medical facilities as well as bringing about a palpable shift in quality of healthcare. A parallel roadmap envisaging augmentation of educational institutes & necessary infrastructure is to be put in place.
- Health Education: Decentralized architecture of propagating minimum health education and awareness to the populace is to be implemented throughout the state at a micro-level.
- Pharmaceuticals: A thrust in the area of drug manufacturing is to be implemented, to make West Bengal one of the leading states in pharmaceuticals. Stringent policies are to be devised and implemented to ensure fake/ counterfeit drugs are not being produced/ distributed in the state.

### Action Areas

- Health & Food Policies: A robust State-wide health policy acting as an umbrella for Health Insurance & Social Security frameworks is to be devised and implemented. Special emphasis is to be laid on rural health insurance and social security schemes. A roadmap is to be devised to reduce food adulteration, and introduce policies and procedures for food monitoring, quality assurance and nutrition definitions and enforcements. An advanced scientific food quality policy is to be formulated and strictly enforced. An overarching body looking into Food & Drug quality, certifications, and best practices is to be augmented, working in close conjunction with various national and international agencies. This will govern health & food issues. New health policies, parallel augmentation of medical facilities, and availability of services shall ensure in a paradigm improvement in the situation of healthcare through the state.
- Medical Infrastructure:
  - Medical Infrastructure: A roadmap to provide quality and affordable health care is to be envisaged and implemented. Capacity building is to be planned out to meet rising demands of health care. Increased spending is required to meet the Infrastructure and technology requirements of the coming years.
  - Education: 30 world-class medical education institutes to be developed in the state. Existing medical colleges are to be drastically upgraded to provide latest facilities to equip emerging doctors. Special thrust to be provided in the areas of remote diagnostics, bio-technology, and nanotechnology in the area of biosciences.
  - Rural Health care: A state-wide medical facilities infrastructure roadmap is to be devised and implemented to ensure primary healthcare service to 100% of the population. Incentive schemes to lure medical practitioners to be devised, aided and abetted by infrastructural and health development plans. Immunization facilities to be present at all primary health clinics to ensure immunization for 100% of the population.

- **Health Awareness:** Propagation of health education schemes & awareness programs are to be devised and implemented so as to reach 100% of the population. Decentralized / outsourced mechanisms for health education have to be implemented. Collaboration plans between various pertinent organizations/entities have to be identified and implemented.
- **Pharmaceuticals:** West Bengal should be the preferred destination for Pharmaceutical Companies in India. A drastic reduction in the production of fake drugs is to be attained and stringent policies are to be devised and strictly enforced to ensure that the production and sales of counterfeit drugs is brought down to negligible proportions at the very least.

## Benchmarks

Metric	Unit	Present	Vision
<b>Health Index</b>	Decimal (factor of HDI)	0.7	0.9
<b>State expenditure on Health</b> (as % of State 5 Year Budget)	%	5.29	7
<b>Life expectancy</b>	Years	69	72
<b>Infant Mortality Rate</b>	/1000 live births	38	10
<b>Neonatal mortality</b>	% (of IMR)	57	30
<b>Vaccinations &amp; Immunizations</b>	% (of all children)	56.4	100
<b>Antenatal care</b>	% (of all married women)	19.7	60
<b>Population served per doctor</b>	Numeral (urban : rural)	830 : 4727	300 : 2500
<b>Hospitals &amp; Health centers</b>	Numeral (hospitals : total health units)	2081 : 13706	3000 : 23000
<b>Medical colleges</b>	Numeral	9	30
<b>Food policies</b>	Comparative	Rudimentary	In line with FDA

Table VII

### Source of data for Table VII

1. *Economic Review 2007-08, Gov't of West Bengal*
2. *Human Development Report for West Bengal – 2004, United Nations (UNHDR-WB)*
3. *Annual Financial Statement & 11<sup>th</sup> Five Year Plan – 2007-12, Gov't of West Bengal*
4. *Bureau of Health Intelligence – 2006-07, Gov't of West Bengal*
5. *Census Data, Gov't of India*

## Education & Skill Development

Primary & Secondary Education

Higher Education

Skill Based Education  
(Vocational)

Industry Academia collaboration

Professional Educational Staff

Thought Leadership &  
Innovation

## V. Education & Skill Development

### Vision Elements

- Primary & Secondary Education: A robust state-wide policy is to be devised and implemented to ensure primary education is provided to all. Education infrastructure is to be ramped up.
  - Higher Education: Capacity, infrastructure and teaching methodology of higher educational institutes are to be upgraded to meet next generation education demands.
  - Skill based education (Vocational): A rapid & percolating strategy to develop vocational training skills is to be developed.
  - Industry Academia interactions: Emphasis is to be laid on industry academia interactions to enable scholars and students access to latest industry happenings.
- 
- Professional Staff: Plans are to be put in place to ensure that sufficient numbers of professional staffs are adequately trained to educate the next generation of citizens.
  - Thought Leadership & Innovation: An environment for producing thought leaders and visionaries is to be created.

### Action Areas

- Primary & Secondary Education: Achieve 100% literacy rate amongst children and a near 0% drop out rate for secondary education is to be envisaged.
  - Infrastructure: Education infrastructure is to be drastically ramped up across the state to ensure primary education facilities are available to 100% of the population in every district. Primary education centers to be located within a 1.5 km radius of rural settlements. All education centers should be equipped with modern facilities and infrastructure to advance extra-curricular skills. Thrust is to be given towards technology enablement (via hardware infrastructure and networking) of schools especially in rural areas to enable distance learning of new sciences/ technologies that would otherwise not propagate to rural learning centers.
  - Curriculum: Emphasis is to be laid on revamping teaching methodology as well as upgradation of curriculum with special stress on practicum. Stress is to be laid on innovative learning principles. Due thought is to be given towards revitalizing knowledge and usage of ancient literatures.
- Higher Education: Capacity and infrastructure of higher educational institutes in all streams are to be upgraded to accommodate for the burgeoning requirements of educated professionals. Infrastructure is to be upgraded to enable next generation learning techniques as well as enable scholars to get acquainted with the latest technologies/ happenings of their fields.
- Skill based education (Vocational): Various pro-active measures are to be undertaken to augment skill based education setups. A comprehensive roadmap covering various vocational education methods and collaborations are to be studied and implemented. Collaboration with industry bodies (as part of Corporate Social Responsibility) is to be investigated and implemented. Emphasis is to be laid on outsourced service

oriented vocational education as well as various decentralized architectures of dissemination of education with the use of technology.

- **Industry Academia Collaboration:** Industry Academia collaborations are to be a special thrust area so that scholars are knowledgeable of latest industrial processes/ technologies and are able to spawn new ideas. Employability streamlining is to be an area of action. Internship/ scholarship models are to be developed between various industries and educational institutes through inter-agency collaborations.
- **Professional Staff:** Augmentation of professional educational staff to adequately train the population and provide them with comprehensive primary and secondary education. A drastic increase in teacher to student ratio is to be envisaged and implemented. Special emphasis is to be laid upon character building and motivational skills of teachers, which can then percolate through to students.
- **Thought Leadership & Innovation:** Special emphasis is to be laid on thought leadership principles in educational curriculum. Stress is to be laid on harnessing entrepreneurial & thought leadership skills of students. Science parks in various disciplines are to be developed based on successful international models. Innovative thought in all streams of education is to be harnessed and models to do so are to be developed. New state of the art research centers are to be developed in special “thrust” fields.

## Benchmarks

Metric	Unit	Present	Vision
<b>Education Index</b>	Decimal (factor of HDI)	0.69	0.8
<b>State expenditure on Science, Technology &amp; Environment</b> (as % of State 5 Year Budget)	%	0.55	4
<b>State expenditure on Education</b> (as % of State 5 Year Budget)	%	8	9
<b>Literacy rate</b>	%	69.2	98
<b>Schools with inadequate infrastructure</b>	%	59.1	15
<b>Trained teachers</b>	%	66	100
<b>Students per teacher</b> (Primary & Secondary)	Numeral	47	20
<b>Drop out rate post primary school</b>	%	18.1	5
<b>Gov’t expenditure on education</b>	% of GDP	3.5	6
<b>Breakup of gov’t expenditure</b>	% of education expenditure (infrastructure : training : midday meals)	2.1 : 0.4 : 1.5	8 : 3 : 2
<b>Primary Schools</b>	Numeral	67107	80000
<b>World class graduate level institutions</b>	Numeral	3	20
<b>Degree Colleges &amp; Polytechnics</b>	Numeral	493	750
<b>Medical Colleges</b>	Numeral	9	30

<b>Metric</b>	<b>Unit</b>	<b>Present</b>	<b>Vision</b>
<b>Vocational Training Institutes</b>	Numeral	50	200

*Table VIII*

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**Source of data for Table VIII**

1. *Census Data, Gov't of India*
2. *Economic Review 2007-08, Gov't of West Bengal*
3. *Human Development Report for West Bengal – 2004, United Nations (UNHDR-WB)*
4. *Annual Financial Statement & 11<sup>th</sup> Five Year Plan – 2007-12, Gov't of West Bengal*
5. *Director of School Education – 2007-08, Gov't of West Bengal*

## Government Services & Public Administration

Red Tap & Transparency

Next Generation Governance

Law Enforcement

Judiciary

## VI. Government Services & Public Administration

### Vision Elements

- **Red Tape & Transparency:** A mechanism to decrease transaction costs and improve efficiency of all facets of government policies, procedures and areas of work is to be formulated and rigorously implemented. Red tape is to be minimized/ removed from all levels and facets of government work.
- **Next generation Governance:** West Bengal is to be at the forefront of Governance by embracing technological innovations in providing services and governance. Innovative governance mechanisms (advanced e-Governance solutions) shall be proposed and implemented.
- **Law Enforcement:** Conscientious law enforcement has to be implemented in all facets of law & order, and ineptitude of law enforcing agencies has to be eradicated.
- **Judiciary:** A revamp of the judicial process is proposed, thereby decreasing corruption as well as the backlogs of cases. Technology enablement and infrastructure development are to be key areas that will facilitate the Judiciary.

### Action Areas

- **Red Tape & Transparency:** An overhaul of the work ethic of government offices is to be done. Citizens should be able to demand stellar “customer service” from government offices. Policies and procedures for various citizen services should be radically simplified and streamlined to enable high accessibility, usability and simplification of the services. Functioning of the Judiciary/ law enforcement is to be kept as much as possible, independent of the executive. Radical checks are to be introduced into the governance mechanism of the Government to ensure accountability and transparency of all transactions. Red tape is to be minimized/ removed from all facets of government work.
- **Next generation Governance:**
  - **Capacity Building & Infrastructure:** A drastic improvement & upgradation of facilities and infrastructure is sought for a future pointing towards higher decentralization of availability of government services. Capacity building and appropriate infrastructure expenditure should be well planned out and implemented.
  - **Services:** Novel & innovative service delivery mechanisms are to be implemented to facilitate citizens. These include but are not limited to e-Governance and next generation ubiquitous governance technologies.
- **Law Enforcement:** A radical overhaul of law enforcement mechanisms is to be thought out and implemented. All facets of law enforcement are to be interlinked and upgraded to meet 21<sup>st</sup> century society requirements. Conscientious law enforcement principles are to be applied and implemented with rigor.
- **Judiciary:** A massive upgrade has to occur in Legal Infrastructure. This is to include meeting capacity requirements in terms of law practitioners and relevant professionals as well as upgradation of existing facilities to meet demands of society. This includes and is not limited to physical infrastructure and technological infrastructure. The judicial system is to be revamped to ensure backlog of cases cease to



pile up. Justice process is to be fast tracked by novel process re-engineering and infrastructure upgradations. Sweeping measures are to be taken to ensure corruption is rooted out from the judicial system.

## Benchmarks

Metric	Unit	Present	Vision
Number of cognizable crimes per lakh of population	Numeral	83	50
Conviction rate	% (of cases that resulted in a conviction to the number of completed trials within a year)	22.6	50
Rate of complaints against policemen	/100 policemen	4.4	0.1
Global Integrity Index for gap in implementation of legal frameworks	Numeral	24	5

Table IX

### Source of data for Table IX

1. Human Development Report for West Bengal – 2004, United Nations (UNHDR-WB)
2. Corruption Perception Index for India - 2007

## Environment

Produce & Food

Pollution

Global Warming

Flora & Faun Preservation

Human Footprint : Impact

## VII. Environment

### Vision Elements

- Produce and food: A long term successful model for agricultural produce is to be developed while parallely visioning adequate forestation, soil quality and “organic produce”.
- Pollution: A revolutionary change in the perception and manner of tackling pollution is to be envisaged and implemented. Pollution creating sources affecting all areas of the ecosystem are to be strictly monitored and swift, far-reaching changes are to be implemented to ensure meeting of pollution levels according to stringently followed international norms.
- Global Warming: A thrust into environmentally friendly fuel/ power generation techniques is to be undertaken to offset issues of global warming. Effects of global warming are to be deeply assessed to understand their effects on the state, and suitable mitigating mechanisms are to be enforced.
- Flora & Fauna preservation: A high impetus roadmap is to be prepared and implemented encompassing sustenance of flora and fauna in the eco-system is to be developed and implemented.
- Human Footprint: Efforts are to be made to ensure adverse impact of human habitation on the ecosystem is minimized, and optimal models created thereof.

### Action Areas

- Produce & food: Innovative & scientific crop production techniques are to be embraced with emphasis on organic produce in which the usage of chemicals fertilizers and pest control mechanisms are minimal and environmentally non-invasive. A roadmap ensuring sufficient aforestation is to be envisaged and implemented.
- Pollution: An integrated forward-thinking watchdog agency is to be setup to formulate stringent policies and procedures, laws governing pollution norms for all pollution sources. The agency is to be empowered by having a law enforcement wing and is to follow strict international guidelines to meet pollution monitoring and enforcing principles. Pollution sources are to be identified and all industrial units across the state are to be sanctioned prior to operationalization. Stringent monitoring of all pollution sources are to be carried out.
- Global Warming: The impact of Global Warming on the ecosystem as well as on human habitat is to be assessed and risk mitigation tactics to be enforced. Pro-active measures are to be implemented to ensure propagation of green technologies through all facets of society, thereby bringing the carbon footprint under the guidelines of international protocols in collaboration with various local and national agencies.
- Flora & Fauna Preservation: A priority based roadmap is to be developed and implemented across the state identifying high risk flora and fauna, as well as solutions for their preservation. Cross agency collaboration and research is to be facilitated to enable preservation of flora & fauna across the state. Stringent norms are to be passed and implemented.

- **Human Footprint:** A careful assessments of adaptive capacity of the ecosystem is to be made in terms of the impact of the human footprint on the environment. A thoroughly researched and detailed roadmap is to be prepared for all new human habitation projects as well as existing habitats in terms of ecosystem sustainability, and proactive steps taken to ensure that balance between the ecosystem and human habitation is maintained in accordance to stringent ecosystem adaptive capacity capabilities.

## Benchmarks

Metric	Unit	Present	Vision
<b>Forest Cover</b>	% (of total land)	13.6	34
<b>Soil Erosion</b>	% (of total land)	15.23	5
<b>Fuel wood consumption</b> (rural population usage)	% of rural population	39.5	3
<b>Water pollution</b> (effluent treatment guidelines)	Comparative	Rudimentary	World Standards
<b>Air Pollution Index</b> (urban areas)	Numeral	145	35
<b>Rural population using rudimentary chullhas</b>	%	83	10
<b>Population served by renewable energy sources</b>	% of total population	0.1	50
<b>Industrial Units not having sought relevant pollution certificates from West Bengal Pollution Control Board</b>	% of total industrial units	78	0

Table X

### Source of data for Table X

1. *Economic Review 2007-08, Gov't of West Bengal*
2. *Directorate of Agriculture – 2007, Gov't of West Bengal*
3. *Dep't of Soil Conservation – 2003, Gov't of West Bengal*
4. *Human Development Report for West Bengal – 2004, United Nations (UNHDR-WB)*

## Sports, Arts & Culture

Sports  
Arts & Culture

### VIII. Sports, Arts & Culture

#### Vision Elements

- **Sports:** A sustained and pro-active roadmap for producing highly talented sports persons in a position to compete on the world stage is to be implemented.
- **Arts & Culture:** A sustained and thorough roadmap is to be envisaged to bring to light the rich culture and heritage of the state. The state is to become a hub for propagation of culture, art and liberal thought.

#### Action Areas

- **Sports:** A roadmap is to be designed for implementation of adequate infrastructure and funding to create world-class sports training and development facilities. Talent scouting and development in various sports fields are to be undertaken at grass root levels and a rapid augmentation in sports related scholarships are to be implemented. Government aid and financing has to be increased drastically and systematically to meet the vision of producing world class sports talent. Various sports are to be identified as special thrust areas, and an implementation roadmap to make the state the leading hub for these sports is to be prepared. A roadmap for commercialization of sports at school and higher educational levels is to be developed and implemented.
- **Arts & Culture:** A thrust is to be given to provide impetus for upliftment and maintenance of heritage sites and cultural footprints. A comprehensive roadmap defining a prioritized implementation plan of various branding, marketing and maintaining heritage sites is to be prepared. A conducive environment to propagate art and liberal thought is to be made. This includes, but is not limited to infrastructural setup, and creating the necessary setup to attract artistes of various genres. Impetus is to be given to the propagation and profitability of localized arts and crafts (including handicrafts).

#### Benchmarks

Metric	Unit	Present	Vision
World class multi-sport infrastructural facilities	Numeral	0	3
Olympian medal winners	Numeral	0	5
State expenditure on sports, arts & culture (as % of State 5 Year Budget)	%	1	2

Table XI

#### Source of data for Table XI

1. Annual Financial Statement & 11<sup>th</sup> Five Year Plan – 2007-12, Gov't of West Bengal

## Child Rights & Protection

Policies  
Education

### IX. Child Rights & Protection

#### Vision Elements

- A secure future with hope, optimism, opportunity and rights is to be envisaged for all children of the state.

#### Action Areas

- **Policies:** Policies are to be formulated and strict procedures enforced to ban child labor & trafficking of all forms. Child protection Committees are to be formed and empowered with various options to monitor and provide child welfare services. Necessary measures are to be taken towards protection and upliftment of rights of children.
- **Education:** Education infrastructure is to be drastically ramped up across the state to ensure primary education facilities are available to 100% of the population in every district. Primary education centers to be located within a 1.5 km radius of rural settlements. All education centers should be equipped with modern facilities and infrastructure to advance extra-curricular skills. Thrust is to be given towards technology enablement (via hardware infrastructure and networking) of schools especially in rural areas to enable distance learning of new sciences/ technologies that would otherwise not propagate to rural learning centers.

#### Benchmarks

Metric	Unit	Present	Vision
Education Index	Decimal (factor of HDI)	0.69	0.8
State expenditure on Education (as % of State 5 Year Budget)	%	8	9
Literacy rate of Children	%	71.2	100
Students per teacher (Primary & Secondary)	Numeral	47	20
Drop out rate post primary school	%	18.1	5
Primary Schools	Numeral	67107	80000

Table XII

#### Source of Data for Table XII

1. Economic Review 2007-08, Gov't of West Bengal
2. Human Development Report for West Bengal – 2004, United Nations (UNHDR-WB)
3. Director of School Education – 2007-08, Gov't of West Bengal

## Moral Leadership

Education  
Leadership

### X. Moral Leadership

#### Vision Elements

- Moral Leadership: Moral values are to be imbibed by the entire population. Leaders are to strive towards being model citizens.

#### Action Areas

- Education: Moral & civil values are to be emphasized upon during the formative years of a child's life. These are to be propagated through education via interesting and innovative methods. Ideologies of peace and tolerance are to be taught in educational curriculum.
- Leadership: Leaders in political spheres are to uphold themselves as model citizens. Responsibilities are to be thrust upon leaders to behave in a manner becoming of a model citizen. Special emphasis is to be laid on revamping of the present political system. Process of selection of leaders is to be re-thought and a method to select "deserving" candidates needs to be implemented. Careful monitoring of educational and legal past of leaders are to be taken into care while selecting them.

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