



Confederation of Indian Industry

PUDUCHERRY VISION 2025





From the Chairman's Desk

Friends,

Puducherry means different things to different people. For some, it is a place to learn French, for others a spiritual place and for still others, it means 'Let's give time a break!'. By 2025 we want to transform Puducherry so that it means to all 'a model state' through balanced, inclusive and sustainable development.

Recognising that growth requires a vision, we at CII along with Sriram Charitable Trust, a non-profit organization have undertaken in building a comprehensive vision for Puducherry called 'Vision 2025'. We believe that Vision 2025 will play an inspirational role in facilitating Puducherry's transformation.

Our Vision reflects the views and aspirations of the people of the Union Territory of Puducherry and is the result of broad-based consultations with all stakeholders across all the regions of the Union Territory - Pondicherry, Karaikal, Mahe and Yanam.

The visioning exercise involved 60 face-to-face interviews and 14 focus group discussions. About 300 people from a cross-section of society - political leaders, government officials, sector leaders, farmers and students - who have an interest in developing Puducherry participated in the workshops.

Regarding the process of vision creation, we have followed the three CII visioning principles laid down by Prof.C.K.Prahalad which is as follows:

- Aspiration must always exceed present resources. In other words, the vision must be a big stretch, and it need not be obvious how it will be attained.
- The vision must not be an extrapolation from the past. Rather, the process of progressing towards the vision must be a process of discovery, of "folding in the future" which means we should set targets and work backwards to achieve the same.
- Adoption of best practices will not help to realize a vision that is not an extrapolation of the past. Rather, there must be innovation, and development of next practices.

Hence we have chosen our vision theme to **ACT** on the above principles.

- **A**spire
- **C**ontribute
- **T**ransform

Vision 2025 is to be built not on our resources and capabilities alone, but mainly on our lofty aspiration and dedicated contribution from each one of us in transforming Puducherry. We need lot of courage, passion, dedication and a service mindset to achieve this vision. We not only need moral and responsible leadership at all levels but also a proactive one to make this happen.

Based on our stakeholder interactions, we have arrived at the following key drivers:

- Higher education, learning and research
- Spiritual wellness and eco-tourism
- High-end services and industries
- Innovative high-value agriculture

The elements of this vision will set the context for the developmental agenda for Puducherry.

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

I thank all the sponsors, namely, Auroma Enterprises, Cooper Bussmann India Pvt Ltd, Fine Automotive & Industrial Radiators Pvt Ltd, Karaikal Port Pvt Ltd, Leo Fasteners, NCR Corporation India Private Limited, RR Cosmo, Sriram Charitable Trust and Sunbeam Generators Pvt Ltd who have wholeheartedly contributed to this social cause.

I thank the CII secretariat, Integra staff and staff of Sriram Charitable Trust who supported this initiative.

I thank ICRA Management Consulting Services Limited (IMaCS) who facilitated the vision gathering and in developing this document.

Come, let's all build Puducherry together.

Sriram Subramanya
Chairman
CII-Puducherry State Council

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Executive Summary

1. The Confederation of Indian Industry (CII), Puducherry, and Sriram Charitable Trust, the Corporate Social Responsibility initiative of the founders of Integra Software Services Private Limited, a leading pre-publishing services company based in Pondicherry¹, mandated ICRA Management Consulting Services Limited (IMaCS) to prepare the “Vision 2025” for Puducherry.
2. Our approach towards developing the Puducherry Vision 2025 encompassed analysing various facets of the Union Territory, including economic growth, social development, issues impacting specific sectors, the factor advantages of Puducherry, and aspirations of its people.
3. We conducted the Vision exercise by interacting with the principal stakeholders in Puducherry, such as:
 - The Hon’ble Governor, Hon’ble Chief Minister of Puducherry, a cross-section of Members of Parliament and Members of Legislative Assembly
 - The political leadership in the UT of Puducherry – both the ruling and the opposition parties
 - The Secretaries and Directors of a cross-section government departments
 - A cross-section of industries in Puducherry
 - A cross-section of the society, such as farmers, academicians, students
 - Non-Governmental Organisations
 - Religious institutions
 - A cross-section of the residents of Puducherry

During the course of this exercise, we conducted over 60 one-on-one interviews and had 14 workshops in which more than 300 persons participated.

4. The Gross State Domestic Product (GSDP) of Puducherry stands at Rs. 8,130 crore at current prices (US \$ 1.6 billion²) in 2008. Puducherry has grown at the rate of 5.2% per annum between 2000 and 2007 but has lagged India’s growth rate of 7.0% during the corresponding period. The secondary sector contributes to 48% of the GSDP, and the tertiary sector contributes to 47% of GSDP, while the primary sector contributes about 5%. Puducherry has lagged the growth rates of most southern states.
5. However, there has been significant increase in the presence of light engineering and electronics industries, which is expected to be a major driver of growth. Similarly, in the Services sector, Business Services driven by knowledge based industries such as IT and ITES, and Tourism are expected to drive economic growth of Puducherry. Strong factor endowments in education and healthcare are also expected to contribute to the growth of the Services sector.
6. Our stakeholder interactions reveal a few broad, mutually enforcing themes which constitute the building blocks for the Vision 2025 of Puducherry.

¹ The official name of the Union Territory is Puducherry. The Puducherry region (erstwhile Pondicherry region) is referred to as Pondicherry for ease of understanding when referred to specifically.

² Conversion at US \$ 1 = Rs. 50

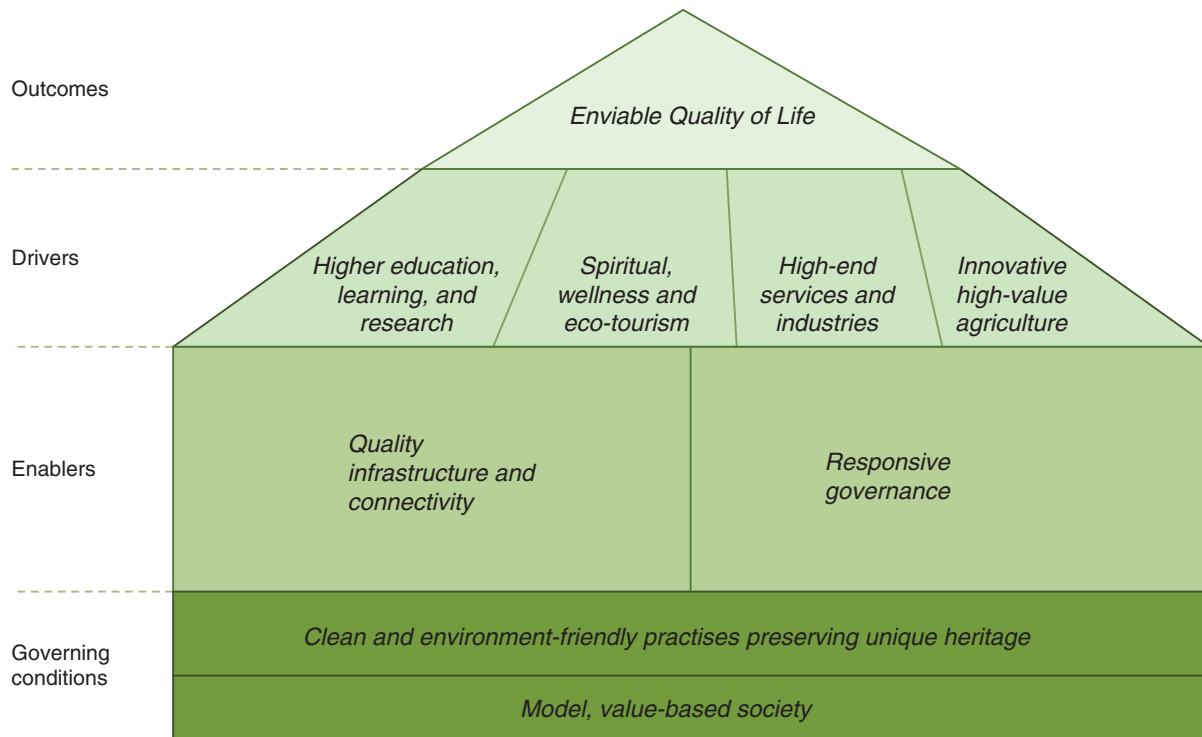


Figure 1. Emerging Themes for Puducherry Vision 2025

7. Accordingly, the synthesis of stakeholder aspirations is reflected in the following Vision 2025 for Puducherry:

“By 2025, Puducherry will be an international destination for higher education, learning, and research; a best-in-class wellness, spiritual, and eco-tourism destination; a hub for high-end services and industries enabled by high-quality infrastructure, connectivity, and responsive governance; duly preserving its environment and heritage, and thereby emerging as a model, value-based society”.

8. The stakeholders of Puducherry should ‘aspire for higher possibilities’, ‘contribute as a team’, and ‘transform the Union Territory’. Consequently, ‘**Aspire, Contribute, and Transform – A C T Puducherry**’ shall be the action agenda to achieve Puducherry Vision 2025.
9. The elements of this Vision will set the context for the developmental agenda for Puducherry. Covering a relatively small geography, Puducherry places a premium on being clean, environmentally conscious, and preserving its unique heritage and culture. This should be kept in mind while formulating the developmental agenda.
- 10. Promoting Tourism:** Identifying ‘targeted’ tourist offerings, developing a branding campaign around tourism, establishing linkages of information, access, and infrastructure are key initiatives which would drive the developmental agenda for the Tourism sector. Specific initiatives include identifying different tourist offerings around the *drivers of spiritual tourism, wellness, and eco-tourism*, along with religious tourism, handicrafts and heritage tourism, beach tourism, health and yoga tourism. The potential visitors and tourists should be made aware that Puducherry has much more to offer than is perceived at present. Integrating tourist offerings with destinations in the region, having a ‘one stop shop’ website and call centre for tourist product bookings, institutionalising tourist assistance cells, and additional premium-category hotels are some of the other initiatives proposed.

- 11. Promoting high-end Services and high-end Manufacturing:** We expect that Puducherry will be a service-led economy along with high-end manufacturing industries. Non-polluting economic activity such as IT and ITES, Tourism, Healthcare, Education, light engineering, and electronics are envisioned to be the drivers of growth of Puducherry. Research, biotechnology, and nanotechnology also hold promise in the long term. Active promotion of thrust areas through participation and hosting of investor meets, formulating a New Industrial Policy, building business infrastructure such as SEZs, and 'vertical' industrial estates should drive growth. Puducherry should ensure a healthy business climate by reducing the time taken to start a business and getting licenses to 5 and 100 days from the current levels of 45 and 240 days respectively. Appropriate skill development and worker welfare measures will be enablers to enhance focus on Services sector led development. Some of the other initiatives that need to be pursued include setting up of a Single Window Grievance Redressal Cell, speeding-up e-Governance, setting up of a Skill Development Centre, formulation of a policy for Special Healthcare Zones, Special Tourism Zones, and Special Education Zones.
- 12. Sustaining Agriculture, Fisheries, and Rural Development:** The focus of the development agenda for this sector is primarily aimed at sustaining agriculture and allied activity at its present levels, and arresting decline. The thrust should be on promoting collective farming practises, promoting innovative high value farming through precision farming and system of rice intensification, developing alternative revenue sources such as animal husbandry and farm tourism, and water conservation. Fishing should be supported by fish-processing centres and parks, life skills and skill building of fisher-folk.
- 13. Building high-quality Infrastructure:** By 2025, Puducherry should be well connected by air, rail, road, and sea, ensuring ease of access to visitors, both national and international. The proposed developmental agenda here involves expanding Urban areas to accommodate a high population density of 5,000 persons by 2025, making available affordable housing, and initiating a Regional Development Plan with neighbouring districts of Villupuram, Cuddalore, and Nagapattinam. Puducherry, as part of Vision 2025, will have international airports at Pondicherry (which would also serve the Chennai region) and Karaikal. We also recommend examining feasibility of a sea-based transportation link from Karaikal through Puducherry to Chennai and high-speed train services from Benagluru and Chennai to Puducherry. This should be carried out in a Regional/Joint Development model with neighbouring states. SEZs at Karaikal, multimodal transport systems complemented by 'walk-only/bicycle-only' zones are other projects proposed. Put together, this will transform the business and economic climate of Puducherry.
- 14. Making available clean Energy, Environment, and 'Health for all':** In this section, the developmental agenda includes formulating of a Power Master Plan, joint power development with other states, incentivising use of energy-efficient appliances under a triple-bottom-line approach, and a regime of mandatory energy audits. Rainwater harvesting and desilting of tanks to conserve water should become part of business as usual practice in Puducherry. A covered sewerage system (which increases coverage from 30% of population to 100%) and setting up of a solid waste management system will improve the sanitation and cleanliness. 'Health for all' is a non-negotiable proposition. Our Vision report proposes a universal preventive healthcare initiative and health insurance cards as the way forward.
- 15. Making Puducherry a global destination for higher-education, learning, and research:** Puducherry should offer its citizens access to high quality education, and evolve as a major national hub for educational institutions of repute. Learning should be transformed into an enjoyable experience which offers learning on site, forming bonds for lifelong knowledge enhancements, and continual career opportunities for the best talent.. Puducherry should emerge as a home for institutions of repute such as IIT/IIM/IISER/NIT and promote international linkages among colleges. These steps will put Puducherry in the Indian and global education map. Puducherry should be a centre for leading research institutions from

India and abroad. Special Education Zones should be set up and an Education Policy should be formulated. A capacity building plan for all categories of education right from schools to colleges and vocational education should be formulated, including medical education, with an aim to hosting students from all over.

16. **Ensuring responsive Governance and Administration:** Puducherry should actively formulate a Policy for Public Private Partnerships (PPP). Apart from this, Puducherry should streamline Governmental procedures and adopt technology as an enabler while managing change by adequate motivation and re-skilling of staff. Formulating a business process document, streamlining procedures, and re-engineering Government departments through e-Governance are some of the initiatives recommended.
17. For implementing the Puducherry Vision 2025, we propose the formation of the Vision Task Force which would be chaired by a senior functionary of Government of Puducherry, such as the Chief Secretary.
18. Puducherry already has advantages of having a relatively high standard of living and being easily manageable. The initiatives of Vision 2025 should take it to the 'next level' where its citizens enjoy an enviable world-class quality of life.

Introduction

The Confederation of Indian Industry (CII) works to create and sustain an environment conducive to the growth of industry in India, partnering industry and government alike through advisory and consultative processes. Recognising that growth requires ‘an inspiring and guiding Vision’, CII has brought forth several pioneering Vision exercises for the four southern states in India, namely Andhra Pradesh, Karnataka, Kerala, and Tamil Nadu. In order to make this a pan-India initiative, CII has been spearheading the ‘India@75’ Visioning Exercise.

In this context, CII has facilitated an exercise to formulate a Vision the Union Territory of Puducherry. CII (Puducherry) and Sriram Charitable Trust (the Corporate Social Responsibility initiative of the founders of Integra Software Services Private Limited, a leading pre-publishing services company based in Pondicherry³), appointed ICRA Management Consulting Services Limited (IMaCS) to assist them in this exercise of formulating a “Vision 2025” for Puducherry.

This report, prepared by IMaCS, documents the key findings of ‘Puducherry Vision 2025’.

Scope and Coverage of the report

In the process of formulating the Puducherry Vision 2025, this report provides the following:

1. An insight to the current state of Puducherry
2. A synthesis of stakeholder aspirations leading to the Vision 2025, keeping in mind that aspirations should be greater than resources
3. A perspective on strategies and illustrative projects to achieve the Vision.

³ The official name of the Union Territory is Puducherry. The Puducherry region (erstwhile Pondicherry region) is referred to as Pondicherry for ease of understanding when referred to specifically.

Approach and Methodology

Enunciating the Vision and formulating a policy that will provide the necessary environment for its fruition was a three-phase exercise as shown in the following figure.

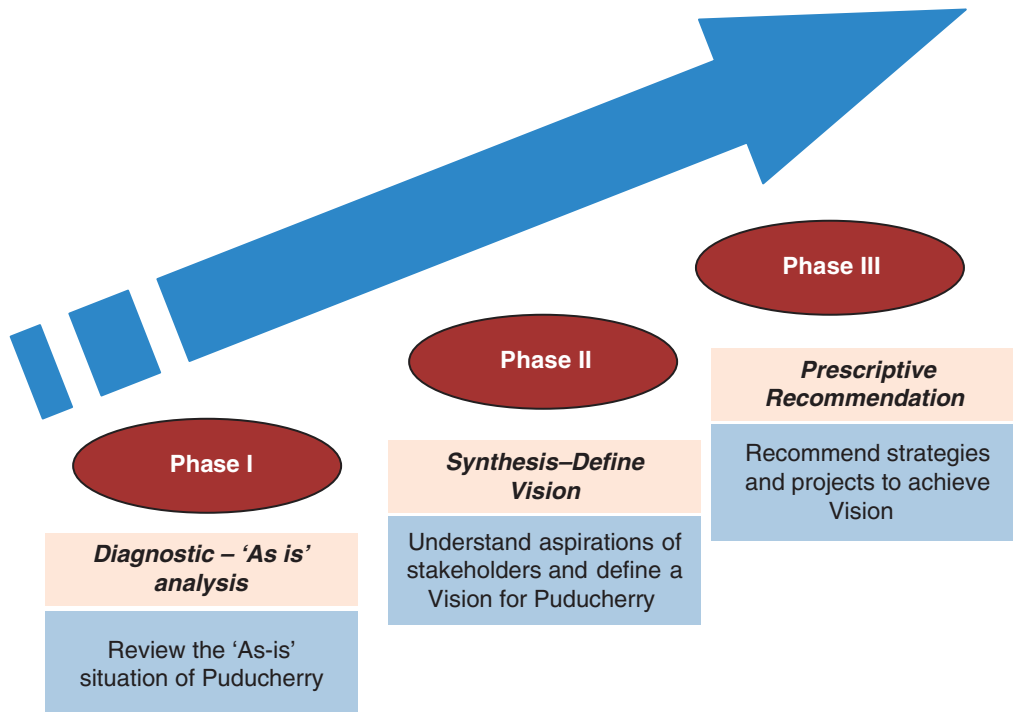


Figure 2. Approach to the Visioning Exercise

Phase I – Diagnosis

Given that Puducherry has witnessed economic growth and is poised to maintain the growth trajectory, the starting point of our study was to take stock of the as-is situation of the Union Territory. This phase focuses not only on economic parameters, but also on other developmental aspects such as health facilities and the quality of education and so on.

Phase II – Define Vision

This phase focussed on articulating an aspirational Vision 2025 for Puducherry, given the opportunity landscape, the factor advantages, and the aspirations of the people. *The guiding principles of stretching the resource frontier (aspirations 'greater than' resources), discovering the future, and innovating 'next practices' were borne in mind in arriving at the Vision. The objective was to achieve these through informed debate.*

We conducted the Vision exercise by interacting with the principal stakeholders in Puducherry. These included the following:

- The Hon'ble Governor, Hon'ble Chief Minister of Puducherry, a cross-section of Members of Parliament and Members of Legislative Assembly

- The political leadership in the UT of Puducherry – both the ruling and the opposition parties
- The Secretaries and Directors of a cross-section government departments
- A cross-section of industries in Puducherry
- A cross-section of the society, such as farmers, academicians, students
- Non-Governmental Organisations
- Religious institutions
- A cross-section of the residents of Puducherry.

During the course of this exercise, we conducted over 60 one-on-one interviews and had 14 workshops in which more than 300 persons participated.

Phase III – Recommend the role of stakeholders and the way forward

Having formulated the Vision, we proceeded to provide a perspective on the strategies and interventions to be adopted by the key stakeholders, namely the Government, the Industry and the citizens of Puducherry, and specific roles to be played by each. We have set targets for each developmental area related to the Vision and have detailed specific initiatives and projects that need to be implemented⁴.

⁴ The list of projects and initiatives are illustrative and not exhaustive

Overview of Puducherry

A Brief History

The Union Territory (UT) of Puducherry is comprised of four different regions, namely, Pondicherry, Karaikal, Yanam, and Mahe with a combined population of 11.1 lakhs currently⁵. The de-facto transfer of these erstwhile French territories to India occurred on 1st November, 1954. Historical references of Pondicherry date back to the Roman era in records which mention of a marketplace called 'Poduke' or 'Poduca' during 100 BC to 100 AD, positively identified as Arikamedu (a part of Ariyankuppan in modern day Pondicherry). The region also has historical rich historical linkages to the Pallavas, Cholas, Pandyas, and the Vijayanagar Empire. Yanam and Mahe have recent origins dating back to the French era. Puducherry has a rich French heritage, having been the capital of the French colonies in India since the 17th century. There are several places of significance such as Aurobindo Ashram in Pondicherry, and Thirunallar Temple in Karaikal. Each region has linguistic and cultural similarities to its neighbouring states, yet strongly retains its unique space by virtue of its connections with the French rule and, most importantly, its status as being a part of a Union Territory.



Figure 3. Location of Puducherry Union Territory – Pondicherry, Karaikal, Yanam, Mahe

Economic Snapshot

Income of the Union Territory

The Gross State Domestic Product (GSDP) of Puducherry stands at Rs. 8,130 crore at current prices (US \$ 1.6 billion⁶) in 2008. While the Puducherry economy has grown at the rate of 5.2% in the period between 2000 and 2007 (constant prices, 1999–2000 series), it has lagged India's growth rate of 7.0%. It contributes to about 0.16% of India's economy. The secondary sector (manufacturing, construction, utility, etc.) contributes to 48% of

⁵ 'Puducherry at a Glance, 2008' Directorate of Economics and Statistics, Government of Puducherry

⁶ Conversion at US \$ 1 = Rs. 50

GSDP and tertiary sector (services such as tourism, trade, real estate, public services, transportation, etc.) contributes to 47% of the GSDP of Puducherry. The primary sector contributes to just about 5%.

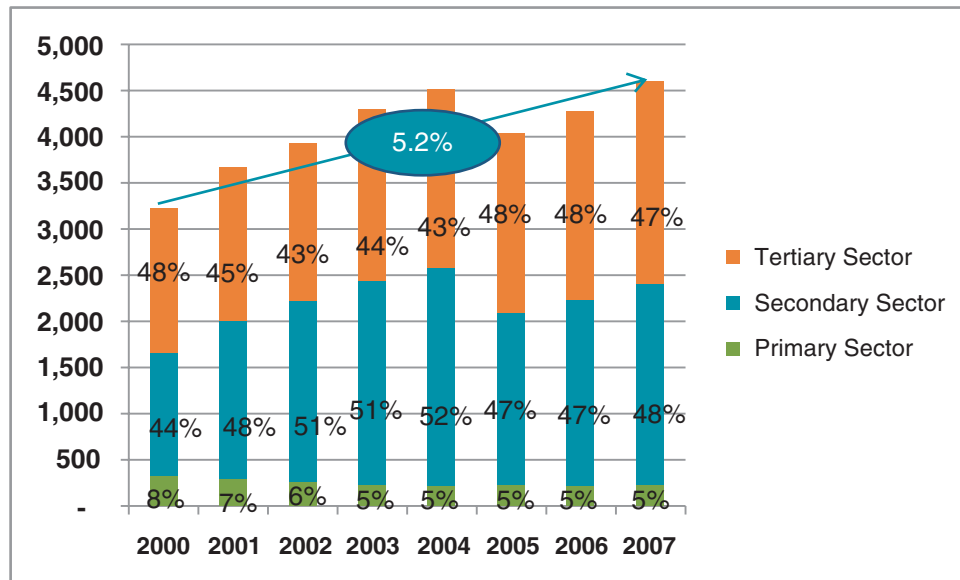


Figure 4. GSDP of Puducherry at constant prices (Rs. crore)⁷
 Source: Directorate of Economics and Statistics, 2007, Government of Puducherry, and IMaCS analysis

The Union Territory has also lagged several states in India’s economic growth.

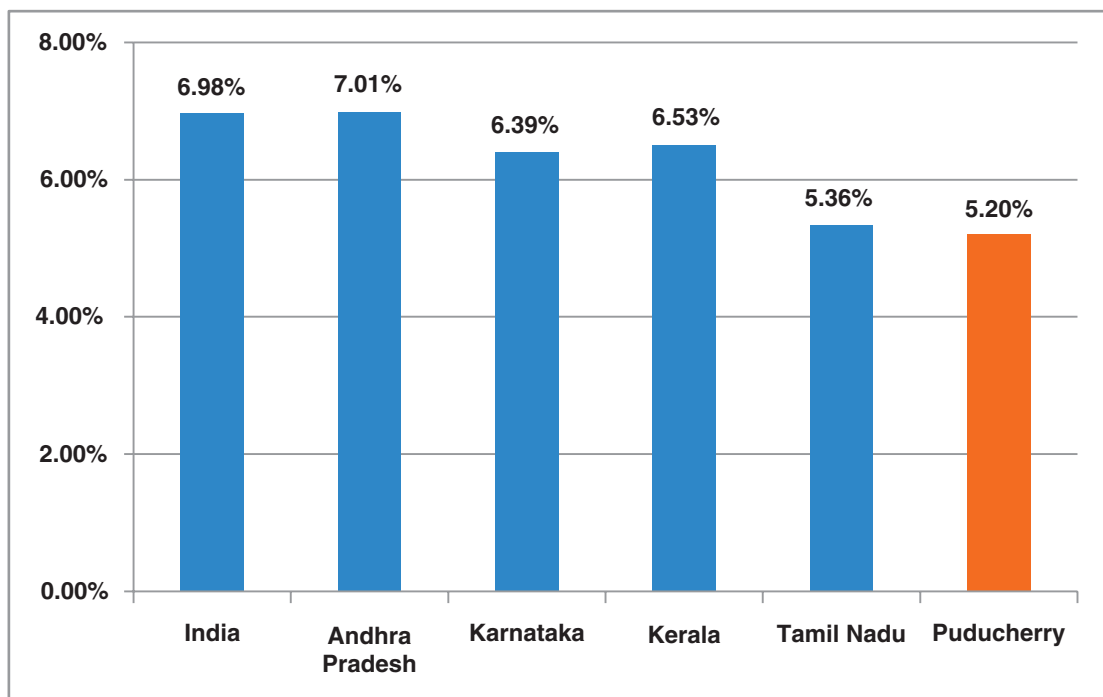


Figure 5. Comparison of Puducherry economic growth and key states
 Source: Economic Survey of India 2007–08, Directorate of Economics and Statistics of respective states and Puducherry, and IMaCS analysis

⁷ 1999–2000 series

Primary Sector

The primary sector contributed around 5% to the GSDP in 2006–07. The contribution of primary sector to the GSDP of Puducherry has been declining in the current decade from 8% of GSDP in 2000 to 5% in 2007. The average annual growth rate has been -1.3% during the said period. The agriculture and animal husbandry activities account for Rs 202 crore of the GSDP in current prices in 2007 and contribute around 65% of the output of the primary sector.

Agriculture

The major crops by area under cultivation are paddy, pulses, coconut, and sugarcane. Around 64% of the area under cultivation is under paddy.

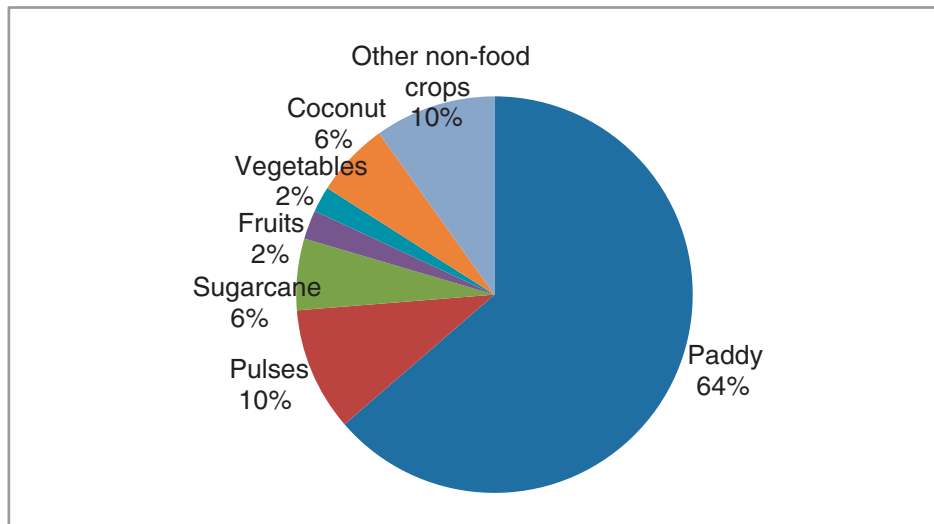


Figure 6. Major crops by area under cultivation (2005–06)

Source: Directorate of Economics and Statistics, 2007, Government of Puducherry, and IMAcS analysis

In 2005–06, Pondicherry region contributed 67% of the agricultural output of the Union Territory. Karaikal region accounted for 28%, Yanam for 4%, and Mahe accounted for the rest.

Issues: The following are the issues facing Agriculture in Puducherry:

- *Area under crops:* The absolute area under cultivation has declined from 38,592 hectares in 2001 to around 34,682 hectares in 2008. There has been a corresponding increase in area put to non-agricultural use by around 3,000 hectares since 2001 and in fallow land by around 1,000 hectares.
- *Productivity:* There has been a decline in the productivity of paddy from 2,572 kg per hectare in 2002 to only around 2,339 kg per hectare in 2006. There has been a year on year decline in productivity of around 2.3%.
- *Irrigation:* The total area under irrigation in the Union Territory has declined from 31,436 hectares in 2004 to 26,937 hectares in 2008.

Value-addition, through measures such as improved crop techniques, horticulture, floriculture, agro-processing, is expected to arrest the decline in agriculture and related areas.

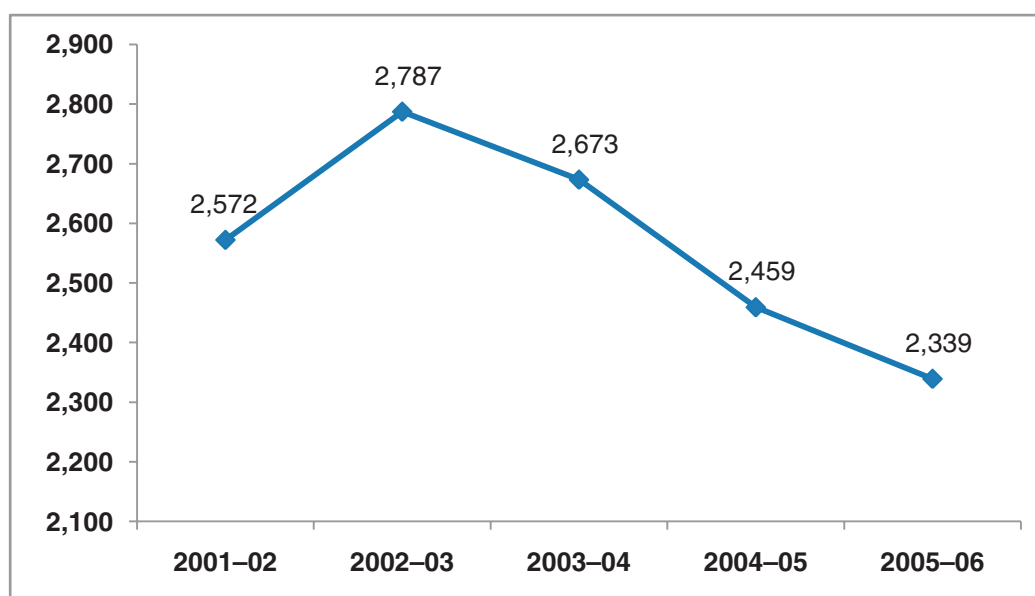


Figure 7. Average yield per hectare of Paddy crop in Puducherry (kg/hectare)
 Source: Directorate of Economics and Statistics, 2007, Government of Puducherry and IMaCS analysis

Animal Husbandry

Puducherry has 97 primary co-operative milk producers’ societies and two co-operative milk producers unions, one each in Pondicherry and Karaikal. Milk Production in the Union Territory at around 45,000 metric tonnes during 2008 has seen a 2.6% year on year growth in the last two years.

Table 1. Milk and Egg Production in Puducherry (2006 and 2008)

| Year | Puducherry | Karaikal | Mahe | Yanam | UT |
|---------------------------------|------------|----------|--------|--------|--------|
| Milk Production (in MT) | | | | | |
| 2006 | 31,828 | 9,520 | 226 | 1091 | 42,665 |
| 2008 | 32,833 | 10,909 | 421 | 766 | 44,929 |
| CAGR | 1.6% | 7.0% | 36.5% | -16.2% | 2.6% |
| Egg Production (in Lakh) | | | | | |
| 2006 | 72 | 29 | 2 | 2 | 105 |
| 2008 | 75.88 | 28.26 | 1.52 | 2.64 | 108.3 |
| CAGR | 2.0% | -1.3% | -12.8% | 14.9% | 1.6% |

Source: Directorate of Economics and Statistics, 2007, Government of Puducherry, and IMaCS analysis

Puducherry meets around 20% of its demand for eggs through local production.

Fisheries

The Union Territory has 1,347 hectares of inland water and 800 hectares of brackish water. The four regions of Pondicherry, Karaikal, Yanam, and Mahe also have access to around 1,000 sq. km. of continental shelves. Fisheries contribute to about 30% of the output of the primary sector. The decline of the output in 2005 was mainly due to the damage to the fishermen’s equipments during the Tsunami in the same fiscal resulting in decline in marine fishing activity.

Table 2. Marine Fish Catch in Puducherry (2004–2008)

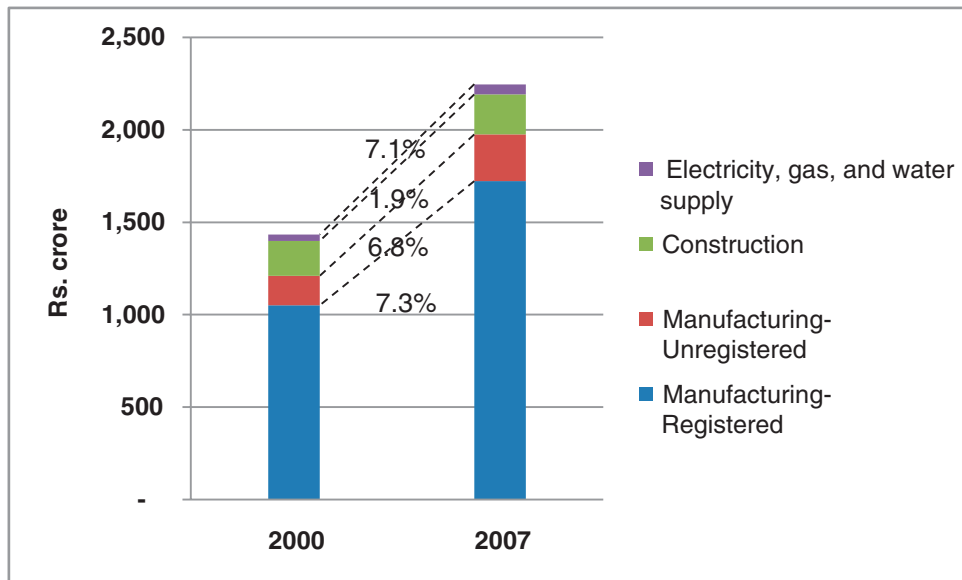
| Marine Fish Catch (MT) | Pondicherry | Karaikal | Mahe | Yanam | UT |
|------------------------|-------------|----------|-------|--------|--------|
| 2003–04 | 20,647 | 16,445 | 3,588 | 2,120 | 42,800 |
| 2004–05 | 14,136 | 11,382 | 3,610 | 2,372 | 31,500 |
| 2005–06 | 15,040 | 12,297 | 4,038 | 2,105 | 33,480 |
| 2006–07 | 17,219 | 11,765 | 3,835 | 973 | 33,792 |
| 2007–08 | 18,860 | 8,478 | 3,856 | 2,079 | 33,273 |
| CAGR | -2.24% | -15.26% | 1.82% | -0.49% | -6.10% |

Source: Directorate of Economics and Statistics, 2007, Government of Puducherry, and IMaCS analysis

Inland fish production has also grown only by 4% during the same time period from 5,048 MT in 2004 to 5,919 MT in 2008. Fishing is a major economic activity in Yanam region.

Secondary Sector

The secondary sector in Puducherry accounts for 48% of the GSDP. The annual average growth in the manufacturing sector has been about 6.6% in the UT while India has recorded a growth of 8.1% in the sector during the same period.

**Figure 8.** GSDP in Manufacturing Sector⁸

Source: Directorate of Economics and Statistics, 2007, Government of Puducherry, and IMaCS analysis

Manufacturing

The Manufacturing sector has been growing at 7.3% per annum between 2000 and 2007. The number of manufacturing units grew at a rate of 2.5% per annum during 2002–2007.

⁸ Constant prices, 1990–2000 series

Table 3. Trend in number of Manufacturing Units, Investment and Employment (2003–2008) in Puducherry

| Units | 2002–03 | 2003–04 | 2004–05 | 2005–06 | 2006–07 | 2007–08 | CAGR |
|------------------------|---------|---------|---------|---------|---------|---------|------|
| SSIs | 6,876 | 7,126 | 7,308 | 7,445 | 7,598 | 7,757 | 2.4% |
| MSIs | 139 | 149 | 159 | 162 | 168 | 170 | 4.1% |
| LSIs | 55 | 65 | 70 | 70 | 71 | 71 | 5.2% |
| Total | 7,070 | 7,340 | 7,537 | 7,677 | 7,837 | 7,998 | 2.5% |
| Investment (Rs. crore) | 1,631 | 1,923 | 2,061 | 2,090 | 2,131 | 2,177 | 5.9% |
| Employment | 82,843 | 85,894 | 88,328 | 89,296 | 91,391 | NA | 2.5% |

Source: Directorate of Economics and Statistics, 2007, Government of Puducherry, and IMaCS analysis

The changing nature of industrial output is evident from the fact that the Textile sector contributed nearly 56% of total industrial output in 1981, followed by food products and beverages at 10.1%, whereas chemicals constituted only 5.5% of industrial output. However, by 2004–05, the chemicals sector contributed maximum to the output at 22.4%, followed by the machinery and parts sector at 20.8%, and metal products contributing 19.5% of industrial output.

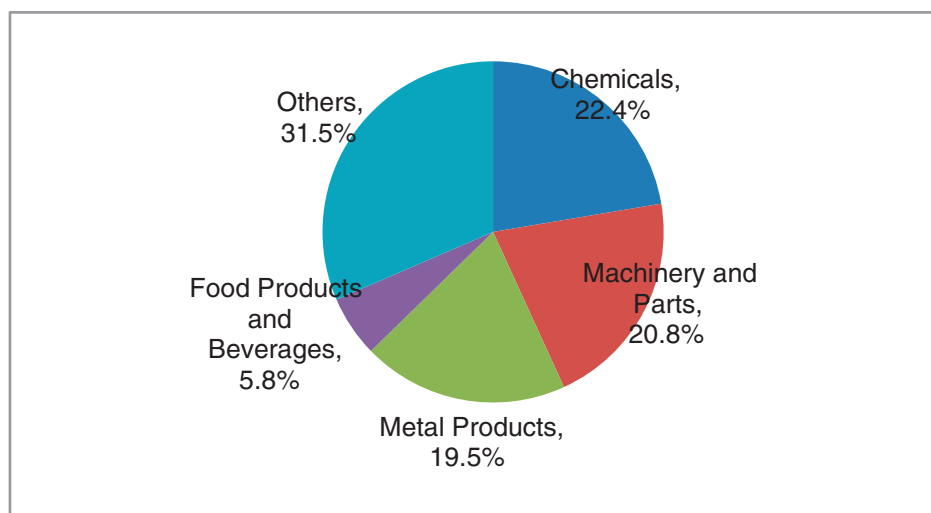


Figure 9. Major heads of Industrial Output in 2004–05

Source: Annual Survey of Industry, 2004–05, IMaCS Analysis

The maximum number of industrial units are in the chemicals sector (1,647) followed by metal products (910), food products (908), textiles (887), and machinery and parts (687).

Issues:

- *Relatively lesser growth in the manufacturing sector:* The sector has not witnessed much growth because the advantage enjoyed by Puducherry on account of various tax concessions has declined after the commencement of the Value Added Tax (VAT) regime. The growth going forward has to be largely based on ‘intrinsic strengths’ overcoming locational constraints.
- *Business Climate:* Discussions with stakeholders reveal that the longer response time taken for solving issues such as getting licenses and need for a conducive business atmosphere has also contributed to reduced industrial growth in Puducherry

- *Need for infrastructure:* Need for infrastructure which will support businesses to set up shop is a key challenge in Puducherry.

Despite the relatively lower growth in the secondary sector, electronics and light engineering sectors have been picking up as evidenced by the presence of companies such as HCL Infosystems, Lenovo, Wipro, Hewlett Packard, NCR Corp., and auto component major, Sundram Fasteners Limited. The light engineering sector is expected to be a major driver of growth.

Tertiary Sector

The tertiary sector contributes to 47% of the GSDP of Puducherry. The tertiary sector is growing at a rate of 9.8% as compared to India which has been growing at 8.5%. Services such as tourism, trade, hotels, and restaurants account for about 43% of the tertiary sector output followed by real estate and business services (17%). We expect that the Services sector will drive the economy of Puducherry going forward.

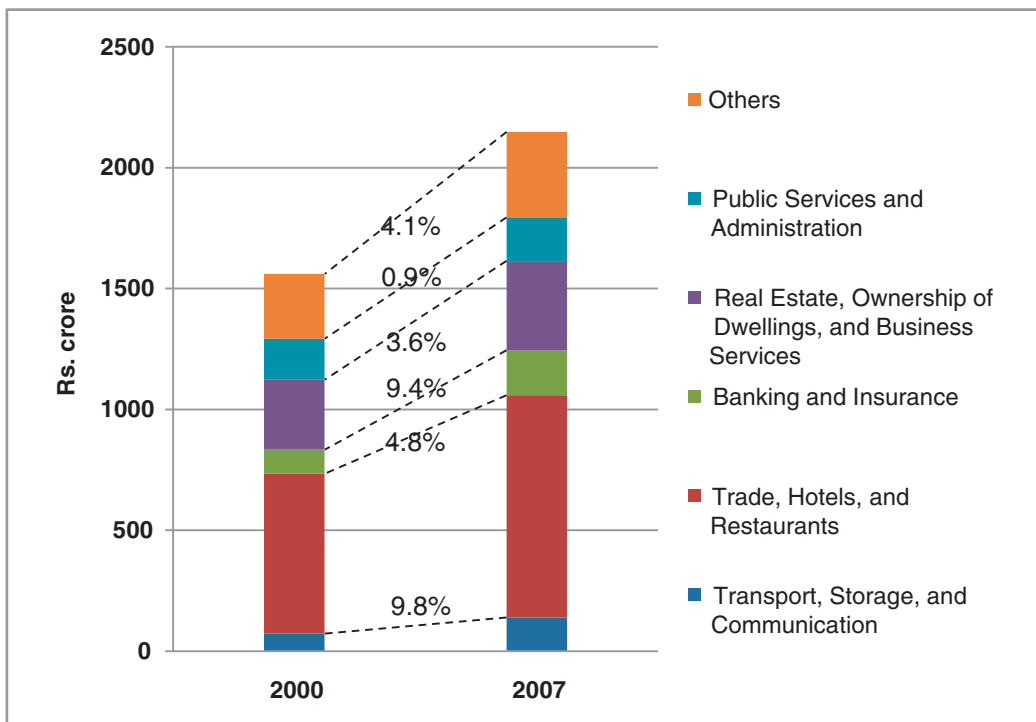


Figure 10. GSDP in Services Sector in Puducherry
 Source: Directorate of Economics and Statistics, 2007, Government of Puducherry, and IMaCS analysis

Tourism

As evident from the contribution to the Services sector GSDP, tourism, related areas of trade, hotels and restaurants account for a large portion of the Services sector. This is evidenced by the increased tourist inflow into Puducherry.

Table 4. Tourist arrivals in Puducherry

| Year | Domestic Tourists | Foreign Tourists | Total |
|------|-------------------|------------------|---------|
| 2001 | 476,804 | 22,115 | 498,919 |
| 2002 | 480,522 | 20,094 | 500,616 |
| 2003 | 500,139 | 25,559 | 525,698 |
| 2004 | 558,445 | 32,053 | 590,498 |



| Year | Domestic Tourists | Foreign Tourists | Total |
|---------|-------------------|------------------|-----------|
| 2005 | 574,011 | 36,009 | 610,020 |
| 2006 | 652,245 | 46,273 | 698,518 |
| 2007 | 798,528 | 57,682 | 856,210 |
| 2008(E) | 942,263 | 66,334 | 1,008,597 |

Source: Department of Tourism, Government of Puducherry, IMaCS analysis; E – Estimates

The growth in the number of domestic tourist arrivals has been an annual average of 9% between 2001 and 2007. In the same period, foreign tourist arrivals have grown at over 17%. In recent years, this has been growing at about 25%. While Karaikal accounts for just 1% of the foreign tourists, it accounts for close to 17% of the domestic tourists due to the presence of the Thirunallar temple and the Karaikal Ammaiyar temple.

Issues:

- *Tourism potential yet to be tapped:* While Puducherry has made strides in tourism, there is still a lot that Puducherry can offer for different tourists to experience. This goes beyond weekend trips and religious trips. The potential of targeted and high-quality tourism offerings should be fully tapped.
- *Infrastructure challenges to Services sector growth:* For Services sector to grow, adequate business infrastructure (Special Economic Zones – SEZs, parks), social infrastructure, and access infrastructure should be created. Puducherry has to address this if it has to attain its potential as a hub for tourism and a *knowledge based-economy* which it is truly capable of.

We see that given the trends, the Services sector (tourism, IT and ITES, education, and healthcare⁹) would be one of the growth engines for Puducherry.

Employment and Unemployment

The classification of workers according to the Census 2001 puts main workers at 93% and marginal workers at only 7% of the total workforce of 3,42,655 in Puducherry. Around 70% of the workforce is involved in manufacturing, construction, transportation, tourism, and business services.

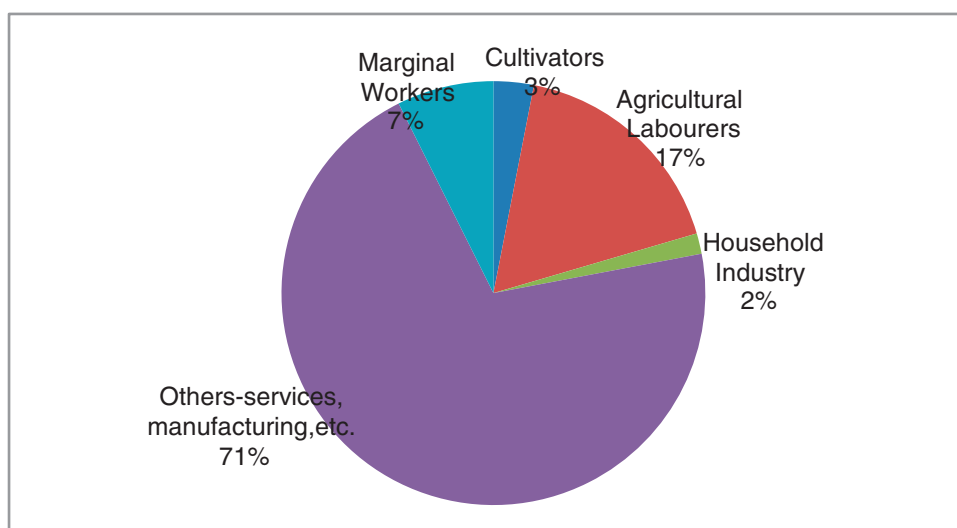


Figure 11. Composition of Puducherry Workforce (2001)

Source: Census of India, 2001, IMaCS analysis

⁹ Some of these sectors are elaborated in the following sections of this document as they form a part of the social sector as well.

Nearly 15% of the population and 50% of the workforce is in the live register and this has been increasing at the rate of 6% between 2003 and 2006. This indicates that the level of 'disguised employment' could be quite high.

Social Snapshot

Population and Urbanisation

The population of the UT was around 9.74 lakhs in 2001. Pondicherry accounts for 75% of the total population of the Puducherry. The estimated population in 2008 is around 11.1 lakhs. Mahe has the highest density of over 4,000 persons per sq. km. given its proximity to Kerala.

Table 5. Population and Urbanisation in Puducherry

| Parameters | Pondicherry | Karaikal | Mahe | Yanam | Puducherry (UT) |
|--------------------------------|-------------|----------|--------|--------|-----------------|
| Population (2001) | 7,35,332 | 1,70,791 | 36,828 | 31,394 | 9,74,345 |
| Percentage to Total | 75% | 18% | 4% | 3% | 100% |
| Population Growth (Decadal) | 21% | 17% | 10% | 54% | 21% |
| Density (persons per sq. km.) | 2,510 | 1,067 | 4,092 | 1,847 | 2,034 |
| Urban Population (Percentage) | 69% | 44% | 100% | 100% | 66% |
| Population (Estimates in 2008) | 8,39,008 | 1,90,594 | 39,387 | 40,987 | 11,09,976 |

Source: Census 2001; Directorate of Economics and Statistics, Government of Puducherry

Since Yanam and Mahe are municipalities, they are classified as having 100% urban population. About 68% of Pondicherry's population is classified as urban. Karaikal has a large rural population. This necessitates proper urban planning and development in the four regions.

Social development indicators

The human development indicators of Puducherry are amongst the best in the country. It has an average literacy of close to 81%. Among the four regions, Mahe has the highest literacy of around 96%. The per capita income of around Rs 63,524¹⁰ (all-India rank 4) is amongst the highest in the country after Chandigarh, Goa, and Delhi.

Table 6. Social Development Indicators of Puducherry

| Social Development Indicators | Puducherry (UT) |
|--|-----------------|
| Literacy (2001) | 81% |
| Sex Ratio (2001) – males per 1,000 females | 1,001 |
| Infant Mortality Rate – per 1000 (2008) | 25 |
| Per capita Income | Rs. 63,524 |
| Human Development Index (HDI) | 0.571 |
| Population Below Poverty Line (2005) | 22% |

Source: 'Puducherry at a Glance 2008'; Directorate of Economics and Statistics, Government of Puducherry, National Human Development Report 2001, Planning Commission, Economic Survey of India 2008, other secondary sources, and IMAcS analysis

Puducherry ranks sixth in the country in terms of HDI.

¹⁰ Current prices, 2008

Infrastructural Snapshot

Access Infrastructure

Puducherry has the following access infrastructure that provides connectivity to key destinations:

Airport: There is an airport in Pondicherry which is mainly used for charter flights. The runway of this airport is under expansion and is expected to be completed soon.

Roads: The following are the key roads that ensure connectivity into various regions of the UT:

- Pondicherry is connected to Chennai via East Coast Road (ECR) and also through National Highway (NH) 45A
- Karaikal is well connected to nearby towns of Chidambaram and Nagapattinam
- Yanam is connected to Kakinada via NH 214
- Mahe is connected to Thalassery, Kozhikode, and other towns via NH 17

Railways: Puducherry is connected by rail via the following means:

- Pondicherry is linked to Villipuram through Broad Gauge and Karaikal is connected via the Nagapattinam-Cuddalore line
- Mahe is located on broad gauge line between Kozhikode and Thalassery
- The nearest railway station for Yanam is at Kakinada, a distance of 26 km away

Industrial Infrastructure

Industrial Estates: There are six major Industrial Estates, namely Mettupalayam Industrial Estate (167 acres), Sedarapet Industrial Estate (62.19 acres), Kirumampakam Industrial Estate (25 acres), Kattukuppam Industrial Estate, Thirubuvanai Industrial Estate (52 acres), and Thattanchavady Industrial Estate (51 acres). There is also a Rural Industrial Estate at Kottucherry, and an Industrial Growth Centre at Polagam in Karaikal.

SEZ/IT/Electronic Parks: An Electronic Park is located at Thirubuvanai and an IT Park is located at Kalapet in Pondicherry.

Fisheries Infrastructure: There is one fishing harbour at Puducherry and at Karaikal with fishing jetties in the remaining regions.

Power Generation: There is a Gas-based Power Plant at Karaikal with a generation capacity of 32 MW.

Social Infrastructure

Puducherry is well known as an Educational Hub (especially in professional education) as well as a Medical Education Hub. There are 1,215 schools in the Union Territory. The Union Territory has one central university and, notably, 11 medical and allied colleges.

It has one of the largest super-specialty government hospitals (JIPMER) in India and attracts patients from all over the country. The high standard of healthcare in Puducherry is evident from the fact that the National Population Commission has credited Puducherry as number one in India in initiating preventive healthcare mechanism. The per capita spending on healthcare is close to Rs. 1,337.

Table 7. Social Infrastructure in Puducherry

| Parameters | Pondicherry | Karaikal | Mahe | Yanam | Puducherry (UT) |
|---|-------------|----------|------|-------|-----------------|
| Education | | | | | |
| Schools (pre-primary to higher secondary) | 871 | 248 | 52 | 44 | 1,215 |
| Universities | 1 | - | - | - | 1 |
| Medical and para-medical colleges | 10 | 1 | - | - | 11 |
| Engineering colleges | 3 | 2 | - | 1 | 6 |
| Arts and Science colleges | 11 | 2 | 1 | 1 | 15 |
| Polytechnics | 2 | 1 | 1 | 1 | 5 |
| ITI | 11 | 2 | 1 | 2 | 16 |
| Health | | | | | |
| Hospitals | 5 | 1 | 1 | 1 | 8 |
| Beds | 2,723 | 628 | 203 | 100 | 3,654 |

Source: 'Puducherry at a Glance 2008', Directorate of Economics and Statistics, Government of Puducherry, and IMAcS analysis

Investments into Puducherry

The following is a summary of the investments being channelled into Puducherry:

Power: There is Combined Cycle Gas Power Plant being set up at Yanam with a capacity of about 350–400 MW.

Ports: A deep-sea port is being set up at Vanjore in Karaikal at a cost of about Rs. 1,400 crore over an area of 600 acres, with an employment potential of around 6,000–8,000. The catchment area of the port would include the Nagapattinam-Tiruchirapalli belt and beyond. Pondicherry port is being constructed with the ability to handle 19.6 million tonnes of cargo by 2013 at a cost of over Rs. 1,850 crore.

Airports: Preliminary feasibility study has been conducted for an airport at Karaikal. The project is under further study now. The initial investment will be around Rs. 56 crore. Expansion of the Pondicherry airport is also underway in the first phase. The second phase is proposed soon to accommodate much larger aircraft.

Special Economic Zones: A multi-product SEZ is proposed at Sedarapet in Pondicherry for Auto parts, Machinery, and IT, spanning about 1,000 acres.

Apart from this, the Nagore-Karaikal broad-gauge railway project is underway. The 'Thirnallar Temple Town' project has been commenced with the signing of a Memorandum of Understanding by the Government of Puducherry with Housing and Urban Development Corporation Limited (HUDCO). The investment is Rs. 146 crore.

Another Rs. 450 crore is being spent on proposed projects such as urban sewerage project for Puducherry, construction of bridges, other infrastructure, and so on.

Strengths, Weaknesses, Opportunities, and Threats of Puducherry

The following figure illustrates the Strengths, Weaknesses, Opportunities, and Threats (SWOT) faced by Puducherry.

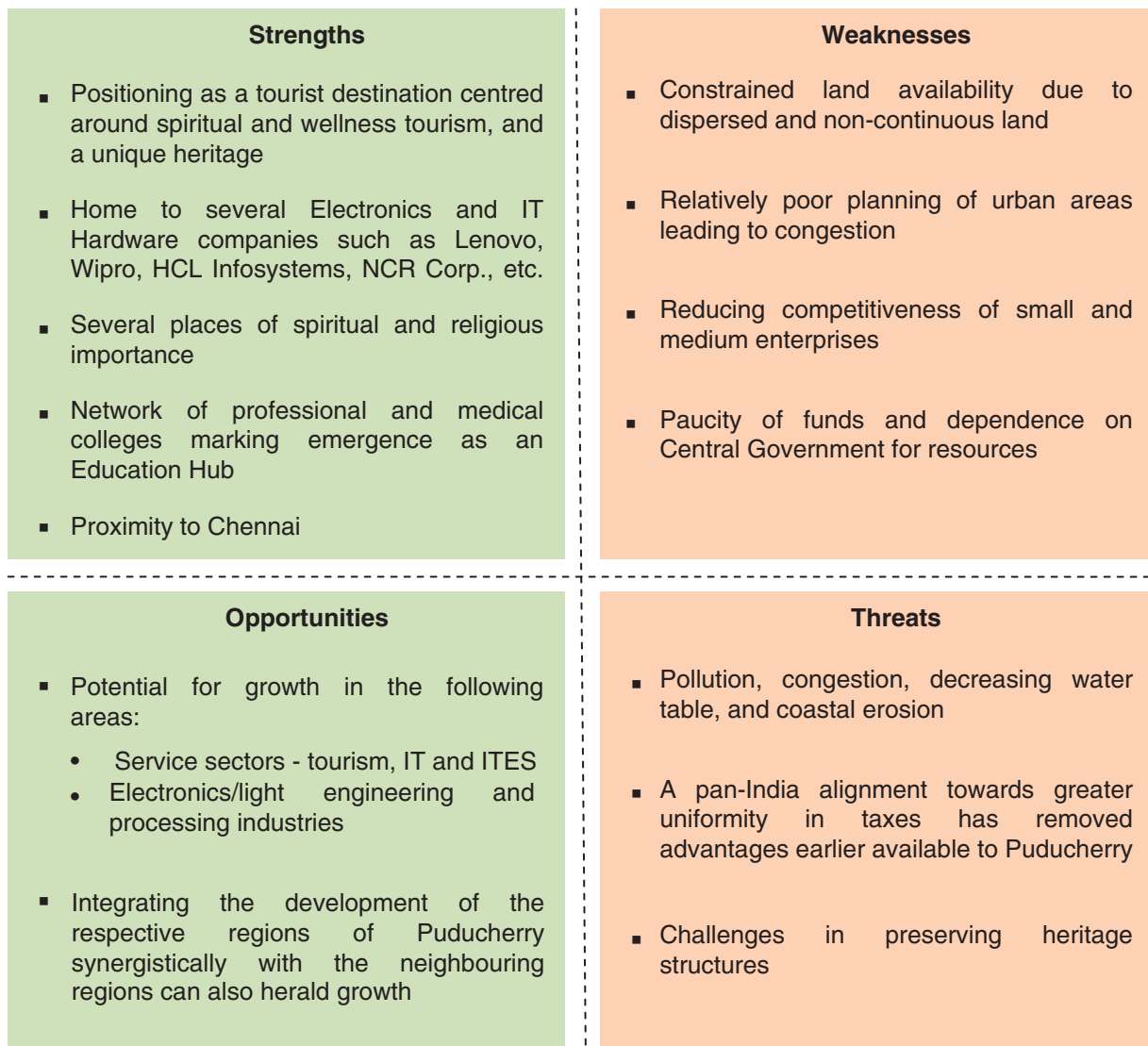


Figure 12. SWOT of Puducherry

Source: Various secondary sources, stakeholder interactions, IMaCS analysis

Puducherry Vision 2025

Synthesising Aspirations and Guiding Principles¹¹

While formulating a Vision, it is necessary to capture the expectations and aspirations of stakeholders by facilitating discussions. It is also necessary to engage a cross-section of stakeholders to ensure that the Vision that emerges is a 'shared' Vision. During this process, it is necessary that the following 'Guiding Principles' be kept in mind:

- Aspirations should be greater than resources
- The future should be 'folded-in' (we should set targets and work backwards to achieve the same)
- Focus should be on 'next practices' (we should adopt methodologies which will be innovative and cause significant changes in the way we do things).

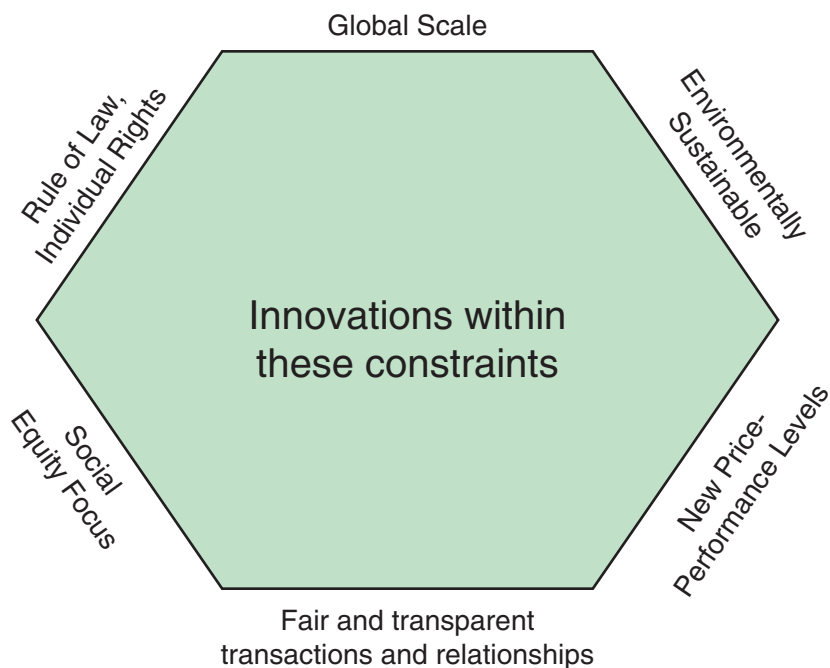


Figure 13. Innovation Sandbox

We kept these in mind when setting the context for stakeholder interactions and debates as well as setting targets. These 'Guiding Principles' will be the cornerstone of Puducherry Vision 2025.

These 'Guiding Principles' emphasises on innovation which needs to occur within the '*sandbox of non-negotiable constraints*' as illustrated above.

¹¹ Reference: India@75 Vision initiative, C.K. Prahalad, CII

Emerging Vision Themes

Our stakeholder interactions reveal a few broad, mutually enforcing themes which constitute the building blocks for the Vision 2025 of Puducherry.

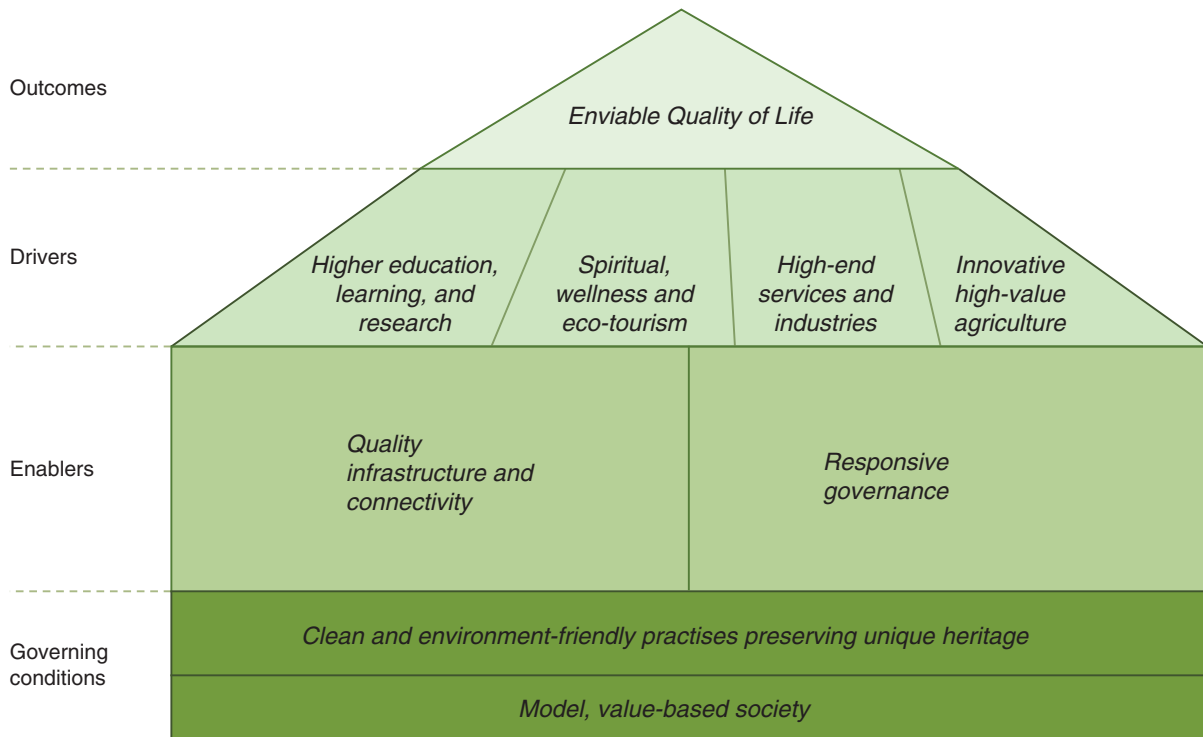


Figure 14. Emerging Themes for Puducherry Vision 2025

The elements of this Vision will set the context for the developmental agenda for Puducherry. Covering a relatively small geography, Puducherry places a premium on being clean, environmentally conscious, and preserving its unique heritage and culture. This should be kept in mind while formulating the developmental agenda.

Puducherry Vision 2025 – defined

Accordingly, the synthesis of stakeholder aspirations is reflected in the following Vision 2025 for Puducherry:

“By 2025, Puducherry will be an international destination for higher education, learning, and research; a best-in-class wellness, spiritual, and eco-tourism destination; a hub for high-end services and industries enabled by high-quality infrastructure, connectivity, and responsive governance; duly preserving its environment and heritage, and thereby emerging as a model, value-based society”.

The stakeholders of Puducherry should ‘aspire for higher possibilities’, ‘contribute as a team’, and ‘transform the Union Territory’. Consequently, ‘Aspire, Contribute, and Transform – A C T Puducherry’ shall be the action agenda to achieve Puducherry Vision 2025.

Putting Vision into Action – the Developmental Agenda

Framework for identifying the Developmental Agenda

We used the India@75 Vision Themes and Guiding Principles while synthesising the Vision. It is also of paramount importance to translate this Vision into Action by formulating a set of projects which would be critical to realising the Vision in the current context. This translates to identifying the Developmental Agenda for Puducherry.

We considered the following factors while formulating the Developmental Agenda:

- *Building capabilities*: Developing new competencies which will aid development on a specific front, such as promoting industries where Puducherry has competitive advantages, developing new skills, and commencing initiatives to develop new strengths.
- *De-bottlenecking*: Removing or easing constraints that hinder development, or limit the existing resources to be utilised optimally.
- *Consolidation*: Furthering existing capabilities by identifying new ways of value addition.

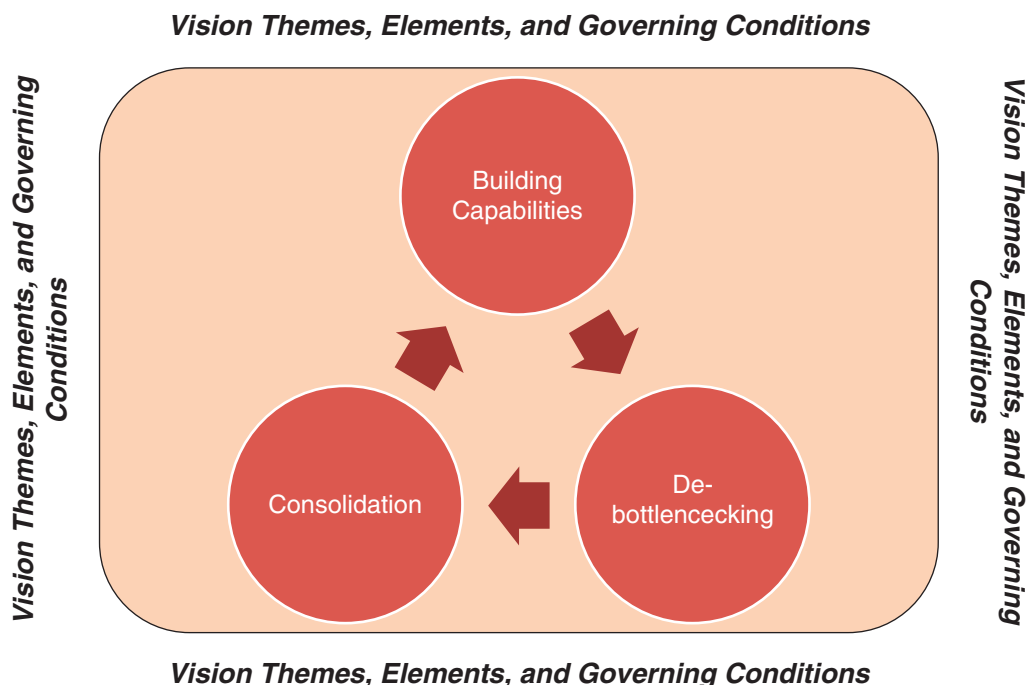


Figure 15. Framework for identifying the Developmental Agenda

Putting the Vision into Action requires that the Developmental Agenda be formulated for the following areas:

Drivers: The drivers of growth in Puducherry require special focus on *Tourism, Manufacturing and Services, and Education and Research*. These areas have separate developmental agenda outlined. *Agriculture, Fisheries, and Rural Development* would have small yet significant supporting role and hence is also addressed.

Enablers: The enablers of Infrastructure and Governance and Administration are critical to ensure progress. The development agenda for *Infrastructure* has been outlined in the following sections. To achieve responsive governance, a separate developmental agenda with focus on streamlining *Governance and Administration* in terms of procedures and enhancing business climate has been detailed.

Governing Conditions: Achieving clean and environment-friendly practises needs a sharp focus on developing next practises vis-a-vis *Energy, Environment, and Healthcare* which has been detailed in the appropriate section in the following pages. As part of the overall developmental agenda, we emphasise on developing a sense of moral leadership which will help the emergence of a model, value-based society.

The Developmental Agenda has strategies to be undertaken to achieve the Vision, necessary targets, and specific projects. The projects presented here are illustrative but not exhaustive. However, they are steps in the right direction towards achieving the Vision.

Tourism

Vision for Tourism:

Puducherry will offer world-class tourist experiences built around the theme of spirituality, rejuvenation, heritage, and eco-tourism to discerning tourists and visitors from India and abroad. Tourism in Puducherry has a lot to offer for people than just perceived now.

Target for Vision 2025:

Table 8. Targets for Tourism

| Parameter | Current ¹² | Vision 2025 | Scale ¹³ | Speed ¹⁴ |
|-----------------------------------|-------------------------------|-------------------------------|---------------------|---------------------|
| Average days of stay for tourists | 1.5–2 | 3.5–4.5 | 3 times | 2 times |
| Profile of tourists | Weekend, relatively low spend | Long haul, high spend, global | NA | NA |

Source: Department of Tourism, Puducherry, various secondary sources, stakeholder interactions, and IMaCS analysis

Developmental Agenda:

The campaign “Give time a break!” promoting Puducherry as a tourism destination seems to have worked, with the annual number of tourists visiting Puducherry touching 1 million. There is a need to increase this by attracting more ‘high-value’ tourists, increasing the tourist spend and the duration of their stay. The room for improvement is obvious from the fact that Puducherry attracts just about 3% of the number of tourists visiting Tamil Nadu. The core areas that constitute the developmental agenda for tourism in Puducherry are the following:

Identifying ‘targeted’ tourist products for different profiles of tourists with spiritual tourism, wellness tourism, and eco-tourism being the key drivers ably supported by other initiatives: Puducherry has different things to offer different people. There is a need to have specific offerings for each target audience comprising of spiritual tourism, wellness tourism, and eco-tourism, which will be the key drivers, along with heritage tourism, religious tourism, and recreational activities such as beach and water-front tourism. Separate offerings should be identified and these themes should be promoted under the umbrella brand rather than just having a single concept.

Developing a branding campaign around tourism: The sub-themes under tourism should be promoted through a branding campaign which communicates that Puducherry has a wide proposition on offer to the discerning tourist.

Promoting tourism and establishing linkages: Linkages should be developed which enables seamless integration of tour operators within and outside Puducherry, Government, hotel owners, and other stakeholders (such as villages participating in eco-tourism initiatives).

Establishing linkages of information, access, and infrastructure: Information should be made available under one roof and connectivity should be established across different destinations. Suitable infrastructure such as ‘5-star’ category hotels should be established. Public Private Partnerships (PPP) should be explored at every possible stage in this process.

An illustrative list of projects to achieve this developmental agenda is outlined in the Annexure.

¹² Refers to 2007, unless otherwise specified, across all sections

¹³ Scale indicates the extent of change required as compared to the current-state

¹⁴ Speed refers to how fast the change has to occur as compared to what has happened in the past

Manufacturing and Services

Vision for Manufacturing and Services

Puducherry will be a high-end Services-led economy along with high-end manufacturing, leading to strong growth based on Puducherry’s intrinsic strengths as a business destination of choice.

Targets for Vision 2025:

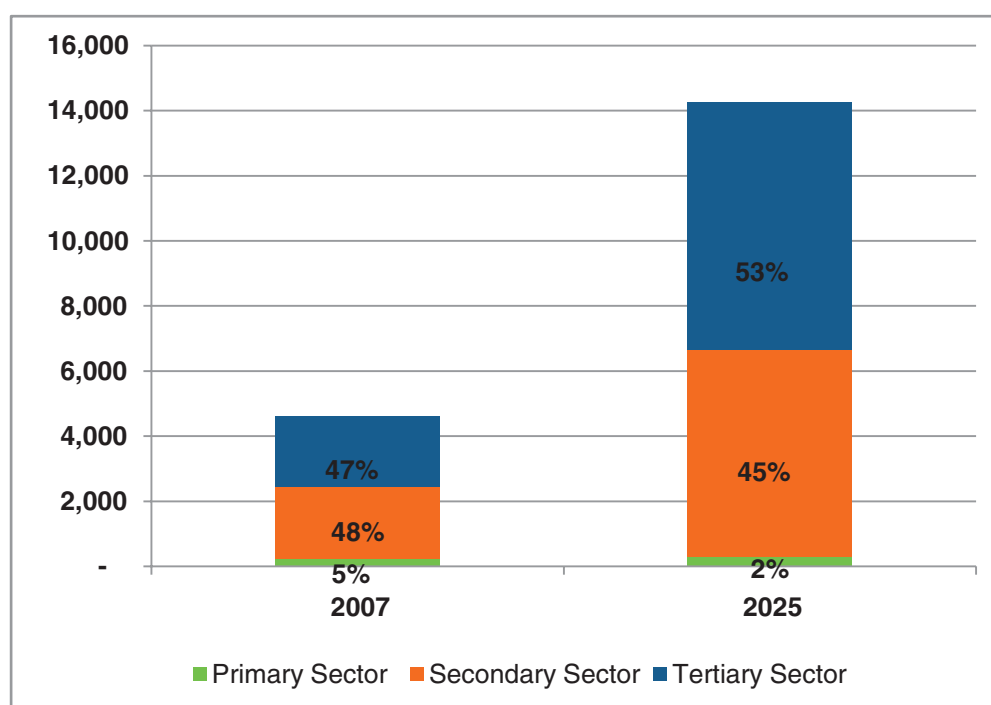


Figure 16. Vision 2025 – Structure of Puducherry Economy – GSDP in Rs. crore
 Source: Directorate of Industries and Commerce, Puducherry, stakeholder interactions, and IMaCS analysis

Table 9. Industrial infrastructure for Puducherry – current and proposed

| | Current and Proposed | Vision 2025 |
|---------------------------|----------------------|-------------|
| Industrial Estates | 6 | 15 |
| IT and Knowledge Parks | | |
| No. of parks | 1 ¹⁵ | 5 |
| Multi-product SEZs | | |
| No. of multi-product SEZs | 2 | 5 |

Source: Directorate of Industries and Commerce, Puducherry, stakeholder interactions, and IMaCS analysis

¹⁵ There is also an Electronic Park at Thirubuvanai

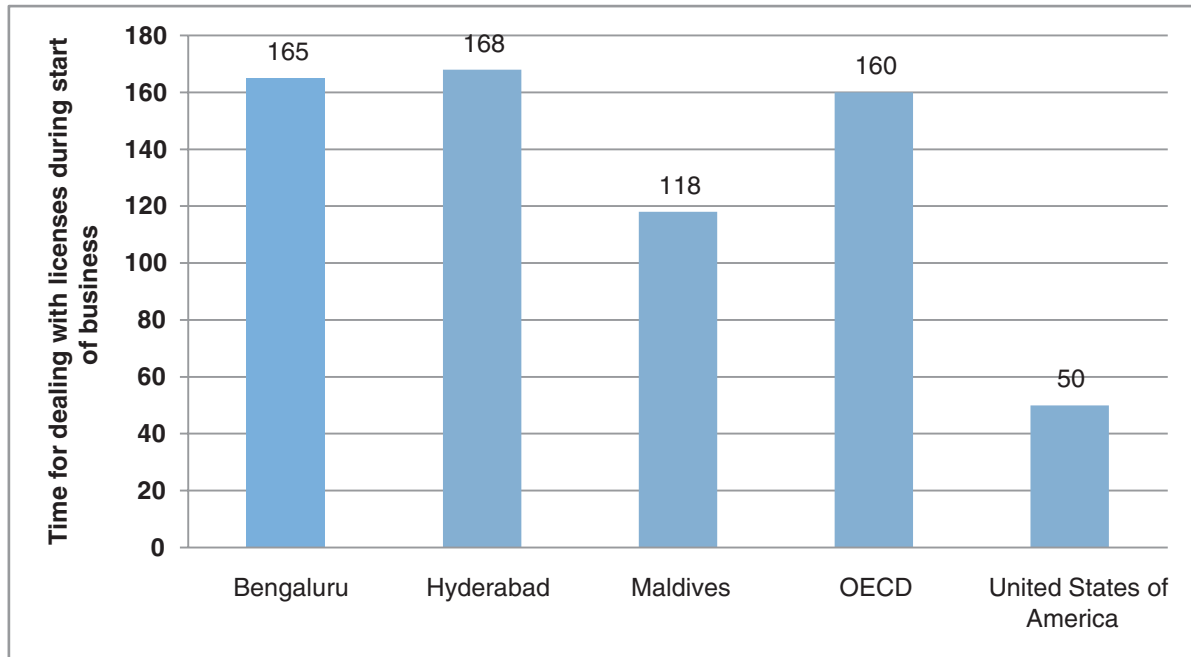


Figure 17. Comparison of time taken to obtain licenses in key cities in India and locations abroad
Source: 'Doing Business in South Asia 2007', World Bank, International Finance Corporation, and IMAcS analysis

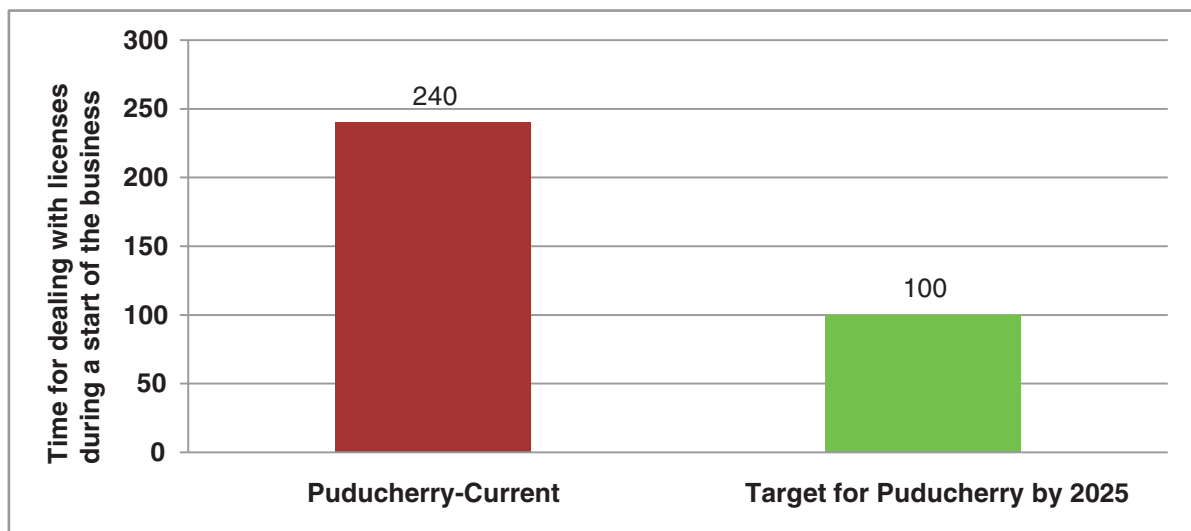


Figure 18. Targets for time taken to obtain licenses for Puducherry by 2025

Source: 'Doing Business in South Asia 2007', World Bank, International Finance Corporation, stakeholder interactions, and IMAcS analysis

Developmental Agenda:

Puducherry is mainly a production driven economy with constraints on availability of land and resources. It is required to formulate the developmental agenda with measures which will herald the next phase of growth in Puducherry. The thrust areas for this growth should be the Services sector with manufacturing playing a supplemental role. Accordingly, the major thrust areas for Puducherry should be the following:

- IT, ITES, and knowledge-based industries
- Light engineering – IT Hardware and Electronics. component manufacturing, etc.
- Tourism
- Education and Research
- Healthcare (good quality hospitals, and post-treatment care, rejuvenation)

The new areas which should also be targeted are the following:

- Research and Development, Design
- Nanotechnology
- Bio-technology
- Translation Outsourcing (given the large talent pool of languages spoken – English, French, and others)

The above thrust areas will also complement the emerging business opportunities slated to occur in Tamil Nadu in general and Chennai in particular.

Existing industrial activities such as chemical plants and leather industries should also be sustained and play a supplemental role which will be enabled by overall infrastructure build-up and a better industrial climate.

Promoting thrust areas: Puducherry should actively promote thrust areas mentioned above through appropriate facilities that help such sectors to make Puducherry their home. Puducherry should participate in investor summits and carry out promotional campaigns to promote itself as an investment destination among the investor community. While promoting these thrust areas through appropriate policy measure, maximum synergy should be drawn with Puducherry being a centre for education and research in such a manner that reinforces the entire ecosystem.

Formulating a New Industrial Policy with focus on thrust areas: The current Industrial Policy for Puducherry was formulated in 1997 after which an Industrial Master Plan was formulated in 2004. A New Industrial Policy with specific focus on the *thrust areas* in particular should now be formulated. This is necessary in the context of the new VAT regime in place following which tax certain concessions no longer exist, and that the advantages enjoyed due to CST exemptions are narrowed. The New Policy should illustratively cover sector-specific incentives, include fiscal incentives such as interest-free loans on VAT, input freight subsidy, and so on. (the feasibility of these should be separately studied). The Policy should also have measures which build capabilities and intrinsic strengths for the economic development of Puducherry.

Building industrial infrastructure: Apart from building infrastructure such as roads, air, and rail, there should be a definite focus on scaling up industrial infrastructure in terms of developing industrial parks, upgrading existing parks, additional IT and knowledge parks, and SEZs. FSI norms for such facilities should be re-examined and relaxed.

Ensure healthy business climate: The overall business climate in Puducherry should be improved in terms of easing the procedures for setting up business and dealing with licenses, as well as the policy environment (as addressed earlier). The current time for setting up business and dealing with licenses should be reduced from 45 days and about 210 days respectively to about 5 days and 100 days respectively.

Facilitating Human Capital Management: Puducherry should facilitate human capital management through the following:

- *Skill development*¹⁶: Puducherry should undertake industry-specific skill-building measures to ensure adequate supply of skilled human resources. Setting up of a Skill Development Centre and Fund which coordinates finishing schools and vocational training institutes should be the starting point in this regard.
- *Worker welfare*: Puducherry should ensure worker welfare through a Worker Welfare Cell that addresses issues related to housing, medical schemes, contract labour, and expeditious settlement of disputes, and ensuring a healthy industrial climate. This cell should operate under the Department of Labour with participation from workers and industry, and focus on specific areas and coordinate actions therein.

The above measures should be ably supported by developments in infrastructure, education and research, and governance (covered in separate sections in this document).

An illustrative list of projects to achieve this developmental agenda is outlined in the Annexure.

¹⁶ Initiatives to address this is also covered under the section on 'Education'

Agriculture, Fisheries, and Rural Development

Vision for Agriculture

Puducherry should emerge as a centre for innovative, collective, high value agriculture sustaining its area under cultivation while substantially increasing the value of the agricultural produce.

Targets for Vision 2025:

Table 10. Targets for Agriculture, Fisheries, and Rural Development

| Parameter | Current | Vision 2025 | Scale | Speed |
|---|--------------------|--|-----------|---------|
| GSDP of Primary Sector (Rs. crore) | 220 | 303 | 1.3 times | 3 times |
| Area under cultivation | 34,682 hectares | Target 29,000 hectares instead of a drop to 25,000 hectares | NA | NA |
| No. of food parks (agri-food and fish processing) | 0 | 5 | NA | NA |
| No. of diary unions | 2 | 4 | 2 times | 3 times |
| Profile of agriculture | Dominated by paddy | Paddy, fruits and vegetables, horticulture, value-addition by processing | NA | NA |

Source: Abstract of Statistics, Directorate of Economics and Statistics, 2007, Planning Department, stakeholder interactions, and IMaCS analysis

Developmental Agenda:

Puducherry has been witnessing negative growth in agriculture in the past with its area under cultivation progressively declining (Given the current trends, in Puducherry alone, the area under cultivation is expected to decline to 15,000 hectares from the current level of 20,000 hectares if no corrective action is taken). The following should be the composition of the developmental agenda for agriculture, fisheries, and rural development going forward:

Promoting collective farming practices: Puducherry should promote collective farming practices. By engaging in collective farming, farmers can collectively purchase equipment to mechanise sowing and other activities, and also bargain effectively with buyers leading to better price discovery. Farmers have to be encouraged to set-up such collective farming bodies through awareness and education. A seed fund (through NABARD, Government) can be set up for such bodies for initial purchase of equipment, and so on.

Promoting innovative high value farming practices: Practices such as precision farming, organic farming, and system of rice intensification should be promoted as part of the collective farming approach.

Developing alternative revenue sources and value addition: Additional revenue streams such as animal husbandry, horticulture, farm tourism should be encouraged. Furthermore, value addition through food processing, fish processing, diary processing, branding, and marketing should be a priority.

Make available adequate water for farming: Preserving water bodies and tanks should be adopted, as well as long term measures such as interlinking of river sources should be examined.

Initiate skill building activities: Puducherry should initiate skill building activities for branding and marketing among Self Help Groups (SHGs), building life skills among fishermen and families, inculcate better techniques, and promote entry into schooling.

An illustrative list of projects to achieve this developmental agenda is outlined in the Annexure.

Infrastructure

Vision for Infrastructure and Planning

Puducherry should be well connected by air, rail, road, and sea, ensuring ease of access to guests, both national and international. Its citizens should have excellent, 'socially responsible' urban infrastructure ensuring a good environment to live and work.

Targets for Vision 2025:

Table 11. Targets for Infrastructure

| Parameter | Current | Vision 2025 |
|--|-------------------|---|
| Urban area (sq. Km) | 71.9 | 290 |
| Greater Developmental Region | 0 | 1 (comprising of Pondicherry, parts of Villupuram, and Cuddalore) |
| Major/Deep-water Sea Ports | 0 ¹⁷ | 2 |
| Airports | One small airport | Two airports - one at Pondicherry and one at Karaikal with international connectivity with international connectivity |
| Pondicherry airport will also serve the Chennai region | | |
| Sea-based links | 0 | 1 |
| High-speed trains | 0 | Fast trains between Pondicherry and Chennai, Bengaluru |
| Time to travel to Chennai (hours) | 2.5 | 1 |

Source: Puducherry City Development Plan, Draft 11th Five Year Plan of Karaikal District, various secondary sources, stakeholder interactions, IMaCS analysis

Developmental Agenda:

The developmental agenda of Puducherry should focus on ensuring planned urban regions, regional development, and building access infrastructure. The following areas require innovative 'infrastructure solutioning':

Build access infrastructure: The action areas for building access infrastructure in Puducherry should be the following:

- *An international airport near Pondicherry serving both Pondicherry and Chennai:* Pondicherry airport is to be extended and developed in a full-fledged manner for attracting tourist and business traffic from India and abroad. This airport will also serve the Chennai region as well when complemented with appropriate connectivity between Chennai and Pondicherry.
- Pondicherry-Chennai Corridor reducing travel time to Chennai to just 1 hour, and Pondicherry-Bengaluru connectivity.
- High-speed trains should ply between Chennai and also Bengaluru to Pondicherry.

¹⁷ Current Puducherry Port is a minor port

- Six-laning of Pondicherry-Chennai roads
- A sea-based route between Karaikal-Pondicherry-Chennai should be developed.
- *An international airport at Karaikal serving Karaikal and central/south Tamil Nadu:* With the Karaikal port, SEZ, and other industrial activity, the Karaikal airport project, which has been found commercially viable as per the initial study conducted by the government, should be expedite.
- Connectivity of Mahe and Yanam to important towns such as Kozhikode, Kannur, and Rajahmundry, etc. should be maintained and upgraded.

These developmental activities can be taken up jointly with Tamil Nadu and other states as the benefits are mutual.

Plan and Expand Urban Areas: Puducherry should expeditiously prepare its Master Plan (which is still under preparation) as 'Planning' has been one of the major challenges Puducherry has faced. While the First Master Plan is being prepared for the Puducherry Urban Area of 71.9 sq. km., there is also a need for planning in the entire Pondicherry region of 290 sq. km. Large parts of Puducherry are well on the path of acquiring the characteristics of 'urban area' of close to 4,000 to 5,000 persons per sq. km. by different estimates, with a population of over 2.2 million expected by 2025. For an excellent quality of life, it is required to plan the land use of the *entire region*. Hence, the Puducherry Planning Authority and other regional planning bodies of Karaikal, Mahe, and Yanam should develop a plan for the four regions comprising the Union Territory. Affordable housing solutions should be designed. *The entire Puducherry should be subjected to proper planning for infrastructure build-up, housing, and identified zones for economic activity from services to agriculture.*

Initiate Regional Development: Regional Development Plan should be prepared for Pondicherry along with Villupuram and Cuddalore districts of Tamil Nadu, and Karaikal vis-a-vis Nagapattinam district. This should take into account that while Puducherry is constrained by availability of land, mutually beneficial arrangements, institutional structures, and frameworks should be created for the respective regions to grow in a synergistic manner vis-a-vis infrastructure, resources, projects, industrial development, etc.

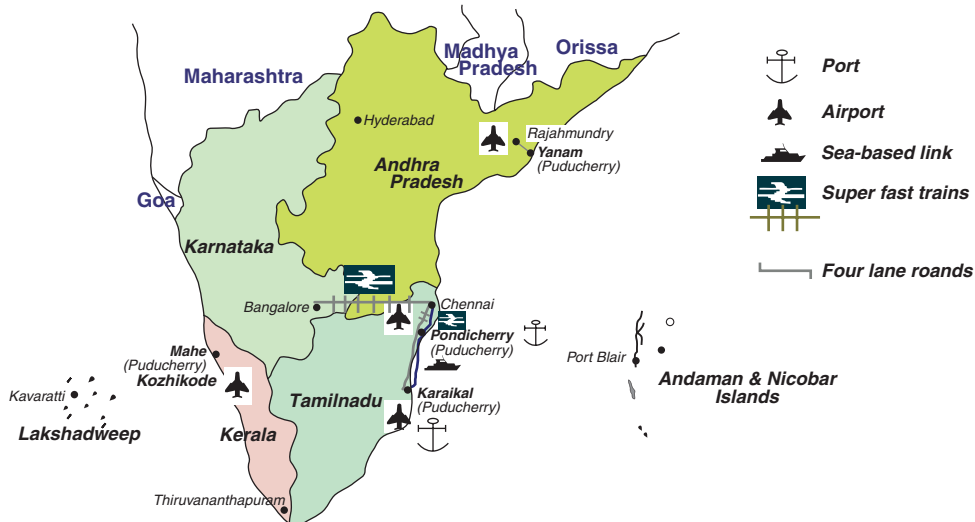


Figure 19. The Puducherry of tomorrow – well connected by air, sea, and roads

Develop multi-modal transport systems: Within Puducherry, multi-modal transport systems should be developed ensuring seamless connection between airports, roads, key activity hubs in the city. The starting point of this would be to have low floor buses and air-conditioned buses which will serve as an effective alternative to personal transport.

An illustrative list of projects to achieve this developmental agenda is outlined in the Annexure.

Energy, Environment, and Health

Vision for Energy, Environment, and Health

Puducherry should guarantee its citizens adequate, affordable and clean electricity through proper planning and innovative solutions. Keeping in view the scarcity of land and the necessary sources of fuel in Puducherry, it would be necessary for the Government to explore innovative approaches such as joint ownership and/or development of power projects in other states, long term import of power through appropriate purchase contracts in a manner that also aids the building up of a clean environment at Puducherry.

Besides power, the Government would also need to focus on creating a clean environment in and around Puducherry, which would involve management of water sources, sewerage, industrial effluent treatment, solid waste management, and controlling atmospheric pollution using modern technology and regulation.

The Government should also provide its citizens and visitors appropriate facilities for primary, secondary and tertiary healthcare.

Targets for Vision 2025:

Table 12. Vision for Energy, Environment, and Health

| Parameter | Current | Vision 2025 | Scale | Speed |
|--|---------|-------------|-----------|-----------|
| Power plants – joint development/owned (including outside the state) | 1 | 3 | 3 times | 3 times |
| Hospital beds | 2,495 | 6,000 | 2.5 times | 2.5 times |
| Solid Waste Management Plants with scientific land-fills | 0 | 3 | NA | NA |
| Covered drainage (% of population) | 30% | 100% | 3 times | 4 times |

Source: 'Puducherry at a Glance 2008'; Directorate of Economics and Statistics, Government of Puducherry, State of Environment Report – 2005, Puducherry Pollution Control Committee, other secondary sources, stakeholder interactions, and IMAcS analysis

Developmental Agenda

In order to achieve the above Vision, Puducherry should adopt the following developmental agenda for the focus areas of energy, environment, and health:

Plan for Power: Puducherry should undertake a detailed planning exercise to assess its demand for power over the next 15 years. This is underlined by the fact that peak power deficit in recent times has touched as high as 20%. To meet the required demand, the Government should adopt a host of strategies such as creation of guaranteed sources by way of joint development of power plants (may be in other states if necessary), long term procurement of power by way of sound purchase contracts, distributed generation where possible using environmentally friendly methods, and energy conservation. The strategy should keep in mind the constraints of lack of power generating natural resources within the Territory. This should be supplemented by energy conservation and use of clean, low-energy consuming devices and appliances. Alternative sources of power, such as solar power, should be incentivised by a 'triple bottom-line approach'.

Improve and preserve the environment: Puducherry should arrest the reduction witnessed in the water table over the years (which has dropped by two to four times), initiate measures to reduce salination, and prevent erosion. Techniques and awareness to manage waste (which is at present dumped in the open without the necessary pre-treatment) should be created. Only 30% of the population has covered drainage facilities, and this facility should be made available to all at the earliest possible.

Deliver healthcare to all citizens: Given the high density of urban population expected and also migration that could come with economic development, Puducherry should assure all its citizens access to healthcare by way of appropriate health insurance schemes. Preventive measures against infectious diseases in high-density pockets should be effected.

An illustrative list of projects to achieve this developmental agenda is outlined in the Annexure.

Education and Research

Vision for Education

Puducherry should emerge as a leading Indian and global destination for education with its hallmarks being schooling for all, excellence in higher and technical education. This should be achieved by being a hub for renowned institutions of excellence with appropriate international linkages, and where learning is a truly enjoyable and enriching experience.

Targets for Vision 2025:

Table 13. Targets for Education

| Parameter | Current | Vision 2025 | Scale | Speed |
|---------------------------------------|---|--|---------|---------|
| No. of IIT/IIM/IISER/NIT | 0 | 2 | NA | NA |
| Current profile of higher education | A large number of education institutions some of which have made a name for their quality at the national level | Institutions of international renown fostering higher education and research with international linkages and tie-ups | NA | NA |
| No. of polytechnics | 5 | 10 | 2 times | 2 times |
| No. of vocational training institutes | 11 | 25 | NA | NA |
| No. of engineering colleges | 6 | 12 | 2 times | 2 times |
| Literacy | 81% | 100% | NA | NA |

Source: 'Puducherry at a Glance 2008', Directorate of Economics and Statistics, Government of Puducherry, Directorate of Higher and Technical Education, Government of Puducherry, other secondary sources, stakeholder interactions, and IMAcS analysis

Developmental Agenda

Puducherry should offer its citizens access to high-quality education and become a hub of educational institutions of international repute. Learning should be transformed into an enjoyable experience which rewards excellence and consistency in performance. Accordingly, the following developmental agenda should be the way forward:

Make Puducherry an Indian and global centre for education: Puducherry should emerge as a home for institutions of repute such as IIT/IIM/IISER/NIT and promote international linkages among colleges. These steps will put Puducherry in the Indian and global education map. The Government should actively engage with the Central Government and international institutions to set up institutions of higher learning that become integrated with other similar institutes around the world. Many of these institutions would not be commercial ventures but would have great externalities both for the local as well as national economy. These institutions could be academic institutes of higher learning, institutes that are think-tanks, or organisations that foster scientific and industrial research.

Besides the emphasis on higher education and other institutions of knowledge, the Government of Puducherry should also embark on a drive to enable universal education that achieves a 100% literacy

level and a young population that is endowed with employable skills and knowledge. A capacity building plan should be formulated and implemented in Puducherry so that it emerges as a hub of education for its citizens and those from outside, and achieve total education access at the grassroots level.

Make education a joyful and meaningful learning experience: Stakeholder discussions reveal that Puducherry should remove the so called 'stress' associated with learning. Learning should be made enjoyable through innovative teaching aids, purposeful by inculcating civic sense and life skills, and having a system which rewards consistency of academic performance.

An illustrative list of projects to achieve this developmental agenda is outlined in the Annexure.

Governance and Administration

Vision for Governance and Administration

Puducherry should be a role model for responsive, transparent governance which is people centric and technology enabled and works towards improved business climate, and better service delivery for its citizens, emerging as an aspirational place to work.

Targets for Vision 2025:

Table 14. Targets for Governance and Administration

| Parameter | Current | Vision 2025 |
|--|---------------------|--------------------|
| e-Governance systems | Partial/in-progress | Total e-Governance |
| Time taken to start a business (days)* | 45 | 5 |
| Time taken to obtain licenses (days)* | 210 | 100 |

Source: 'Puducherry at a Glance 2008', Directorate of Economics and Statistics, Government of Puducherry, Directorate of Higher and Technical Education, Government of Puducherry, other secondary sources, stakeholder interactions, and IMAcS analysis

* Note: While the initiatives and projects mentioned below will speed-up response of governmental services, this section should be read in line with related projects for improving business climate under the section 'Manufacturing and Services'

Developmental Agenda:

The following developmental agenda will help in increasing the effectiveness and efficiency of Governmental services:

Encourage Public Private Partnerships (PPP): Puducherry should formulate a PPP policy indicating the sectors and sub-sectors in which partnerships are required. It should also specify guidelines and process to be followed for selection of private player and division of roles and responsibilities, key points of contact, models for different projects, the kind and quantum of support the Government will provide and the inputs that the private partner will need to bring to the table, the prevailing regulatory environment (including legislation) that will govern the concessions, and any model agreement formats/templates that will delineate the risks and rewards of various participants.

Streamline Governance through people, process, and technology initiatives: Puducherry should streamline Governmental procedures and adopt technology as an enabler while managing change by adequate motivation and re-skilling of staff.

Facilitate greater stakeholder interaction: Puducherry should promote greater interaction between Government and other Non-Governmental Organisations (NGOs) who are an important driving force and change agents and help in greater alignment of initiatives.

An illustrative list of projects to achieve this developmental agenda is outlined in the Annexure.

Implementation Road-map and Role of Stakeholders

For implementing the Puducherry Vision 2025, we propose the formation of the Vision Task Force which would be chaired by a senior functionary of Government of Puducherry (such as Chief Secretary). Needless to say, it would be impossible to expect the Government alone to take the ownership and responsibility of this enormous exercise. This Task Force should have representatives from the industry, NGOs, eminent citizens, and technical experts who will handhold various departments, bodies, agencies, who have roles to play in specific agenda areas, initiatives, and projects. There would be different 'panels' aligned to specific focus areas.

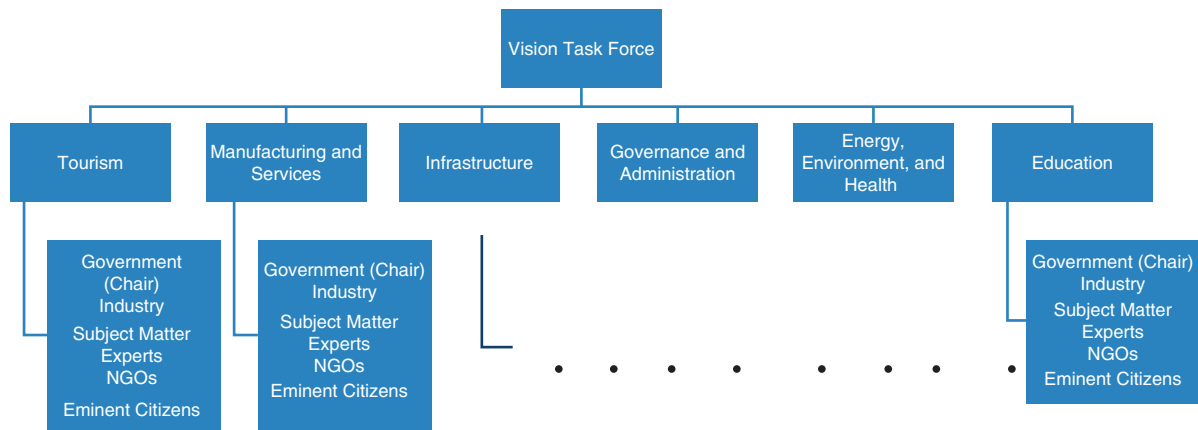


Figure 20. Puducherry Vision 2025 Task Force

This Vision Task Force should review the progress of initiatives every quarter with individual panels leading and handholding initiatives.

The Roles are detailed below (*illustrative*):

- **Government:** The Government should own the right to provide direction on specific projects, identify projects they need to own, identify opportunities on partnerships, and handle administrative coordination for the fructification of initiatives.
- **Industry:** Industry should partner with Government, provide inputs, form partnerships, adopt certain initiatives by themselves, and highlight areas of concern and areas where development is required.
- **Subject Matter Experts:** This includes individuals or agencies which have expertise on the chosen area, knowledge experts, who provide guidance on what should be done, share learnings, and act as sounding boards and knowledge partners.
- **Eminent Citizens and NGOs:** The role of eminent citizens and focussed NGOs is to highlight people's aspirations and concerns, and serve as a means to constantly connect with citizens as active partners in development.

A comprehensive review of the progress and achievements of the Vision should be carried out at a period of every five years to ensure that the initiatives are appropriately fine-tunes to keep pace with changing times.

In summary, the Vision 2025 for Puducherry calls for implementation of various initiatives and we strongly opine that all stakeholders, viz., the Government, industry, educational institutes, and other intermediate agencies work together in a concerted manner to achieve the growth potential of Puducherry and celebrate the achievement of this Vision.

Annexure

In this section we outline an illustrative list of projects for implementation pertaining to various areas aligned to the Vision Themes and as mentioned in the Developmental Agenda. These projects will be starting points in help achieving the Puducherry Vision 2025.

Categorisation of Timeframe and Phase:

The timeframe for projects spans across 'Short Term' (requires under two years to implement), 'Medium Term' (requires between two and five years to implement), and 'Long Term' (requires more than five years to implement). Furthermore, the Phase (time to start/kick-off the specific project) has also been indicated. Phase I implies the initiative should be commenced immediately. Phase II implies that the initiative can be commenced after a period of three to four years. Phase III implies that the initiative can be commenced after a period of more than five years from now.

List of projects for Tourism

The proposed projects for Tourism are outlined here.

Table 15. Projects for Tourism

Location: Entire Union Territory

Project: Productise Tourism offerings

Project Objective: Puducherry to identify and promote productised tourist offerings.

Description: Puducherry should attract high value and long haul tourists. There is a need to identify 'targeted' tourist products for different profiles of tourists with spiritual tourism, wellness tourism, and eco-tourism being the key drivers ably supported by other initiatives. There is a need to have specific offerings for each target audience comprising of spiritual tourism, wellness tourism, and eco-tourism, which will be the key drivers, along with heritage tourism, religious tourism, and fun-related activities such as beach and water-front tourism. Separate offerings should be identified among these themes and promoted under the umbrella brand rather than just having a single concept.

Steps and Metrics:

- Identify tourism destinations and ideas such as the following:
 - Spiritual tourism (around Auroville, Ashram, etc.)
 - Wellness tourism (around relaxation, rejuvenation, yoga, exercises, therapies, and related activities)
 - Eco-tourism (Ousteri bird sanctuary, eco-beach at Karaikal, and mangrove forests at Yanam)
 - Handicrafts and heritage tourism at Murugapakkam (Pondicherry), and village tourism heritage tourism at Tharangambadi, Tranquebar which are near Karaikal, and French architecture and buildings around White Town, etc.
 - Health and Yoga tourism (centred around rejuvenation, meditation, post-medical care, etc.)
 - Backwaters and Beach tourism at Mahe
 - Beach tourism and waterfront activities at Karaikal's Emerald Beach
 - River-side tourism at Yanam (along Godavari river) and Mahe (Mahe River).
- Tour operators must be encouraged to offer tour packages to these locations
- Connectivity to these locations must be established such as Air Conditioned buses/low floor buses which ply across specific related routes

- Tourist infrastructure such as boarding and lodging, well-trained staff, civic amenities, ticketing systems should be available at these locations (projects such as the proposed Thirunallar Temple Town project should be completed in a timely manner)

Timeframe: Medium Term

Phase: I

Location: Entire Union Territory

Project: Integrate with regional tourism

Project Objective: Puducherry to take steps which integrates its tourism offerings with tourism in the neighbouring regions.

Description: The synergies and benefits which will accrue to Puducherry will be greater if it identifies tourist offerings driving synergies with tourism in the nearby regions. There should be enhanced coordination and linkages between tour operators and Tourism Corporation of Puducherry with those of nearby states.

Steps and Metrics:

- Religious tourism in Puducherry, Karaikal-Thirunallar can be combined with Thiruvannamalai and Chidambaram and offered as package tours with adequate connectivity between these hubs
- Eco-tourism in Pondicherry and Karaikal can be combined with mangrove forest tourism at Pitchavaram
- Tie-ups and coordination between Puducherry tour operators and Kerala, Tamil Nadu, and Andhra Pradesh tour operators
- Linkage tour bookings and promotional activities with Tourism Development Corporation of nearby states

Timeframe: Medium Term

Phase: I

Location: Entire Union Territory

Project: Branding campaign

Project Objective: Puducherry to develop a sustained branding and promotional campaign.

Description: Puducherry should develop a branding campaign focussing on the above themes, locations, and offerings in a sustained manner. The campaign should clearly communicate that there is a lot that Puducherry has to offer. This should be supported by promotional campaign among tour operators, hotels, tourism fairs at key locations in India, Europe, and other places.

Steps and Metrics:

- Develop a branding campaign focussing on the above themes, locations, and offerings
- Promote tourism in Puducherry through promotional campaign among tour operators, hotels, tourism fairs at key locations in India, Europe, and other places

Timeframe: Medium Term

Phase: I

Location: Entire Union Territory

Project: Design a comprehensive 'Visit Puducherry' website and Call Centre

Project Objective: Develop a comprehensive website which is a one-stop-shop for all tourists.

Description: Puducherry should develop a comprehensive website which has details of all existing and newly promoted tourism destinations, and enable tourists to book packages right from pick-up at the entry to drop at the end of the tour.

Steps and Metrics:

- Inventorise all offerings and operators – compile various tourism themes, destinations, and operators who offer the same

- Identify partner agencies (hotels, and tour operators) who can serve such tourists and offer specific package tours
- Design and develop a website which will be able to take bookings
- The back-office team of the website will help ensure that the bookings are fulfilled by having relevant sub-bookings and coordination performed between hotels and transport and tour operators who will be partner agencies fulfilling the web-orders of the tourists
- This can also be extended to a phone-based call centre services
- New offerings and existing offering/operators should be updated based on adherence to service levels and standards
- Interactive blogs can be included so that those hosting events can be allowed to post such information about venue, timings, etc.

Timeframe: Short Term

Phase: I

Location: Pondicherry

Project: Pondicherry as a Convention Centre

Project Objective: Pondicherry to position itself as a convention centre and a place for corporate conventions and academic and research seminars.

Description: A Convention Centre of atleast 1,000–1,500 seats should be located at Pondicherry to position itself as a convention centre for corporate conventions and academic and research seminars.

Steps and Metrics:

- Set up a Convention Centre of 1,000–1,500 seats
- Promote and position as a convention centre for corporate conventions and academic and research seminars

Timeframe: Medium Term

Phase: III

Location: Entire Union Territory

Project: Puducherry Civic Sense Initiative

Project Objective: Puducherry to inculcate civic sense.

Description: Awareness programmes should be conducted among students and the general public about civic sense – cleanliness, adherence to traffic rules, etc., so that the image of a 'Clean Puducherry' is created and sustained.

Steps and Metrics:

- Initiate 'Clean Puducherry' awareness campaign
- Conduct cleanliness drives with help of citizenry

Timeframe: Short Term

Phase: I

Location: Entire Union Territory

Project: Tourist Assistance Cells

Project Objective: Puducherry to set up tourist assistance cells at key tourist hubs.

Description: Given the large number of foreign and domestic tourists expected to visit Puducherry, the visit should be made a memorable experience. Ready tourist assistance cells manned by persons who can speak multiple languages and help coordinate with police and health and other agencies in case required by visitors should be set up at key tourist hubs in Puducherry. School and college students, NGOs, etc., can manage these cells on a rotation basis.

Steps and Metrics:

- Set up Tourist Assistance Cells at key tourist locations
- School and college students, NGOs, etc., can manage these cells on a rotation basis

Timeframe: Short Term

Phase: I

Location: Pondicherry and Karaikal

Project: Premium Hotels Project

Project Objective: Develop world class hotels in Puducherry.

Description: Puducherry to develop Premium-category hotels in Pondicherry and Karaikal with the aim to attract high value tourists to visit the region. Government to play an active role in this in terms of offering land and/or PPP.

Steps and Metrics:

- Develop 3 to 4 Premium category hotels and/or business category hotels at Pondicherry and Karaikal.

Timeframe: Medium Term

Phase: II

Source: Various secondary sources, stakeholder interactions, and IMaCS analysis

List of projects for Manufacturing and Services

The proposed projects for Manufacturing and Services are outlined here.

Table 16: Projects for Manufacturing and Services

Location: Entire Union Territory

Project: e-Governance-based Single Window System

Project Objective: Puducherry to have a e-Governance-based Single Window System.

Description: Puducherry should aim to increase the ease of doing business by reducing the time it takes to start a business and reducing the time taken to obtain licenses to under 100 days. An e-Governance-based system which will have adequate controls to ensure service levels for each activity in the clearance processes will help in this regard.

Steps and Metrics:

- Set up an e-Governance-based Single Window Systems that integrates all processes from application for starting business to issue of clearance, and the departments involved therein.

Timeframe: Medium Term

Phase: I

Location: Entire Union Territory

Project: Cell for Single Window Grievance Redressal

Project Objective: Puducherry to establish a single window cell for addressing grievances of industries and catering to requirements which help businesses run better.

Description: Stakeholder interactions reveal that there are delays in the interface between Government (public administration) and industries when it comes to addressing grievances related to infrastructure at estates, SEZs, etc., as well as those related to day-to-day operations (in areas such as power, water supply, etc.) It is proposed that a Single Window Help line be set up exclusively focussing on addressing grievances of industries and catering to requirements which help businesses run better, in terms of minor infrastructure requirements, inspections, permissions, etc. The Single Window should be able to link up with the Inspector of Factories, Pollution Control Board, Labour Department, Electricity Department, and other relevant departments.

Steps and Metrics:

- Set up Single Window Help line for Industries for Grievance Redressal.

Timeframe: Short Term

Phase: I

Location: Entire Union Territory

Project: Formulate a New Industrial Policy for Puducherry

Project Objective: Puducherry to formulate a New Industrial Policy based on the changed industrial context.

Description: Gujarat has an Industrial Policy as latest as 2009, Tamil Nadu has an Industrial Policy formulated in 2007, while Andhra Pradesh has an Industrial Policy for 2005–10. In contrast, Puducherry's Industrial Policy was formulated in 1997 followed by an Industrial Master Plan in 2004. A New Industrial Policy with specific focus on the thrust areas in particular should now be formulated. This is necessary in the context of the new VAT regime in place following which certain tax concessions no longer exist and that the advantages enjoyed due to CST exemptions are narrowed. The New Policy should illustratively cover sector-specific incentives, including fiscal incentives. The Policy should also have measures which build capabilities and intrinsic strengths for the economic development of Puducherry. The Policy should also identify non-polluting industries and exempt them from clearances issued by the Pollution Control Board.

Steps and Metrics:

- Formulate a New Industrial Policy for Puducherry
- Policy to address
 - sector specific incentives
 - fiscal incentives for thrust areas
 - exempt non-polluting industries from clearances by Pollution Control Board
 - attempt to improve overall business climate with a view to build on intrinsic strengths of Puducherry

Timeframe: Short Term

Phase: I

Location: Entire Union Territory

Project: Puducherry as a knowledge services hub

Project Objective: Puducherry to emerge as a knowledge services hub by construction of large and mini SEZs and parks.

Description: Puducherry should aim to emerge as a knowledge services hub. A critical component for this is to have the necessary business infrastructure in place. This requires appropriate planning and partnerships for developing multi-product SEZs, IT SEZs and knowledge parks which would be the home for light engineering manufacturing and assembly industries, knowledge-based industries such as IT, ITES, biotechnology, R&D, design, nanotechnology, etc.

Steps and Metrics:

- Operationalise the identified SEZ in Puducherry and identify zones for further development of SEZs and parks
- Partner with different agencies for development and occupancy of IT, ITES, biotechnology, and other knowledge-based industries.
- Mini-parks can be developed for IT and ITES industries depending on immediate land availability to expedite the process.

Timeframe: Long Term

Phase: I

Location: Entire Union Territory

Project: Promote 'Let's go to Puducherry' campaign

Project Objective: Puducherry should promote itself as a business destination with a healthy business climate.

Description: Puducherry should develop a branding campaign focussing on its business infrastructure, availability of skilled human resources, and connectivity, and promote itself as a knowledge and light engineering hub. It should participate in Indian and international investor meets and also hold annual investor summits which attract projects into the Union Territory. This would be strengthened by infrastructure build-up, both upcoming and proposed at Puducherry and Karaikal.

Steps and Metrics:

- Develop branding campaign for Puducherry as a tourist destination
- Participate in Indian and international investor meets
- Host investor meets in Puducherry

Timeframe: Medium Term

Phase: II

Location: Karaikal

Project: Build-up business infrastructure at Karaikal

Project Objective: Karaikal to complement Puducherry as a business destination.

Description: Given that the Vanjore Port is coming up at Karaikal and the presence of the Polagam Growth Centre, and its proximity to the industrial regions in Tamil Nadu, Karaikal is set to emerge as an industrial destination. Setting up of a Special Economic Zone spread over 1,000 acres (after due feasibility studies) at the North of Vanjore Port area in Keezhayur, opposite to the Polagam growth centre and the Shipping port will help Karaikal leverage on the Port and other facilities and facilitate its emergence as an industrial hub.

Steps and Metrics:

- Set up SEZ in Karaikal near the Vanjore Port after due feasibility studies.

Timeframe: Long Term

Phase: II

Location: Entire Union Territory

Project: Skill-Building Initiatives

Project Objective: Puducherry to serve as a model for skill development.

Description: Puducherry hopes to grow and sustain the Manufacturing and Services sectors. While this requires adequate capacity building of colleges, ITI and polytechnics, it also needs supporting skill-building measures. We propose that a Skill Development Cell and Fund be set up for Puducherry. This can also avail funding under the National Skill Development Mission. The focus areas should be setting up finishing schools, and training programmes, skill building for manufacturing by shop floor training and certification under the Modular Employable Skills framework of the Directorate General of Education and Training, as well as setting up of Services Training Institutes for tourism (guides, operators, ticket agents, and assistance cells), ITES sector, retail, etc. Partnerships should be the way forward in this initiative.

Steps and Metrics:

- Set up a Puducherry Skill Development Cell and Fund for coordinating all skill building activities
- Initiate finishing schools for college students, diploma, and ITI students
- Conduct skill-building programmes at shop floor (with coordination and inputs through the Cell)
- Set up Services Training Institutes for different services sector jobs.

Timeframe: Medium Term

Phase: I

Location: Entire Union Territory

Project: Worker Welfare Initiative

Project Objective: Puducherry should serve as a model for ensuring worker welfare.

Description: The workforce in Puducherry should be motivated and sustained for ensuring industrial development and better industrial climate. Affordable housing for workers, setting up a Contract Labour Welfare Fund for contract workers in case of injury and sudden retrenchment, monitoring compliance to ESI and PF norms by industries, and measures to quicken dispute resolution process to under one month should be targeted.

Steps and Metrics:

- Set up a Worker Welfare Cell as part of Labour Department with industries and unions on advisory capacity which will ensure and coordinate the following:
 - Provision of affordable housing for workers by coordinating with Housing Board and also other private players
 - Setting up of a Contract Labour Welfare Fund by the Government
 - Monitor compliance to ESI and PF norms by industrial units
 - Work to effectively fast track resolution of disputes within one month.
 - Existing structures and initiatives in this area to be strengthened and expedited

Timeframe: Medium Term

Phase: II

Location: Entire Union Territory

Project: Frame Policy for Special Education Zones, Special Healthcare Zones, and Special Tourism Zones

Project Objective: Puducherry to create special institutional structures for thrust areas.

Description: As Tourism, Education, and Healthcare are thrust areas for Puducherry, the Government should study and set up a policy framework for creation of Special Education Zones, Special Healthcare Zones, and Special Tourism Zones (already underway in Kerala) with guidelines for facilities, investment, fiscal incentives, quality of services offered, etc.

Steps and Metrics:

- Study and frame policy for setting up of the following
 - Special Tourism Zones
 - Special Education Zones
 - Special Healthcare Zones

Timeframe: Medium Term

Phase: I

Source: Various secondary sources, stakeholder interactions, and IMaCS analysis

List of projects for Agriculture, Fisheries, and Rural Development

The proposed projects for Agriculture, Fisheries, and Rural Development are outlined here.

Table 17. Projects for Agriculture, Fisheries, and Rural Development

Location: Entire Union Territory

Project: Puducherry Collective Model Farms Initiative.

Project Objective: Puducherry to set up model farms which are collectively run adopting innovative farming practices.

Description: By engaging in collective farming, farmers can collectively purchase equipment to mechanise sowing and other activities, and also bargain effectively with buyers leading to better price discovery. Farmers have to be encouraged to set-up such collective farming bodies through awareness and education. Such bodies can also train farmers on better farming practises. A seed fund (through NABARD, Government) can be set up for such bodies for initial purchase of equipment, etc.

Steps and Metrics:

- Set up 'Model Farms' in about two villages and improve productivity through the following steps:
 - analyse main crops and attempt to synchronise crops
 - experiment with organic farming, SRI (system of rice intensification), and precision farming techniques
 - use collective farming approach for mechanisation, buying, and selling
 - set up information kiosks giving price information to farmers at key markets
 - initiate crop diversification in a portion of the area into horticulture, etc.
 - help diversification into animal husbandry and poultry in addition to cultivating crops (through the Farmer Income Guarantee Scheme)
 - facilitate transportation by Government and collective initiatives.
- Such measures should be sustained based on lessons learnt and success stories.
- The technical inputs should be provided by a panel of experts from Department of Agriculture and organisations such as M S Swaminathan Research Foundation (MSSRF)

Timeframe: Long Term

Phase: I

Location: Entire Union Territory

Project: More Farmer Revenue Streams

Project Objective: Puducherry to set in place processes which help generate additional revenue for farmers.

Description: Having additional revenue streams will help increase income for farmers and also reduce risk. Awareness building programmes should be conducted and schemes to be formulated which will help farmers to generate additional revenue through organised farm tourism by networking with tour operators, diversification into horticulture, floriculture, and animal husbandry.

Steps and Metrics:

- Conduct awareness building programmes on benefits and methods for the following
 - Farm tourism
 - Crop diversification into floriculture and horticulture (medicinal plants, orchids, etc.)
 - Animal husbandry
- Network with tour operators and farmers for conducting farm tourism activities, and design schemes for diversification into horticulture, floriculture, and animal husbandry

Timeframe: Medium Term

Phase: I

Location: Pondicherry, Karaikal, and Yanam

Project: Agro, Fish, and Dairy Processing Parks

Project Objective: Puducherry to establish agro-processing parks, fish processing, and dairy processing parks.

Description: Puducherry requires agro-processing parks which help in storage and preparing processed food, vegetables, and other agriculture produce. This will help in value addition. Similarly, given that a fishing harbour is coming up at Karaikal and that the dependency of Yanam on fishing, there is a need for setting up of cold storage facilities and fish processing facilities at Pondicherry, Karaikal, and Yanam.

Steps and Metrics:

- Set up a total of about 2 agro-parks at Karaikal, and Yanam, and 2–3 fish processing facilities at Pondicherry, Karaikal, and Yanam.
- Set up dairy processing units at Karaikal and Pondicherry

Timeframe: Medium Term

Phase: I

Location: Entire Union Territory

Project: Set up/consolidate enabling agencies

Project Objective: Puducherry should set up enabling agencies and consolidate operations to serve the farmers better.

Description: Stakeholder discussions reveal that it would be advantageous to have the PASIC and Department of Agriculture function under one roof. This would help make available all agro-related services at a single point.

Also, organic farming has been identified as one of the key areas for agriculture in Puducherry (also reflected in our 'collective farming' approach). The same can be realised only if adequate accredited inspection and certifying authorities are established in Puducherry.

Steps and Metrics:

- Operations of PASIC and Department of Agriculture to be consolidated under one roof.
- Establish additional accredited inspection and certifying authorities for farm produce

Timeframe: Short Term

Phase: I

Location: Entire Union Territory

Project: Puducherry Water Conservation Project

Project Objective: Puducherry to secure water supply by appropriate measures.

Description: Puducherry should secure water sources and supply. It should examine the feasibility of interlinking of Palar and Pennar with Cauvery river as well as interlinking of Bahoor and Ousteri lakes. It should also desilt the 84 major and 140 small tanks once every three/four years/on a periodic basis. Additional check dams should be constructed in the Sankarabarani river.

Steps and Metrics:

- Study feasibility of interlinking Palar and Pennar with Cauvery river, and interlinking of Bahoor and Ousteri lakes
- Desilt the 84 major and 140 small tanks once every three/four years/on a periodic basis
- Construct additional check dams in the Sankarabarani river

Timeframe: Long Term

Phase: III

Location: Entire Union Territory

Project: Fair pricing for farmers

Project Objective: Eventually, Puducherry should move to a position where the minimum support prices for agriculture can be fixed by the farmers themselves.

Description: A liberalised price regime for a mature market should be the end state where the prices are determined by market forces to the extent possible with the requirement for regulation depending on the context. A more flexible pricing scheme where farmers have greater say in deciding the price of the produce should come into existence in the long run.

Steps and Metrics:

- Puducherry should move towards a more flexible pricing scheme where farmers have a greater say in deciding the price of the produce with due changes in the Policy Framework.

Timeframe: Long Term

Phase: III

Location: Entire Union Territory

Project: Up-skilling fishermen

Project Objective: Puducherry to build life skills among fisherfolk.

Description: The literacy rates in fishermen in Puducherry is low at around 27% and fishing techniques are traditional. Puducherry should inculcate life skills among fisherfolk through skill-building measures on modern fishing techniques and encouraging children of fisherfolk to pursue education without dropping out.

Steps and Metrics:

- Awareness building and skill building on modern fishing techniques to be conducted for fisherfolk
- Awareness and counselling programmes which encourage children of fisherfolk to take up further schooling and higher education should be conducted
- Establish market linkages with buyers and sellers for better prices

Timeframe: Short Term

Phase: I

Location: Entire Union Territory

Project: Puducherry SHG Marketing Assistance Cell

Project Objective: Puducherry to conduct skill building programmes for SHGs through a SHG Marketing Assistance Cell.

Description: SHGs in Puducherry should be given training on better production/processing techniques as well as on branding and marketing. A special SHG Marketing Assistance cell should be set up for this purpose.

Steps and Metrics:

- Conduct skill building programmes for SHGs on branding and marketing
- Assist SHGs in marketing and branding through SHG Marketing Assistance Cell

Timeframe: Medium Term

Phase: I

Source: Various secondary sources, stakeholder interactions, and IMaCS analysis

List of projects for Infrastructure

The proposed projects for Infrastructure are outlined here.

Table 18. Projects for Infrastructure

Location: Entire Union Territory

Project: Plan Large Urban Regions

Project Objective: Puducherry to plan and expand its urban areas. Planning exercises should be undertaken for other regions as well.

Description: The density of Puducherry is over 2,500 persons per sq. km., and is expected to reach anywhere between 4,000 to 5,000 persons per sq. km., by 2025. Hence, it is required to appropriately plan the entire area for different economic and social activity – housing, industry, Services sector SEZs, etc. The Master Plan which is being developed for the current Puducherry Urban Area of 71.9 sq. km., should be completed at the earliest.

Steps and Metrics:

- Complete First Master plan for the existing Puducherry Urban Area
- Formulate Territory Plans for all four regions – Pondicherry (on priority basis), Karaikal, Yanam, and Mahe given the urban characteristics
- Enforce plans in letter and spirit

Timeframe: Medium Term

Phase: I

Location: Pondicherry and Karaikal

Project: Initiate Regional Development Plan

Project Objective: Puducherry to integrate its development with the rest of the region.

Description: Prepare Regional Development Plan for Pondicherry along with Villupuram and Cuddalore districts of Tamil Nadu, and Karaikal vis-a-vis Nagapattinam district. This should take into account that while Puducherry is constrained by availability of land, mutually beneficial arrangements, institutional structures, and frameworks should be created for the respective regions to grow in a synergistic manner vis-a-vis infrastructure, resources, projects, industrial development, etc.

Steps and Metrics:

- Prepare Regional Development Plan for Pondicherry and Karaikal
- Set up institutional frameworks for coordination with surrounding districts (applicable to other locations too)

Timeframe: Medium Term

Phase: I

Location: Entire Union Territory

Project: Build access infrastructure

Project Objective: Puducherry to emerge as a well connected destination by various means of transport.

Description: Access infrastructure is key to development. With several projects slated to come up, the following should be completed on a priority basis.

- Airport expansion of Pondicherry airport, followed by running flights from key cities, and even international locations
- International airport at Karaikal
- Feasibility study followed by next steps for a Karaikal-Pondicherry-Chennai sea-based route
- Feasibility study and next steps for fast-trains at over 150 kmph between Chennai-Pondicherry and Bengaluru-Pondicherry

- Connectivity through four lane followed by expansion between Mahe and Kozhikode and Yanam and key near-by towns in Andhra Pradesh (such as Rajahmundry)

These projects can be taken up through joint development with neighbouring states.

Steps and Metrics:

- Airport expansion of Pondicherry airport, followed by running flights from key cities, and even international locations
- International airport at Karaikal
- Feasibility study followed by next steps for a Karaikal-Pondicherry-Chennai sea-based route
- Feasibility and next steps for fast-trains at over 150 kmph between Chennai-Pondicherry and Bengaluru-Pondicherry
- Connectivity through four lane followed by expansion between Mahe and Kozhikode and Yanam and key near-by towns in Andhra Pradesh (such as Rajahmundry).

Timeframe: Long Term

Phase: II

Location: Entire Union Territory

Project: De-bottlenecking and consolidating existing access infrastructure

Project Objective: Puducherry to strengthen its existing access infrastructure through de-bottlenecking and consolidation.

Description: Puducherry should debottleneck and consolidate its existing access infrastructure through the following steps:

- Debottleneck NH17 in Mahe
- Develop Villupuram-Pondicherry and Cuddalore-Pondicherry highways as four lane
- Construct link road across key highways around Pondicherry

Steps and Metrics:

- Debottleneck NH17 in Mahe by constructing bypass at Chalakkara and Palloor in the Mahe-Tellicherry road
- Develop Villupuram-Pondicherry and Cuddalore-Pondicherry highways as four lane highways
- Construct link road across key highways around Pondicherry connecting NH45 and ECR which can also serve as an outer ring road

Timeframe: Long Term

Phase: I

Location: Pondicherry

Project: Pondicherry Mass Housing Project

Project Objective: Pondicherry should build affordable houses for the urban poor.

Description: Pondicherry has a slum population of about 30% of its population. The total slum population is estimated to be over 2 lakhs. It is necessary to develop affordable housing solutions for atleast 20,000 to 25,000 households with the help of liberal FSI norms.

Steps and Metrics:

- Develop through partnerships affordable housing for the poor to the extent of atleast 20,000 households with the help of liberal FSI norms.

Timeframe: Long Term

Phase: III

Location: Pondicherry

Project: Pondicherry Satellite Township Project

Project Objective: Pondicherry should develop a satellite township outside of the city.

Description: As the population density is expected to rise further, an immediate requirement is to decongest the city and make it more liveable by developing a satellite township for Pondicherry with the help of liberal FSI norms.

Steps and Metrics:

- Conduct survey, identify prospective locations, and conduct feasibility study and a plan for the satellite town
- Develop town with help of partnerships and liberal FSI norms
- This should include space for urban poor as well and offer housing solutions for different customer preferences as well

Timeframe: Long Term

Phase: II

Location: Pondicherry

Project: Multi-modal Transportation

Project Objective: Pondicherry to have multi-modal transportation systems in place.

Description: Within Pondicherry, multi-modal transport systems should be developed ensuring seamless connection between airports, roads, and key activity hubs in the city. The starting point of this would be to have low floor buses and air-conditioned buses which will serve as an effective alternative to personal transport. The feasibility of a light rail system within Pondicherry should be examined.

Steps and Metrics:

- Have low floor and air-conditioned buses run between key activity hubs and tourist locations
- Define 'walk-only/bicycle-only' zones which are complemented by well defined parking systems and multi-level car parks with smart cards
- Study feasibility of light rail system within Pondicherry

Timeframe: Medium Term

Phase: I

Source: Various secondary sources, stakeholder interactions, and IMaCS analysis

List of projects for Energy, Environment, and Health

The proposed projects for Energy, Environment, and Health are outlined here.

Table 19. Projects for Energy, Environment, and Health

Location: Entire Union Territory

Project: Comprehensive Power Master Plan

Project Objective: Puducherry should formulate a comprehensive power master plan for the next 20 years.

Description: Puducherry has recently suffered from power shortages as high as over 20%. There is a need to formulate a Power Master Plan for the UT that ensures that there is no peak shortage and energy deficit

Steps and Metrics:

- Formulate Power Master Plan for Puducherry.

Timeframe: Medium Term

Phase: I

Location: Entire Union Territory

Project: Joint Power Projects Initiative

Project Objective: Puducherry to jointly develop power plants in a Regional Development Model.

Description: Given that the power requirements are expected to grow, Puducherry should further pursue joint development of power plants with neighbouring states in a Regional Development Model. Existing initiatives in this area should be aggressively pursued.

Steps and Metrics:

- Conduct preliminary study of power projects that can be developed jointly
- Take the proposals to other parties/states
- Set in place a joint development mechanism which works in a mutually beneficial model as synergies and scale of joint development becomes visible

Timeframe: Long Term

Phase: III

Location: Entire Union Territory

Project: Eco-Power Initiative

Project Objective: Puducherry should promote power-friendly electric appliances.

Description: Puducherry should adopt a 'triple-bottom-line' approach and incentivise consumers to adopt energy-friendly devices.

Steps and Metrics:

- Study triple-bottom-line cost-benefit of various environment-friendly sources such as solar panels and water heaters, and low-power consuming devices such as compact fluorescent lamps (CFL), bulbs, LED lighting, battery-operated cars, green-buildings which are eco-friendly.
- Incentivise consumers by granting credits/subsidies for using such sources and cutting consumption
- For a start, the Government can itself lead by example of moving over to eco-friendly devices and CFL.

Timeframe: Medium Term

Phase: II

Location: Entire Union Territory

Project: Energy conservation drives

Project Objective: Puducherry to conduct an aggressive campaign to conserve energy.

Description: Puducherry should make every attempt to conserve power. The way forward is to conduct an awareness campaign demonstrating success stories for domestic and industrial consumers. Additionally, Energy Audit must be conducted for all industrial and large commercial establishments. The Government can fund this scheme entirely, or, alternatively the nominal cost can be later recovered from savings made from the consumers

Steps and Metrics:

- Conduct awareness campaign demonstrating success stories for domestic and industrial consumers
- Make Energy Audit mandatory for industrial and large commercial establishments. The Government can fund this scheme entirely, or, alternatively the nominal cost can be later recovered from savings made from the consumers.

Timeframe: Short Term

Phase: I

Location: Entire Union Territory

Project: Covered Sewerage System

Project Objective: Puducherry to have a covered sewerage system.

Description: At present, as per its City Development Plan, Puducherry's covered drainage system covers only 20 sq. km. and 30% of the Puducherry population. The sewerage system should be extended to cover the whole of Puducherry. The feasibility of implementing this project with private partners should be explored under appropriate PPP models.

Steps and Metrics:

- Study the feasibility of a fully covered sewerage system in Puducherry on a PPP mode
- Study topography of land (by Geographic Information System) vis-à-vis drainage system and plan for a covered draining system
- Eventually, implement the project of a fully covered drainage system.

Timeframe: Long Term

Phase: III

Location: Entire Union Territory

Project: Clean Puducherry Campaign

Project Objective: Puducherry should conduct a campaign to build awareness on cleanliness, that includes management of all water bodies, preventing water stagnation, solid waste management, and provision of civic amenities as required.

Description: Puducherry should aim to control water borne diseases and also diseases spread by waste. In this regard an awareness campaign with solutions on waste disposal and preventing water stagnation should be undertaken. Civic amenities in terms of eco-sanitation toilets and dustbins should be set up at key locations in the city.

Steps and Metrics:

- Conduct an awareness campaign focussing on the following:
 - Preventing water stagnation
 - Effective waste disposal that complements waste segregation at source
- Set up civic amenities in terms of eco-sanitation toilets and dustbins at key locations in the city.

Timeframe: Medium Term

Phase: I

Location: Pondicherry and Karaikal

Project: Waste Management

Project Objective: Puducherry to set up a waste management system.

Description: Puducherry to set up a waste management system. It generates about 252 MT of solid waste per day, which unfortunately, today is disposed in the open. Adequate capacity for segregation of waste, treatment, and scientific disposal should be created which is sustainable with the environment. This should be explored in a public private partnership mode.

Steps and Metrics:

- Initiate waste segregation into bio-degradable and non-biodegradable solid waste at point of collection
- Establish solid waste compost plant and scientific landfills (2 at Pondicherry and 1 at Karaikal, minimum)
- For a start, study feasibility of project on a public private partnership basis

Timeframe: Medium Term

Phase: I

Location: Entire Union Territory

Project: Rainwater harvesting

Project Objective: Puducherry to conserve rainwater by scientific rainwater harvesting.

Description: Puducherry has been witnessing an alarming fall in the water table over the past two decades. There is a need to arrest this by means of initiating a mandatory roll-out of scientific rain water harvesting in the UT

Steps and Metrics:

- Initiate roll out of Rainwater harvesting in Puducherry
- Aim for coverage of Puducherry Urban Area
- Extend this to cover all of Puducherry eventually

Timeframe: Long Term

Phase: III

Location: Entire Union Territory

Project: Coastal Area Protection

Project Objective: Puducherry should protect its coastal areas against erosion and prevent salination of ground water sources.

Description: Puducherry should undertake a detailed study of its coastal areas for preventing salination of groundwater, and erosion of land in coastal areas. This should be supported by suitable waste management and water recharge initiatives.

Steps and Metrics:

- Prepare action plan for arresting coastal erosion and salination of groundwater
- Follow-up with ongoing implementation

Timeframe: Medium Term

Phase: I

Location: Entire Union Territory

Project: Preventive healthcare

Project Objective: Puducherry to adopt preventive healthcare projects.

Description: Puducherry has a slum population of about 30%. While Puducherry has built a name for itself in medical education, there is a need to take the medical expertise to the grass-roots level. A Preventive Healthcare programme with monthly medical camps in slums jointly conducted by Government and hospitals should be organised. A part of the funding for this can come from the healthcare funding of the Government.

Steps and Metrics:

- Conduct Preventive Healthcare Camps for slum population

Timeframe: Long Term

Phase: I

Location: Entire Union Territory

Project: “Our Puducherry-Healthy Puducherry”

Project Objective: Puducherry to plan for capacity building in healthcare and also provide healthcare insurance cards for all.

Description: Puducherry should formulate a detailed plan for capacity building in healthcare in terms of hospitals, beds, doctors, nurses, etc. It should also formulate a healthcare insurance scheme for all of the population through health insurance cards.

Steps and Metrics:

- Formulate a plan and build healthcare capacity for hospitals, beds, doctors, nurses, and so on.
- Health Insurance cards should be given for everyone in the UT as a part of commitment to healthcare.

Timeframe: Long Term

Phase: II

Source: Various secondary sources, stakeholder interactions, and IMaCS analysis

List of projects for Education and Research

The proposed projects for Education and Research are outlined here.

Table 20. Projects for Education

Location: Entire Union Territory

Project: Continuous Assessment System

Project Objective: Puducherry to have a system of continuous assessment for its students in matriculation or equivalent and higher secondary or equivalent.

Description: Stakeholder interactions reveal that the students experience great stress and uncertainty during times of 10th and 12th standard due to a single exam-based system. A system of continuous assessment with adequate weightage should be designed.

Steps and Metrics:

- Design a continuous assessment system for 10th and 12th standard
- As an example, online/web-based mid-term/periodic assessment modules should be developed

Timeframe: Medium Term

Phase: II

Location: Entire Union Territory

Project: Teacher Training Initiatives

Project Objective: Puducherry to initiate teacher training initiatives at all levels from school to college education.

Description: Puducherry to develop teacher training programmes specific to subjects and administer the same to teachers in a continuous learning mode. Atleast one month of learning effort should be encouraged. This can be done on online model as well.

Steps and Metrics:

- Topics for continuous learning should be decided and curriculum should be formed for teacher training
- A one month learning module should be created and made available in an online model.

Timeframe: Medium Term

Phase: I

Location: Entire Union Territory

Project: Life Skills and Experimental Projects as part of co-curricular activities for students

Project Objective: Puducherry should be a pioneer in initiating life skill and research activities among students in schools and colleges.

Description: Life skills (psychosocial and interpersonal skills) should be taught to students. Experimental projects should be encouraged among students. An 'Innovation Incubation Cell' should be set up which would coordinate social and technical research projects, seed fund testing, and serve as an ideating platform.

Steps and Metrics:

- Initiate life skill-building programmes in schools and colleges
- Set up a 'Innovation Incubation Cell' which would coordinate social and technical research projects, seed fund testing, and serve as an ideating platform
- Encourage experimental and research projects among students through the above platform

Timeframe: Medium Term

Phase: I

Location: Entire Union Territory

Project: Innovative Learning

Project Objective: Puducherry should adopt innovative learning practises.

Description: Puducherry should adopt innovative and modern learning practises such as visual learning aids and techniques, online learning supplementing classroom learning, project based learning, etc.

Steps and Metrics:

- Puducherry should
 - adopt visual learning aids and techniques in classrooms
 - promote online learning and classroom-based learning.

Timeframe: Medium Term

Phase: II

Location: Puducherry

Project: Puducherry Science Park and Planetarium

Project Objective: Puducherry to set up a Science Park and Planetarium.

Description: It is necessary to inculcate a sense of research, inquisitiveness, and learning among students and build up interest in science. Setting up of a science park and planetarium will help students 'experience science' and help in fostering this spirit.

Steps and Metrics:

- Build a modern Science Park and Planetarium at Puducherry.

Timeframe: Medium Term

Phase: III

Location: Entire Union Territory

Project: Civic Sense and Moral Leadership programme as a means for value-based education

Project Objective: Puducherry should inculcate Civic Sense and Moral Leadership among its citizenry.

Description: Conducting awareness programmes and contests on civic sense and moral leadership, along with frequent programmes to inculcate a sense of rights and responsibilities should be initiated. This is important for citizens in general and students in particular.

Steps and Metrics:

- Conduct awareness programmes and contests on civic sense and moral leadership among students
- Inculcate a sense of rights and responsibilities through awareness and promotional campaign among citizenry by initiatives such as periodic display of related messages at public places which reinforces awareness
- Broaden the horizon and responsibility of students with inputs on agriculture, energy conservation, ecology, and other societal aspects through awareness campaigns, farm visits, case studies, as well as including learning modules on these areas.

Timeframe: Short Term

Phase: I

Location: Entire Union Territory

Project: Puducherry Education Destination project

Project Objective: Puducherry to formulate a Capacity Building Plan for its education institutions and also host institutions of global repute with the aim of emerging as an Education Hub.

Description: Puducherry aims to emerge as an Education Hub for India and eventually at the global level as well. This required that a Capacity Building Plan be formulated for Education Institutions spanning across school education, technical education, vocational education, and higher education. The capacity building should emphasis on quality as well because there will be students in large numbers from outside of Puducherry. Simultaneously, Puducherry should also aim to set up a national-level reputed institution such as IIT/IIM/IISER. The existing colleges must be helped and encouraged to enter into international tie-ups.

Steps and Metrics:

- Set up a national-level reputed institution such as IIT/IIM/IISER in Puducherry
- Encourage existing colleges to enter into international tie-ups
- Undertake capacity building plan for school education, technical education (engineering, diploma), higher education (arts, science, and commerce), and vocational education (ITI, etc.)
- Innovative solutions such as two-shift operations of colleges, etc. ('education assets') should be promoted

Timeframe: Medium Term

Phase: I

Location: Entire Union Territory

Project: Puducherry Quality Education Initiative

Project Objective: Puducherry should take efforts to sustain the quality of education.

Description: Puducherry should actively monitor the quality of its educational institutions by means of measuring quality through an appropriate model and advise on how to improve quality.

Steps and Metrics:

- Construct an education quality monitoring system (such as a scale/index)
- Advise educational measures in improving quality progressively

Timeframe: Medium Term

Phase: II

Source: Various secondary sources, stakeholder interactions, and IMaCS analysis

List of projects for Governance and Administration

The proposed projects for Governance and Administration are outlined here.

Table 21. Projects for Governance and Administration

Location: Entire Union Territory

Project: Puducherry PPP Policy

Project Objective: Puducherry to formulate a PPP policy.

Description: Puducherry should formulate a PPP policy indicating the sectors and sub-sectors in which partnerships are required. It should also specify guidelines and process to be followed, key points of contact, models for different projects, etc. A PPP Cell should be set up for exploring opportunities in this area which will work with different departments leveraging on its expertise.

Steps and Metrics:

- Formulate PPP Policy
- Create a PPP Cell which will identify projects, formulate tenders, coordinate the bid process, interface with different departments, etc.

Timeframe: Short Term

Phase: I

Location: Entire Union Territory

Project: Delegation of Authority

Project Objective: Puducherry to have greater authority in taking administrative decisions.

Description: Stakeholder aspirations reveal that there is a need for greater decision making and financing authority at the Union Territory level itself. As the times change, the need for measures such as greater delegation of authority, statehood, and other possible alternatives should be carefully examined by a separate study by an expert committee.

Steps and Metrics:

- Conduct a detailed study to assess the need, feasibility, and mechanism for greater decision making and financing authority at the level of Territorial Administration (such as larger limit on sanctioning funds for projects, certain aspects related to the use of land for projects, possibility of statehood, other possible alternatives, etc. illustrative only)
- Study should be carried out by an expert committee

Timeframe: Long Term

Phase: III

Location: Entire Union Territory

Project: Stream-line governance procedures through technology and e-governance

Project Objective: Puducherry to streamline governance procedures and aggressively adopt technology.

Description: Puducherry should first prepare a business process document with a thorough understanding of current state procedures and a streamlined set of procedures for efficient administration. E-Governance system linking up all Government departments should be accomplished (a project underway currently which should be expedited). A Government Re-Engineering Cell must be created which will help departments with the change management process

Steps and Metrics:

- Prepare a Business Process Document for the Government with recommended streamlined procedures (use of technology, outsourcing non-core operations through job-work orders, common interfaces reducing redundancy, removal of local body clearances for construction inside identified industrial lands/estates, etc.)
- Implement e-Governance across Government departments

- Create a Government Re-Engineering Cell which will help Government departments in the change management process

Timeframe: Long Term

Phase: I

Location: Entire Union Territory

Project: Annual Training for Government Staff

Project Objective: Puducherry to conduct annual training for Government staff.

Description: With the pace of changes happening in the economy, and new ways of doing business, etc., the government staff should be updated on current issues, their impact on the department, new policies and procedures, etc. It is critical that an Annual Training programme be conducted for the Government staff. This can be done on an online web-based system with department specific modules.

Steps and Metrics:

- Design department-specific training modules
- Roll-out web-based training programme for Government staff covering (illustratively) the following:
 - Updates on current issues and their impact on the department
 - Subject/department-related areas
 - New policies and procedures, etc.

Timeframe: Medium Term

Phase: I

Location: Entire Union Territory

Project: Performance Management System

Project Objective: Puducherry to introduce a Governance review mechanism.

Description: Puducherry should identify a set of key metrics to assess the performance of Government departments. Such metrics should be effectively monitored and areas of improvement should be suggested by an Expert Panel.

Steps and Metrics:

- Set up Expert Panel on Governance
- Identify parameters of performance measurement
- The same can be monitored at department level, with the Expert Panel also offering suggestions for performance improvement
- This can be carried out on a yearly/six-monthly basis

Timeframe: Short Term

Phase: III

Location: Entire Union Territory

Project: Government-NGO forum

Project Objective: Create a Government-NGO forum to synchronise action.

Description: Both Government and Non-Government Organisations (NGOs) are involved in several schemes and activities for a public cause. A common forum should be formed to channelise energies and address specific issues with a common agenda.

Steps and Metrics:

- Form a Government-NGO forum to have a common agenda and sharper focus, alignment, and channelisation of resources for action

Timeframe: Medium Term

Phase: II

Source: Various secondary sources, stakeholder interactions, and IMAcS analysis

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