


TAMILNADU
VISION2025
PEOPLE. PRIDE. PROGRESS.





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From the Chairman's Desk

Friends,

"May you live in interesting times" is proverbially an ancient Chinese saying. Surely today this ancient Chinese proverb has become more Indian if not South Indian!



We, as a Nation, are at a stage wherein finding economic models to growth patterns has become near impossible. We are literally bursting at the seams with growth. We have empirically seen 15-17 year phases in the history of India—Poorna Swaraj in 1930s, the Quit India Movement in the 1940's leading to independence in 1947, Extreme Socialism in 1973, liberalisation sown in the early 1990s'. Ladies and Gentleman we are now at 2008 and I believe at the beginning of the next revolution.

When we embarked on this vision exercise we had two fundamental choices to make.

1. Desktop Research or Deliberative Democracy.
2. Mapping Backward Trends and Extrapolating them or Folding in the Future.

We took the bolder options. We combined Desktop Research and Deliberative Democracy. In essence statistical models and number crunching exercises to aid the vision were supplemented by extensive interactions a wide cross section of stakeholders. The aspirational vision of over 700 people from Tamil Nadu has been captured through the process. The spectrum covered Politicians to Students, Bureaucrats to Academia and Civil Society Leaders to the Common Man.

There is no time for incremental change. We need to envision the future by capturing the aspirational dreams of the people of the State. Hence, we've decided to take the approach of "fold in the future"... Creating a vision based on people's aspirations and creating a roadmap to reach there, rather than



incremental growth. Hence, we mapped where we would like to be in 2025 and also how we would attain our vision of 2025.

This path breaking document captures the unequivocal voices of Tamil Nadu. I take the liberty of highlighting a few of the mega trends

Key Learnings of the Vision:

- ★ The scale of changes to happen in the next two decades is likely to be unmatched by anything we have seen so far.
- ★ The speed at which things have to happen to achieve the goals is again of a measure unseen till now.
- ★ To match the speed and scale there will be need for a drastically improved delivery mechanism and devolution of power.
- ★ Capital expenditure of a high order will be needed and hence the PPP route will be a preferred mode of delivery .
- ★ Inclusive growth will be an absolute must to ensure social stability.

I wish to thank the core committee members consisting of key CII office bearers, eminent academics, bureaucrats, and persons representing civil society organisations, who guided the vision gathering and provided feedback at critical intervals.

I wish to thank PricewaterhouseCoopers, who facilitated the vision gathering and in developing this document.

Gopal Srinivasan
Chairman
CII-Tamil Nadu State Council



Executive Summary

Introduction

This is the summary of “Vision 2025” of Tamil Nadu as articulated by the people of the State. India is in the cusp of a disruptive change. Exponential economic growth has thrown statistics into turbulence making it almost impossible to find a viable correlation between historic economic trends and present growth. This vision document recognises that and has hence looked to identify the potential and capture the future aspirations of the state and its people. Unlike such endeavours in the past this exercise did not attempt to project the future with past trends. Instead, it has sought to envision the future based on the emotions and aspirations of people of the state.

In addition to a long history stretching back to the classical age and having among the world’s richest cultural traditions, Tamil Nadu is a key actor in India’s economic resurgence story and has been identified as one of the most competitive business destinations in Asia.

Tamil Nadu, with a GSDP of about Rs. 2.5 lakh crores¹ at current prices for 2006-07, is one of the most vibrant states in India that has moved fast on the development scale. Primarily supported by robust growth in the manufacturing and services sector the GSDP of Tamil Nadu, in PPP terms, has become almost equal to the GDP of Norway.

The economy owes its strength to factors such as high urbanisation and literacy rates, a sound educational system and relatively efficient infrastructure. Nevertheless, the challenges of inclusiveness, equitability, environmental sustainability, an alarming infrastructure deficit and an ageing population 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 identified challenge.

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. The fulcrum of the vision is the principle of deliberative democracy as articulated by Joseph M Bessette wherein the voices of various sections of society have been captured with in-depth quantitative research as an analytical backstop.

Key Learning:

- ★ The scale of changes to happen in the next two decades is likely to be unmatched by anything we have seen so far.

- ★ The speed at which things have to happen to achieve the goals is again of a measure unseen till now.
- ★ To match the speed and scale there will be need for a drastically improved delivery mechanism and devolution of power.
- ★ Capital expenditure of a high order will be needed especially in the education and health sectors.
- ★ Greater private sector participation (PPPs) will be essential for capital generation and support in delivery.
- ★ Non exclusionary growth will be an absolute must to ensure social stability.

A quick summary is presented below.

Urbanisation

Tamil Nadu already has among India's highest urbanisation rates. It is proposed to further harness this strength by the development of 1 mega urban region around Chennai and 4 mega cities, as well as bring these metropolises on par with Asia's best developed cities. This is sought to be achieved through an emphasis on planning, supported by world class multi-modal public transportation systems. In addition to the mega cities, 25 urban centres in the districts should be upgraded to world class levels. The mega urban region would be connected with the mega urban region and 4 mega cities by 6/8 lane highways and the 25 urban centres to the block headquarters by 4 lane highways creating a collective 'hub and spoke model'.

These urbanisation goals would require the employment of pioneering techniques in urban management including unified urban planning, Parking and FSI credits and digital simulation planning of transportation differential FSI norms, to aid low cost housing for instance, would also be a vital part of the urbanisation strategy.

Infrastructure

While Tamil Nadu's infrastructure services are, in most cases, comparable with the best in the country, they are nevertheless out of step with the ambitious development agenda set out in the Vision. Focusing on this is therefore one of the pillars of the overall exercise.

The core strategy of infrastructure development revolves around high speed road and rail networks (including 7,000 km of 6 and 8 lane highways), uninterrupted water supply with universal coverage, world class airports with a total capacity of 7 crore passengers, a 12 fold increase in port-handling capacity and enhancement of the power generation capacity by a multiple of 11.

These targets are proposed to be met through innovative and forward looking measures such as encouraging financial inflows through PPP mechanisms, minor port development schemes, airports in smaller towns, interlinking of rivers and development of desalination plants.

Industrialisation

Chennai has always been one of India's chief industrial growth centres, having the advantages of a strategically located port and a highly skilled work-force. Chennai's position has been further bolstered in recent times thanks to its success in industries such as IT, Electronics and Automobiles. Besides, Tamil Nadu has among the most dispersed industrial spreads in the country with cities like Coimbatore, Madurai and Trichy being business centres in their own right.

The manufacturing and services sector is envisioned to contribute Rs. 10.8 lakh crores at current prices by 2025 which translated into a growth of 5 times the current value. Leveraging on the state's existing reputation as one of Asia's best locations for manufacturing, the Vision sees Tamil Nadu emerging as one of Asia's manufacturing hubs, playing host to at least 5 Fortune 500 companies. 93% of the GDP is foreseen to come from the manufacturing and services sectors by 2025. The industrial vision also encompasses the tourism potential of the state which is projected to grow to 5 crore international tourists by 2025.

The realisation of the industrial vision would be aided by developing incubation hubs (in particular, for SMEs), development of clusters and an emphasis on skill development. Other elements of the state's industrial strategy include a concerted move up the value chain, especially in industries where the state has a demonstrated strength, and enhancement of its sectoral diversity. These measures will see to the number of new jobs go up by 2.6 crores by 2025. The number of vocational training institutes should go up by 4 times.

The industrial competitiveness of the state is proposed to be reinforced through state interventions in such areas as research & development and local branding.

Health

That a healthy population contributes to a healthy economy is a truism that acquires additional layers of meaning in the context of India's much vaunted "demographic dividend".

Health infrastructure in terms of number of beds and doctors are envisioned to grow by 5 times each at 4 times the speed as we have experienced in the

past decade. The Vision for the State would necessitate positive changes in statistics such as the infant mortality rate. The state's role in preserving its citizens' health would include increasing the doctors per thousand population ratio from 0.14 to 2.3, hospital beds per thousand populations from 0.94 to 3.6, introducing health insurance, focused institutional development and allocating a larger slice of the budget pie for health sector interventions.

Tamil Nadu's emerging strength in the area of medical tourism is proposed to be further enhanced with a more international accent. With doctors per thousand population poised to become 2.3 only in 2025, leveraging technologies will help achieve increased productivity. Remote diagnostics through tele-medicine would increase the penetration of healthcare in rural areas and drive productivity to world class levels.

Governance

A scan of the economic success and failures of countries after World War II indicates an unmistakable correlation between governance and growth. The success of countries like tiny Botswana in comparison with its surrounding countries is just one example of the difference good government can make to its citizens.

Acquiring a reputation for responsiveness and transparency is therefore not only a pre-condition for efficiently executing the state's development agenda but also a conspicuous green signal for external investments. Among the metrics outlined by the governance vision in this document is the number of days to start a business and register property. It is proposed that Tamil Nadu should attain the standards of benchmarks like Australia and Norway where it takes 2 days to unlock the factory gates and just a day to settle into a new home.

Replicating the efficiency of the benchmark countries would also involve replicating the sophistication of their governance systems which include measures such as e-governance, reengineering citizen's services, decentralisation and outsourcing.

Rural Development

Despite its significant urbanisation, a substantial part of the state's population is still dependent on agriculture. A development vision that does not address the needs of the rural masses is therefore likely to be ineffective in transforming the lives of the majority in the State.

The vision has the twin agenda of enhancing agricultural yield through measures like improvement of productivity, introduction of value added

products and agro marketing while ensuring that industrial development spreads out to backward districts. Both these objectives are dependent upon the ramping up of infrastructure in rural areas, financing which would require a lot of innovative thinking. The length of roads per square Km for instance needs to go up from 132 to 300. The high class road network connecting the mega urban region, 4 mega cities to the 25 world class urban centre would form the back bone through which villages can be connected to the urban areas. The world class urban centres are envisioned to be connected to block headquarters with 7,400 km of four lane highways.

These measures are expected to result in an ambitious 5 fold increase in rural per capita income which would cross Rupees 45,000 per annum by 2025.

Education

Human capital has always been a great asset of Tamil Nadu and examples of countries like Japan and Korea amply demonstrates the worth of human capital in comparison with natural resources. The place of education in fostering human capital is similarly beyond dispute. The GER (Gross Enrolment Ratio) for higher education should grow 4 times the current levels.

State should have 100% of the children completing high school and 50% enrolling in colleges by 2025. Further, it is expected that Tamil Nadu will have a base of 1.2 crores graduates and 3 crores vocationally trained and certified technicians. The number of institutions for higher education and vocational training should increase by 4 times each. Science Parks along the Taiwanese model is a specific success story that is proposed to be replicated in the state.

Besides physical investment in facilities, it is also worthwhile to look at softer issues that could enhance educational effectiveness without necessarily entailing a substantial cost. These could include steps like greater collaboration between industry and academia, encouraging vocational training and greater flexibility of curriculum.

Diaspora and Southern Synergies

In an age which acknowledges the soft power of a country along with its military and economic might, Tamil Nadu's Diaspora, and its unique cultural and political relationship with other southern states, is an asset that the state would do well to harness. Chennai, Coimbatore and Hosur should be promoted as preferred headquarters for businesses in the bordering areas of the neighbouring states.

To reach out to the state's estimated 40 lakhs non-residents, various measures like expanding the role of the World Tamil Council and instituting regional

awards along the lines of the Padmashri and the Padma Bhushan are proposed. In addition, replicating the success of the recently held Chennai Sangamam in other parts of the State and also neighbouring States would help build bridges with the related cultures of the other southern states. These cultural links often lay the foundation for stronger economic ties and attracting investments.

Our Approach

A two-pronged approach was adopted for the visioning exercise, consisting of Desktop Research and Deliberative Democracy. In other words, statistical models and number crunching exercises to aid the vision were supplemented by extensive interactions with more than 700 stakeholders representing a wide spectrum of the state's population. This included students, administrators, politicians, ward councillors, trade union leaders, civil society organisations, industry, academicians and sector experts.

Acknowledgement

CII wishes to thank the Government of Tamil Nadu, PricewaterhouseCoopers, that facilitated the vision gathering and in developing this document, the core committee members consisting of key CII office bearers, eminent academics, bureaucrats, and persons representing civil society organisations who guided the vision gathering and provided feedback at critical intervals and above all the nearly 700 people for their passionate, thoughtful and candid participation that helped capture the voices of their hearts and images of their dreams and convert them into this document We dedicate this document to their dreams come true.



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Vision 2025

The following 'as-is' and 'to-be' scorecards provide a snapshot of the indicators, both economic and social, of Tamil Nadu. A variety of indicators have been chosen to give an idea of the magnitude of change the state has to undergo in order to achieve envisioned future. The projections were born out of statistical projections or statistical interpretation of the aspirations of the people interviewed.

The economic scorecard points to a projected GSDP of Rs. 11.6 lakhs crores that would be equal to that of India's GDP in 2000. The 7 times increase in air passengers, 10 times increase in cargo and 10 times increase in power capacity all point out the grand scale of changes that beckon the state. The ease of doing business by reforms in governance would reduce time required for starting a business to 2 days from 41.

The social scorecard demographics trends expected in 2025 pointing a rise in median age from 29 to 37. Aspirations target a Human Development Index of 0.94, Gini Index of 0.26, 95% Gender Disparity Index and almost an elimination of absolute poverty making the state on par with developed western countries. On the education front, the aspirations of universal literacy, 50% of the children aspiring for higher education, 15 lakhs youngsters (3 times the current figure) enrolled in vocational training courses points the giant leaps that state would have taken to become a knowledge economy that would pride itself of producing a Nobel laureate. The inclusivity in growth would have caused a five fold increase in per-capita farmer income.

The significance of speed and scale of the changes is indicated in the tables following the scorecard.

Economic scorecard

| Tamil Nadu Statistics | Unit | 1991 | Current | Vision 2025 |
|--|------------------|-------|---------|-------------|
| Gross State Domestic Product ² | Rs. lakh crores | 0.3 | 2.5 | 11.6 |
| Roads ³ | km per 100 sq km | 105 | 132 | 300 |
| Air Passengers ⁴ | Lakhs | 7 | 103 | 700 |
| Installed Power Capacity ⁵ | MW | 6,000 | 11,000 | 111,000 |
| Cargo (Air + Sea) ⁶ | MT | 25 | 90 | 1,100 |
| Travel time from Chennai to Kanyakumari | Hrs | NA | 13 | 7 |
| Mega Urban Region | Nos | 0 | 0 | 1 |
| Mega Cities | Nos | 0 | 1 | 4 |
| World class urban centres | Nos | 0 | 0 | 25 |
| Days to start business ⁷ | Days | NA | 41 | 2 |
| Days to register property ⁸ | Days | NA | 63 | 1 |
| Fortune 500 companies with bases in Tamil Nadu | Numbers | NA | - | 5 |

Speed & Scale

| | Scale | Speed |
|---------------------------------|----------|----------|
| GSDP | 5 times | 4 times |
| Per capita GSDP | 4 times | 4 times |
| Air Passengers | 7 times | 6 times |
| Installed Power Capacity | 11 times | 20 times |
| Cargo (Air + Sea) | 12 times | 16 times |

Social scorecard

| Tamil Nadu Statistics | Unit | 1991 | Current | Vision 2025 |
|---|-----------------------|------|---------|-------------|
| Population ⁹ | Crores | 5.6 | 6.6 | 7.2 |
| Young (0-14) | % | 30.3 | 24.5 | 18.7 |
| Old(60+) | % | 12.5 | 10.0 | 17.1 |
| Median Age | Years | 22 | 29.0 | 37.3 |
| Urbanisation ¹⁰ | % | 36 | 50 | 75 |
| Water supply ¹¹ | Lpcd | NA | ~50 | 150 |
| Human Development Index ¹² | | 0.5 | 0.7 | 0.94 |
| Poverty Ratio (Below Poverty Line) ¹³ | % | 35 | 22 | ~5 |
| Gini Index ¹⁴ | | 0.28 | 0.34 | 0.26 |
| Infant Mortality Rate ¹⁵ | per 1,000 live births | 48 | 37 | 5 |
| Hospital beds ¹⁶ | Numbers | NA | 61,000 | 300,000 |
| Gender Disparity in higher education ¹⁷ | | NA | 0.75 | 0.94 |
| Higher Education Gross Enrollment Ratio ¹⁸ | % | 4-6% | 14% | 50% |
| Vocational training - No of students | Lakhs | NA | 4.2 | 15.6 |
| Farmer income per capita | Rs | 5300 | 9000 | 45,000 |
| Nobel Laureates | Numbers | 0 | 0 | 1 |

Speed & Scale

| | Scale | Speed |
|---------------------------------------|-----------|-----------|
| Infant Mortality Rate | 7 times | 3 times |
| Urbanisation | 1.5 times | 1.8 times |
| Doctors graduating per year | 3 times | 3 times |
| Per farmer income | 5 times | 8 times |
| College Gross Enrollment Ratio | 4 times | 4 times |

Note: The projections are provided based on statistical analysis, interviews and benchmarks.

எண்ணிய எண்ணியாங்கு எய்துப எண்ணியார்
திண்ணியர் ஆகப் பெறின்

If those who have planned (an undertaking) possess firmness (in executing it) they will obtain what they have desired even as they have desired it. (666)

Urbanisation

Sub Vision

Well planned cities comparable to other advanced Asian metropolises will be developed in Tamil Nadu. Multimodal public transportation systems of international standards will be in place in all major cities.

Goals

- ★ 1 unique mega urban region around Chennai.
- ★ 4 mega cities should be developed.
- ★ 25 urban centres should be upgraded to world class levels.
- ★ Integrated transport system 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 5,000 sq kms encompassed by Marakkanam, Arakonam and Pulicat (MAP) as Greater Chennai Region. Infrastructure connectivity to be complemented with appropriate governance structure that allows for decentralised jurisdictional authorities to function under a common framework.
 - ❖ Other four mega cities, namely Coimbatore, Madurai, Thiruchirapalli and Thoothukkudi, should also be planned on the lines of greater Chennai – MAP region with standardised urban amenities.
- 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 by 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 road, it compensates in the form of FSI credits which can be freely traded within that zone.
- Transportation Solutions
 - ❖ Parking Credits – There is vast difference between parking requirements 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.

"Adequate water supply, sewerage and waste management."

- ❖ 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 a Unified Metropolitan Transport Authority (UMTA).
- ❖ Integrated Multimodal Transport System – All 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 an Integrated Multimodal Transport System will be the introduction of a high capacity bus service.

“The inland water bodies (esp. Coovum, Adyar) should become attractions of Chennai.”

| Unit | Unit | 1991 | Current | Vision 2025 | Scale | Speed |
|----------------------------------|--------|------|---------|-------------|------------------|------------------|
| Mega Urban Region | No. | 0 | 0 | 1 | | |
| Number of megacities | No. | 0 | 1 | 4 | 4 times | 3 times |
| World Class Urban Centres | No. | 0 | 0 | 25 | | |
| Urbanisation | % | 36% | 50% | 75% | 1.5 times | 1.8 times |
| Urban Population | crores | 2 | 3.25 | 5.4 | 1.7 times | 1.7 times |

கேடறியாக் கெட்ட இடத்தும் வளங்குன்றா
நாடென்ப நாட்டின் தலை

A country stands tall if it has the inherent strength to contain calamities and rebuild with growing strength. (736)

Infrastructure

Sub Vision

Every remote village in Tamil Nadu will be connected through high quality road and rail networks. The citizens of the state will have access to uninterrupted water and power supply. Airport and port infrastructure that matches the best in the world will propel the economic growth by facilitating efficient passenger and cargo movements.

Goals

- ★ The 5 mega cities will be connected to 25 urban centres in the state through 7000 kms of 6-lane and 8-lane highways. Time taken to travel to Kanyakumari from Chennai by road will be reduced to 7 hours compared to 13 hours now.
- ★ Airports should be augmented to handle 7 crores passengers annually.
- ★ The port capacity in the state should be increased by 12 times to leverage its maritime advantage.
- ★ The installed power capacity should increase 10 times.
- ★ 20% of the energy requirements will be met through renewable sources.
- ★ Each citizen should be provided with 150 lpcd of water.

"Strong rural-urban partnerships would have evolved through good connectivity."

Action Points

- ❖ State Highways – 7,000 km of 6-lane/ 8-lane road will require enormous financing (approximate cost of Rs. 70,000 crore) which may be taken up through PPP route.
- ❖ Minor Ports – The cargo handling capacity of the ports in Tamil Nadu (including the major ports) is currently around 82 MT¹⁹. The state should aspire to increase the handling capacity by 12 times. In addition to expansions in major ports, developments of minor ports in Cuddalore, Marakkanam, Nagapattinam, Colachel, Manappad etc., through private participation should be furthered.
- ❖ Power – Initiate structural reforms in the power sector so as to reduce inefficiencies in production, transmission and distribution. The state should focus on generating more power from non-conventional sources. Development of large scale power projects supported by off shore terminals can be considered along the TN coast.
- ❖ Airports – The volume of air passengers are projected to grow to 7 crores by the year 2025. All 5 mega cities should have airports that have to be expanded to effectively serve the burgeoning demand. Also development of limited number of regional airports connecting the 25 urban centres should be

"Low cost desalination plants should be set up all across the coast."

assessed and development plans to be prepared. Expedite the proposed plans of Airports Authority of India to add capacity in the existing airport by adding an additional runway immediately and initiate steps for development of a greenfield international airport in the medium term.

“Renewable energy development should be promoted.”

- ❖ Water – Long term sustainable solutions for drinking water needs should include an integrated approach of interlinking of rivers, low cost desalination plants, and preservation of underground and freshwater sources.

| | Unit | 1991 | Current | Vision 2025 | Scale | Speed |
|---------------------------------|------------------|-------|---------|-------------|-----------------|-----------------|
| Roads | km per 100 sq km | 105 | 132 | 300 | 2 times | 6 times |
| Air Passengers | lakhs | 7 | 103 | 700 | 7 times | 6 times |
| Installed Power Capacity | MW | 6,000 | 11,000 | 111,000 | 10 times | 20 times |
| Cargo (Air + Sea) | MT | 25 | 90 | 1,100 | 12 times | 16 times |
| Water Supply | Lpcd | NA | 50 | 150 | 3 times | NA |

ஆக்கம் அதர்வினாய்ச் செல்லும் அசைவிலா
ஊக்க முடையா னுழை

Wealth and gain go forth in search of those
who strive tirelessly with firm resolve. (594)

Industrialisation

Sub Vision

The 'Innovation ecosystem' in place in Tamil Nadu will make it the destination of choice for professionals and industrial houses across the world. Tamil Nadu will become the manufacturing hub of Asia that leverages skilled human capital. Developing tourism assets and promoting the state to be one of the premier destinations.

Goals

- ★ 93% of the GSDP contribution should come from manufacturing and services.

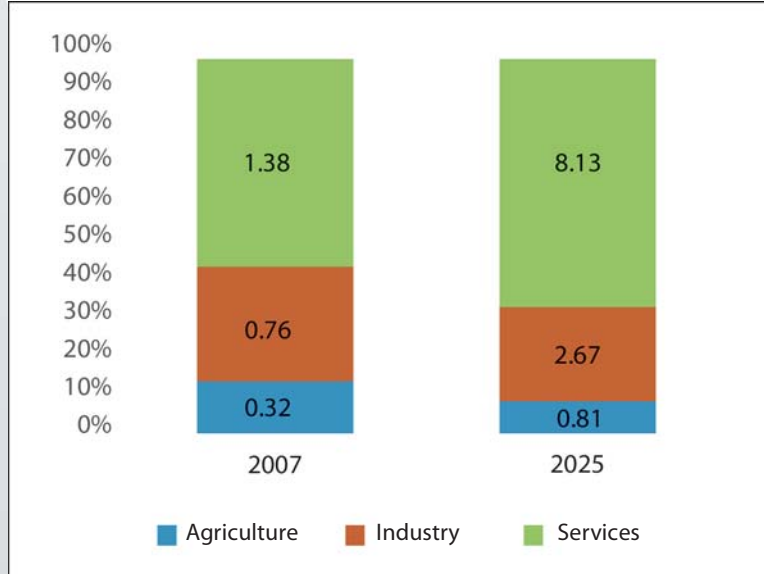


FIGURE 1 PROJECTED GSDP SPLIT (RS LAKH CRORES)

- ★ High performance sectors are expected to generate 3.4 crores direct and indirect jobs (2.6 crores additional jobs)²⁰.

TABLE 1 EMPLOYMENT (DIRECT + INDIRECT) IN HIGH PERFORMANCE SECTORS (Figures in lakhs)

| Sectors | 2006 | 2025 |
|-----------------------|-----------|------------|
| Auto/auto ancillaries | 1 | 19 |
| Leather | 11 | 40 |
| Textiles | 50 | 166 |
| ICT (Manufacturing) | 1 | 45 |
| IT/ITeS | 2 | 11 |
| Construction | 23 | 61 |
| Total | 88 | 342 |

- ★ Skills training should be imparted to bridge employment gap.
- ★ Industrial clusters should be developed in all regions.

Industrialisation

- ★ Innovation and Incubation Hub (especially for SMEs) to be setup.
- ★ Geographical Indications of products and services of Tamil Nadu should be branded and preserved.
- ★ Tamil Nadu should attract 5 crore foreign tourists.

“Compete on industries that require ‘intellect’ rather than competing on production.”

Action Points

- ★ High Performance Sectors
 - ❖ Moving Up the Value Chain – It is projected that about Rs 10.8 lakh crore will be contributed to GSDP by the manufacturing and services sector. Low cost labour advantage model for industrial growth will not be sustainable in the long run and the industry needs to move up in value chain and excel using innovation to retain its leadership in the high performance sectors such as Auto/ auto ancillaries (rank 1 in India), Leather (rank 2 in India), Textiles (rank 1 in India), ICT – Manufacturing (rank 1 in India), ICT -IT/ ITeS (rank 1 in India) and construction.
 - ❖ Research and Development – Clusters of high quality research institutes should be established complimentarily in Chennai (for example IIT, IISER, IIIT co-located in Chennai).
 - ❖ Tourism Development – Standards for planning and creating new mega tourism ecosystems should be initiated. For example, developing the Nilgris area into an eco-tourism mega zone with norms for town planning, transportation designing, increasing forest cover and carrying capacity plans well defined. Tax incentives for setting up accommodation facilities in less known tourist spots to provide thrust to tourism. Ensure additional direct flight connectivity to key destinations like the United States, Hong Kong, Korea and Taiwan.
- ★ New Sectors
 - ❖ Push for New Sectors – New sectors such as Nanotechnology, Biotechnology, Food processing and Pharmaceuticals hold a lot of promise for growth. Tamil Nadu has lots of potential in financial services which needs to be tapped. The state should create the appropriate facilities and systemic framework to attract these sectors to set up shop in Tamil Nadu. Potential of the IT services sector in domestic market needs to be tapped to sustain the growth in the sector.
 - ❖ Industrial incubation hubs – Development of industrial incubation hubs is necessary especially to assist new sectors and players to harness the potential of the sector in the state. Exclusive science parks for Nanotechnology, Biotechnology and Pharmaceuticals could be set up to provide collaboration with industry to aid research.

“High value-adding industries that would leverage the intellectual capabilities of the Tamil populace.”

★ Regional Balance

- ❖ Cluster Development – Unique potential of all the areas in the state should be identified and clusters for industrial hubs should be formed accordingly. These industrial hubs will be able to work together with the districts to mutually develop, grow and share the prosperity. The economic ecosystem hence created will ensure reduced socio-economic disparity. Present clusters which exist in Tamil Nadu are highlighted in figure below. Other clusters which could come up in the state are food processing, pharmaceuticals and ICT (Hardware).

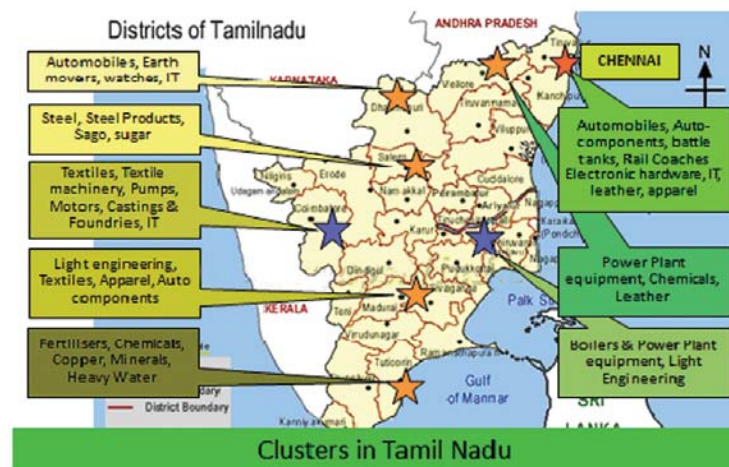


FIGURE 2 INDUSTRIAL CLUSTERS IN TAMIL NADU (2007)

- ❖ Geographical Indications – Local brand of regional products and services which have gained popularity (like Madurai Jasmine, Erode turmeric etc.) should be branded and marketed to achieve higher price realisations. It is necessary to promote them for economic gains and even more so for the cultural strengthening.
- ★ Human Capital
- ❖ Capital Edge – Tamil Nadu has a disciplined work culture, infrastructure and high levels of education which gives the state an edge over the other states to provide efficient and productive human capital to the industry.
 - ❖ Job Creation – Due to the immense amount of growth in the manufacturing and service sectors, the number of jobs will increase exponentially by four times. Tamil Nadu needs to gear up to provide adequate manpower for these jobs. It is projected that if the present development trends are to continue, then the gap between the available jobs and the employable workforce in the high potential sectors is going to be 60 lakhs by the year 2025²¹.

“Develop monetisable skills that give upward social mobility.”

Industrialisation

- ❖ Skills Training – Partnerships should be created among industry-academia-government for large scale skills training. Tamil Nadu will be producing about 1.2 crore graduates and 3 crore diploma holders by 2025. Finishing school should be setup to ensure bridging of skills gap and minimum on the job training.
- ❖ Motivation – “Promoting entrepreneurship” by recognition of successful entrepreneurs through various awards by the Government and Industrial bodies. Introduction of mandatory entrepreneurship courses from high school level would motivate students from a young age to become entrepreneurs.

| | Unit | 1991 | Current | Vision 2025 | Scale | Speed |
|---|-----------------|------|---------|-------------|----------------|-----------------|
| Contribution to GSDP by manufacturing and services | Rs. lakh crores | 0.4 | 2.1 | 10.8 | 5 times | 5 times |
| Vocational Training | lakhs | NA | 4.2 | 15.6 | 3 times | - |
| Direct + Indirect Employment in High Performance Sectors | lakhs | NA | 88 | 342 | 4 times | - |
| Population dependent on Agriculture | Crores | 3.5 | 3.6 | 1.8 | 2 times | 18 times |

அற்றார் அழிபசி தீர்த்தல் அஃதொருவன்
பெற்றான் பொருள்வைப் புழி

Banishing hunger of the poor is the
most secure use of one's wealth. (226)

Health

Sub Vision

Every citizen of the state will have access to affordable, best in class health services. All major diseases will be controlled, infant mortality rates will almost be eliminated and life expectancy will rise to 90 years. The state will be known for its eco-friendliness with a wholesome and hygienic environment of clean air and water. The state will have become one of the preferred choices of medical tourism and outsourced medical services. There will be greater recognition of human resources from Tamil Nadu in the health sector.

Goals

- ★ Drastically improve the health infrastructure by increasing the number of hospitals. The beds per thousand population should increase from the current 0.94 to 3.6²² which amounts to an addition of 239,000 beds.
- ★ The number of doctors per thousand should increase from 0.14 to 2.3²³. Number of doctors graduating per year to increase from 3,000 to 10,000.

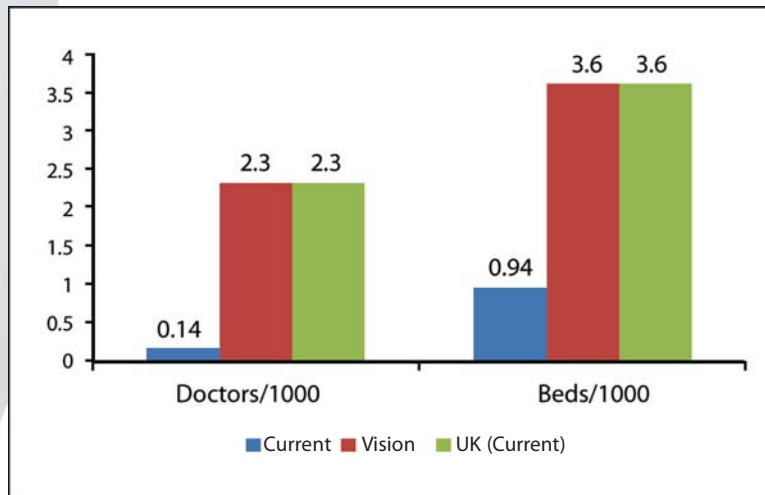


FIGURE 3 HEALTH INFRASTRUCTURE

- ★ Government should provide thrust to health insurance. Health insurance to poorer communities through Micro Finance Institutions (MFI) and Non-Governmental Organisations (NGOs) could be initiated.
- ★ The number of medical colleges should be increased by 4 times.

Action Points

- ❖ Building institutions – Currently there are 30 colleges²⁴ teaching allopathic medicine. This has to be doubled in the short run and increased to 120 by 2025. Other than establishing more colleges for doctors, institutes need to be set up in each district to train nurses, technicians and paramedics to serve the ageing world population.

*"More specialists in field
of preventive health."*

- ❖ Increased spending and health care policies – The state should increase the spending on health to Rs. 70,000 crores from the present level of Rs. 1,500 crores²⁵. The state should enact clear policies and guidelines on PPP in the health care sector which will enable to attract large private investment in the health care industry in the state.
- ❖ Building awareness – Awareness on preventive medicine (hygiene, sanitation) should be increased through mass media and with the assistance of health care professionals and non-governmental organisations. Include standardised course on public health in schools.
- ❖ Outsourcing medical services – To aid outsourcing large infrastructure such as ‘medicities’ with research facilities, service apartments, multi-organ transplant institute, other specialties should be created.
- ❖ Use of technology – With doctors per thousand population poised to become 2.3 only in 2025, leveraging technologies will help achieve increased productivity. Remote diagnostics through tele-medicine would increase the penetration of healthcare in rural areas and drive productivity to world class levels.
- ❖ Research – Tamil Nadu should focus on medical research for incorporating the advances in Nanotechnology and Biotechnology in the provision of medical services. This will help in early identification of diseases resulting in a healthier population.

“Micro insurance (as practiced in Andhra Pradesh) is a good model to provide health insurance to poorer communities.”

| | Unit | 1991 | Current | Vision 2025 | Scale | Speed |
|------------------------------------|----------------------|------|---------|-------------|-----------------|-----------------|
| Beds | Number | NA | 61,000 | 300,000 | 5 times | NA |
| Medical colleges | Number | 5 | 30 | 120 | 4 times | 4 times |
| Infant Mortality Rate | Per 1000 live births | 48 | 37 | 5 | 7 times | 3 times |
| State expenditure on health | Rs. crores | 400 | 1,500 | 70,000 | 46 times | 62 times |
| Doctors graduating per year | Number | 500 | 3,000 | 10,000 | 3 times | 3 times |

இயற்றலும் ஈட்டலும் காத்தலும் காத்த
வகுத்தலும் வல்ல தரசு

Producing, saving, protecting, regulating and equitably distributing are salient features of governance (385)

Governance

Sub Vision

The state will have developed a brand for responsiveness and transparency (very low transaction costs), 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. In Norway and Australia the time taken to start a business is 2 days and to register a property is 1 day²⁶.

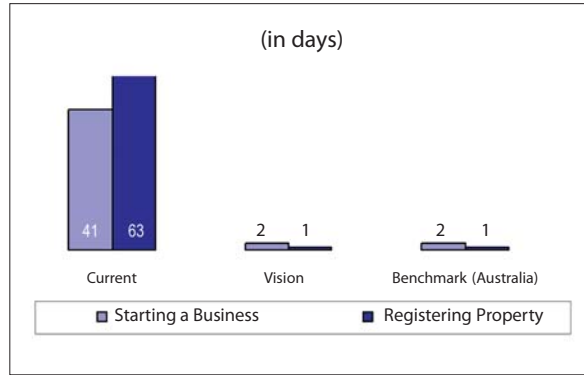


FIGURE 4 TRANSACTIONS COST

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.
- ❖ Decentralisation – Increased participation of local bodies in project conceptualisation 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 needs assessment of ULBs.

“Biometric IDs should be used in provision of public services.”

பொருளென்னும் பொய்யா விளக்கம் இருளறுக்கும்
எண்ணிய தேயத்துச் சென்று

The imperishable light of wealth goes into regions desired
(by its owner) and destroys the darkness of want.(753)

Rural Development

Sub Vision

Tamil Nadu's rural areas will have well developed infrastructure and well connected to the urban hubs. The per capita income of rural household will grow five fold through improved agricultural practices and strong growth in manufacturing and services. Thus absolute poverty will be reduced to a minimum.

Goals

- ★ Tamil Nadu should hasten rural infrastructure initiatives reducing costs from farm to markets. The length of roads per 100 sq. km. should increase from 132²⁷ to 300 as noted previously.
- ★ The per capita income of farmers should grow by 5 times to reach Rs 45,000 by 2025.
- ★ The state should promote production of high value add products in horticulture and poultry that are less water intensive.

“Cooperative movements should be depoliticised and revived.”

Action Points

- ★ Infrastructure: 4-lane road connectivity of the district headquarters to the block headquarters, on the 'hub and spoke model', will convert the region into a highly motorable area enabling travel within thirty minutes. This would provide immense economic opportunities to the people in the region in addition to access to better education and healthcare facilities. It would require about 7,400 km of roads to be upgraded at the cost of approximately Rs. 49,500 crore²⁸.
- ★ High value products: Economic incentives, training of farmers towards adopting newer farming practices, and marketing the products (like Taj Mahal roses) will enable farmers to gain increased incomes.
- ★ Policies: The state should frame a comprehensive agriculture policy that takes into account the impending retail boom. Cooperative movements and Self Help Groups (SHGs) in agriculture and allied activities should be strengthened to enable collective participation of farmers. Private sector participation will vitalise the sector as the packaging would be started at the farmland.
- ★ Productivity: Scientific selection of crops based on prevalent conditions like satellite based precision farming should be followed for higher yields. Further use of technology and mass mechanisation of agricultural practices should be encouraged. Improvement can also be brought about by land reforms and establishment of village knowledge centres. Scaling up of rice intensification and other precision farming methods.
- ★ Marketing: Agro-marketing measures should be taken to increase the profitability of farming. The state should also analyse the pros and cons of contract farming before deciding on a policy for the same.
- ★ Skills training: A large portion of population dependent on farming should be trained to take advantage of the opportunities that are likely to be created in the rural areas. A detailed skills assessment to map the training needs based on required skills and future opportunities should be carried out.

| | Unit | 1991 | Current | Vision 2025 | Scale | Speed |
|---|------------------|------|---------|-------------|---------|----------|
| Per farmer income | Rupees | 5300 | 9,000 | 45,000 | 5 times | 8 times |
| Population dependent (directly and indirectly) on Agriculture | Crores | 3.5 | 3.6 | 1.8 | 2 times | 18 times |
| Roads | km per 100 sq km | 105 | 132 | 300 | 2 times | 6 times |

கேடில் விழுச்செல்வம் கல்வி யொருவற்கு
மாடல்ல மற்ற யவை

Knowledge is an indestructible wealth;
there is nothing else in benefits to compare (400)

Education and Innovation

Sub Vision

Tamil Nadu 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. Tamil Nadu will achieve universal secondary education. 50% of the students will enrol for colleges. Education will be accessible for all and not denied to anyone. The education system should be able to nurture a minimum of one Nobel laureate by 2025.

Goals

- ★ Achieve near zero drop-out rate in secondary education.
- ★ Build a base of 1.2 crore graduates and 3 crore certified technicians.
- ★ Increase the capacity of the higher education institutions and vocational training institutions by 4 times.
- ★ TN 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 doubled immediately.
- ★ Exclusive science parks for Nanotechnology, Bio-technology and Pharmaceuticals.
- ★ To produce 1 Nobel laureate by 2025.

"Industry should assist in establishing research centres in universities that would work on cutting edge technologies."

| (in lakhs) | Students | | Teachers |
|------------------|----------|------|----------|
| | 2007 | 2025 | 2025 |
| Primary | 64.0* | 53.3 | 2.1 |
| Upper Primary | 36.9* | 30.2 | 1.2 |
| Secondary | 18.9* | 19.0 | 0.8 |
| Senior Secondary | 10.5* | 12.5 | 0.5 |
| Higher Education | 8.0 | 29.5 | 1.6 |
| Vocational | 4.2 | 15.6 | 0.9 |

* 2004-05

TABLE 2 PROJECTED NUMBER OF ENROLLED STUDENTS AND TEACHERS REQUIREMENT²⁹

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 initiatives to ensure compulsory enrolment and zero drop-outs.
 - ❖ Model centres 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 institutions to all. Initiatives 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 is necessary of the acute shortage of nurses, technicians and paramedics. Private training facilities need a boost to train more nurses and paramedics. Present large hospitals, both government and private, can be compelled to train atleast 30% of their nurses and paramedics requirements.
 - ❖ Short term vocational courses with diploma for special skills like plumbing, house keeping etc., will ensure these skills are monetisable.
- “The pay scales for primary school teachers should be made competitive.”*
- ★ Higher Education
- ❖ The capacity and infrastructure of the higher institutions needs to be quadrupled to accommodate projected 30 lakh students.
 - ❖ Flexibility in college curriculum should be introduced to spur innovation.
 - ❖ Capacity of medical colleges needs to be immediately doubled to ensure minimum provision of quality healthcare to the population of the state. At present, about 3,000 doctors³⁰ graduate from the medical colleges in Tamil Nadu whereas the number in Andhra Pradesh, Karnataka and Maharashtra is close to 5,000 each. It is projected that the required capacity will be four times the present capacity. Hence to meet the demand, speedy approval of medical colleges should be facilitated by the state.
 - ❖ Collaboration of educational institutions and industry to ensure students are not only updated to the latest industrial processes and technology but also to ensure their employability.
- ★ Innovation
- ❖ Courses on entrepreneurship should be introduced in all colleges. In all secondary schools chapters on successful entrepreneurs should be included to motivate the students.

- ❖ Open learning syllabus with more emphasis of practical application based on strong theoretical knowledge. Ensuring a minimum 50% credit system for practical application and research based evaluation system would be the first step.
- ❖ Ensure more institutes (IISER, IISc, IITs) are established in the state to give thrust to research and innovation.
- ❖ Science Parks, on the Taiwan model, should be set up in five major urban centres in close collaboration with industry to aid research. Science parks will also ensure training of students and skill them for industries in the new sectors.
- ❖ Inter-college/school competition to be comprehensively introduced with due statutory recognition for new talent on the lines of Arjuna Award for National Sports.

| | Unit | 1991 | Current | Vision 2025 | Scale | Speed |
|--------------------------------|---------|------|-------------------|-------------|----------------|----------------|
| Vocational training institutes | numbers | 100* | 212 ³¹ | 850 | 4 times | 6 times |
| Colleges | numbers | NA | 240 ³² | 900 | 4 times | NA |
| College Gross Enrollment Ratio | % | 4-6% | 14% | 50% | 4 times | 4 times |
| Nobel laureates post 1990 | - | 0 | 0 | 1 | - | - |
| Medical Colleges | Numbers | 5 | 30 | 120 | 4 times | 4 times |

* estimate

தள்ளா விளையுளும் தக்காரும் தாழ்விலாச்
செல்வரும் சேர்வது நாடு

A kingdom is that in which complete cultivation, virtuous persons,
and merchants with inexhaustible wealth dwell together. (731)

Diaspora and Southern Synergy

Sub Vision

The state should position itself to positively tap the investment potential by capturing the 'southern synergy' and engaging the Diaspora.

Goals

- ★ The shared history of southern states as 'Madras Presidency' with Chennai as capital should be projected to capture the 'southern synergy'.
- ★ Tamil culture is a powerful integrating force and the state should proactively engage the 40 lakh Diaspora spread all around the world by recognising their achievements.
- ★ Wide use of Tamil in the Internet.

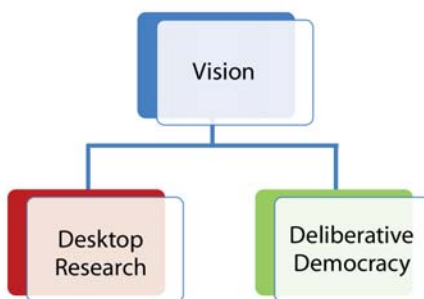
"Tamil culture is a huge unifying force."

Action Points

- ★ World Tamil Council – Formation of World Tamil Council to integrate all Tamils in a common platform is one of the primary initiatives the state should undertake to engage the Diaspora.
- ★ Awards – Diaspora representatives successful in various fields should be honoured on the lines of the Padmashri award presented by the Government of India.
- ★ Arts and Crafts – Festivals like 'Chennai Sangamam' should be scaled up and conducted in more centres across the state. Arts and crafts of various districts of Tamil Nadu should be showcased through events all over the state.
- ★ Engaging the neighbours – The state can attract businesses from neighbouring states to setup shop in Tamil Nadu through special schemes/ benefits. Unified investment promotion councils should be set up for the same.
- ★ Preferred business destination – Promotion of Chennai, Coimbatore and Hosur as preferred headquarters for businesses in the bordering areas of the neighbouring states.
- ★ Tamil in Internet – Standardising 16 bit encoding for Tamil and getting it adapted by Unicode will permit ubiquitous use of Tamil in the Internet.
- ★ 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.

"Engage the diaspora with events like Pravasi Bharathiya."

Approach and Methodology



The exercise was executed on a two pronged approach as outlined below:

Desktop research – An as-is assessment and a projection of socio-economic indicators act as the baseline of the standard development scenario.

Deliberative democracy – Interaction with luminaries, sector experts, business leaders and researchers were used to syndicate the voice of the visionaries and thought leaders. Interaction forums were conducted to bring out the emotional aspirations of the youth for the future of the state.

About 700 people were met across all fields and regions of the state giving the vision a comprehensive spread.

| | |
|-----------------------------|------------|
| Students | 484 |
| Administrators | 23 |
| Politicians | 13 |
| Ward Councilors | 8 |
| Trade Union Leaders | 28 |
| Civil Society Organisations | 12 |
| Industry | 23 |
| Academicians | 20 |
| Other Sector Experts | 17 |
| Thematic Sessions | 72 |
| Total | 700 |

Way Forward

With the collective vision of the state crystallised in this document, it should go back to the people. It is necessary to inform and educate everyone in the state and make all the development efforts coherent to achieve the goals. The action plan will be shared with the students, elected representatives, administrators, businesses to chart out the collective execution plan. Detailed sector based studies would be carried out to evolve the strategy to achieve individual goals.

Since most of the problems highlighted here along with the solutions and action points are common to most of the areas in the country hence the vision will be scaled to strategise development of the nation.

End Notes

- | | | | |
|----|---------------------------------------|----|---|
| 1 | Central Statistical Organisation, Gol | 20 | Centre for Monitoring Indian Economy |
| 2 | Centre for Monitoring Indian Economy | 21 | CII Study on Human Resources & Skills for Tamil Nadu |
| 3 | Government of Tamil Nadu | 22 | Centre for Monitoring Indian Economy and Organisation for Economic Co-operation and Development |
| 4 | Government of Tamil Nadu | 23 | Centre for Monitoring Indian Economy and Organisation for Economic Co-operation and Development |
| 5 | Government of Tamil Nadu | 24 | TN Medical University |
| 6 | Government of Tamil Nadu | 25 | Government of Tamil Nadu |
| 7 | Doing Business Report, IFC | 26 | Doing Business Report, IFC |
| 8 | Doing Business Report, IFC | 27 | Government of Tamil Nadu |
| 9 | Government of India Census | 28 | Highways Department, Government of Tamil Nadu |
| 10 | Government of India Census | 29 | Government of India Census |
| 11 | Government of Tamil Nadu | 30 | Tamil Nadu Medical University |
| 12 | United Nations Development Programme | 31 | Department of Education, Government of Tamil Nadu |
| 13 | Government of Tamil Nadu | 32 | Government of Tamil Nadu |
| 14 | United Nations Development Programme | | |
| 15 | Government of Tamil Nadu | | |
| 16 | Centre for Monitoring Indian Economy | | |
| 17 | Government of Tamil Nadu | | |
| 18 | Government of Tamil Nadu | | |
| 19 | Indiastat.com | | |