

# TAMIL NADU VISION **\$1 TRILLION**

JANUARY 2024



Knowledge Partner





**\$1**

**TRILLION**

# TABLE OF CONTENTS

---

<b>01</b>	Executive summary	<b>06</b>
<b>02</b>	Introduction & current landscape	<b>10</b>
<b>03</b>	\$1 Trillion economy vision & growth framework	<b>16</b>
<b>04</b>	Critical tenets for achieving the vision	<b>20</b>
<b>05</b>	Big bets for Tamil Nadu & sectoral imperatives	<b>24</b>
<b>06</b>	Climate conscious, regionally holistic, and socially inclusive strategy	<b>86</b>
<b>07</b>	Call to action	<b>104</b>



“

## **We have set ourselves an ambitious target of becoming a \$1 Trillion economy by 2030**

---

”

**Thiru. M. K. Stalin**

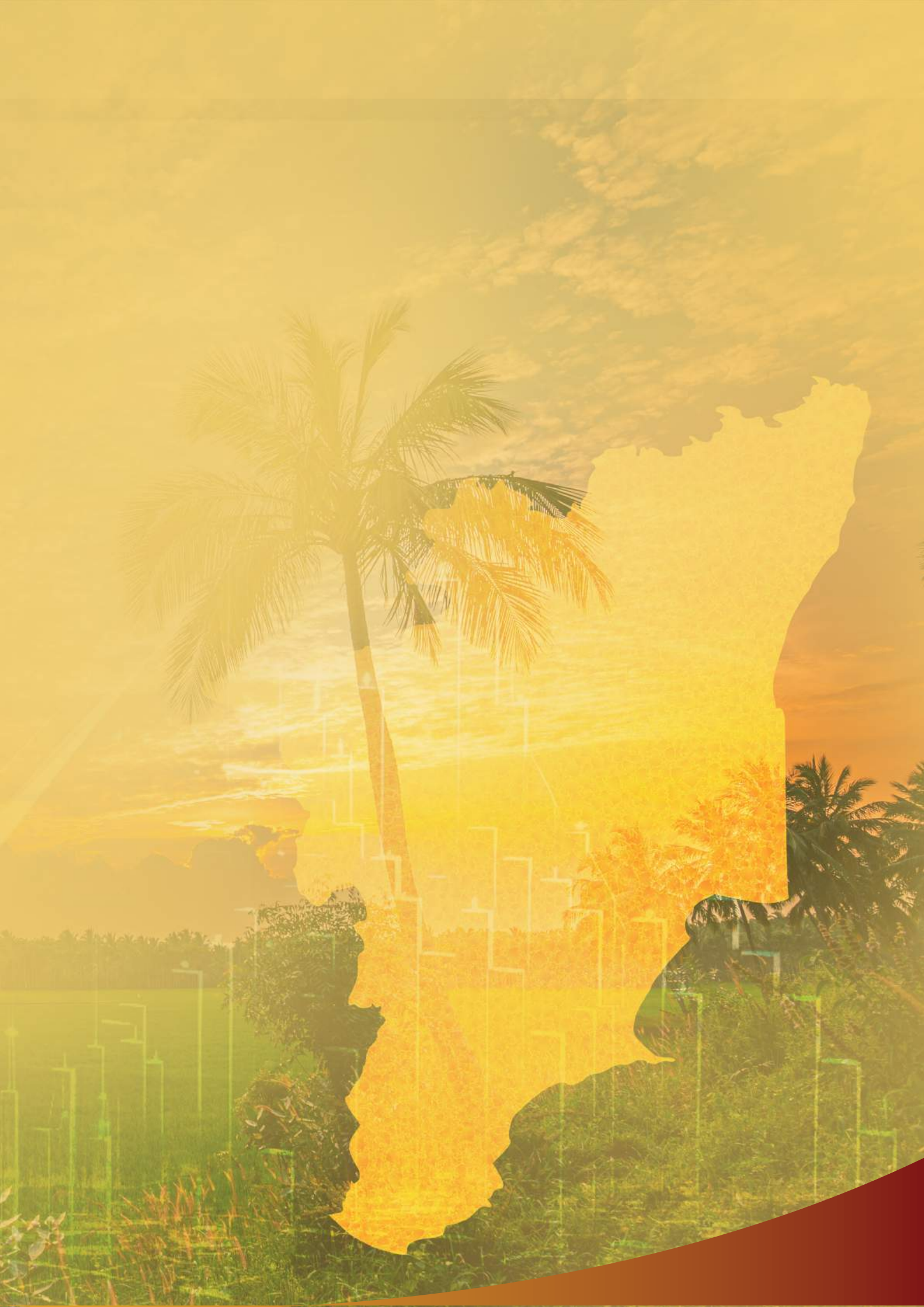
Hon'ble Chief Minister of Tamil Nadu

Tamil Nadu has always been a pioneer State with significant initiatives and contributions in the social sector, cultural milieu, economic progress, and technological innovations. It has presented a successful model of combining massive social welfare policies with robust growth parameters. Going forward, the State has immense potential to emerge as the fastest growing hub, riding on its strengths in innovation, sustainability, and a skilled workforce.

The preparation of the 'Tamil Nadu Vision \$1 Trillion' is an important step in the State's march towards achieving its ambitious target of becoming a \$1 Trillion economy. The present document briefly summarizes some of the key bets in that direction.

Diverse stakeholders have contributed to the preparation of the strategic plan. With the collective effort of all stakeholders, both public and private, this ambitious goal can be achieved, fulfilling the aspirations of the people of Tamil Nadu.





# 01

## Executive summary

---



Tamil Nadu, an economic powerhouse, is India's 2<sup>nd</sup> largest economy<sup>1</sup>. Its diverse economic landscape spans across multiple primary, secondary, and tertiary sectors. This growth trajectory has been fueled by widespread industrialization, strong exports, a thriving MSME ecosystem, and robust investor support. Tamil Nadu has also ensured focus on healthcare and education, while expanding its infrastructure and fostering an investor-friendly environment. In addition to maintaining its economic growth trajectory, the State has also maintained its commitment to growing sustainably and keeping social & regional inclusivity at its core.



With this strong foundation, Tamil Nadu is eyeing an ambitious goal of becoming a \$1 Trillion economy. To achieve this goal, a comprehensive 'Growth Framework' has been designed to act as a blueprint. At the heart of the growth framework are the 'Growth Vectors', which are key sectors segmented across primary, secondary, and tertiary, representing pillars of the State's multidimensional economy. To ensure the success of these growth drivers, a robust foundation is required, which is provided by the 'Enablers' such as infrastructure, human capital, innovation, and governance. Further, 7 key tenets have been laid out as guiding principles for formulating detailed strategies and an implementation roadmap. These include driving investments, enhancing human capital, pioneering innovation, developing best-in-class infrastructure, driving market efficiency, and ensuring efficient governance, while ensuring climate sensitive, regionally holistic, and socially inclusive growth. With the overall growth framework and key tenets, a detailed strategy with action plan & key intervention areas has been laid out, underscoring select 'big-bets' - which could be game-changing opportunities for Tamil Nadu. This report provides a glimpse of the broader strategy and roadmap, highlighting key sectoral initiatives and select big-bets.



In agriculture, there is significant potential to boost crop value-addition and expand export footprint by establishing end-to-end clusters with post-harvest and processing infrastructure, as well as multi-stakeholder engagement. It is also critical to drive diversification to high realization crops and increase the utilization of arable lands to accelerate growth. To capture the potential of the dairy sector, it is essential for Tamil Nadu to drive a shift towards an organized milk sector with focus on value added dairy products, while also improving milk yield through optimal feed management. There also exists an opportunity to service the free-range egg demand from domestic and export markets. Within fishing & aquaculture, Tamil Nadu must tap the potential of deep-sea fishing and lead the way in Sashimi grade tuna export, while also aiming to become the Head On Shell On (HOSO) shrimp export hub of India.

In manufacturing, Tamil Nadu has a strong starting point with its significant industrial footprint spanning multiple sectors. The State is India's leading player in textiles, and can bolster its position further by aiming to become the export epicenter of value-added textiles, as well as pioneer in the specialized field of technical textiles. In automotive and Electric Vehicles (EV), there is potential to spearhead cell component and Electric Vehicle Supply Equipment (EVSE) component manufacturing to create a virtuous cycle of investments in the larger EV ecosystem. Further, it can grow stronger in the traditional Internal Combustion Engine (ICE) segment by evolving as an auto component export hub for the world. To bolster the chemicals sector, the State should invest in sustainable petrochemical hubs with a thrust on upstream & downstream products, as well as build a strategic play in specialty chemicals, especially agro-chemicals, flowers & fragrances, and nutraceuticals. Tamil Nadu must also emphasize on building its prowess in the electronics and semiconductors sector by attracting leading players in Fabrication (FABs), Assembly, Testing, Marking, and Packaging (ATMP), and the Outsourced Semiconductor Assembly and Test (OSAT) sectors, while driving value addition & localization in Electronics Manufacturing Services (EMS). In the machinery segment, the State should aim to become an investment hotspot for machinery manufacturing across focus segments, as well as rejuvenate existing machinery clusters in the State. In the non-leather footwear industry, Tamil Nadu should aim to become a leading global exporter.

In the services sector, IT and Global Capability Centers (GCCs) are the major contributors to the State's economic growth. Within IT, Tamil Nadu can aim to attain leadership in SaaS, while becoming the preferred choice for industry players looking at IT expansion into tier 1/2 cities, and establishing itself as a leading data center hub in India. Within GCC, Tamil Nadu can aim to attract capability

centers across engineering research & development, fables, BFSI, telecommunications, media, healthcare and pharmaceuticals. In the growing market of animation & VFX, Tamil Nadu should look to cement its position as a leading player by attracting global VFX studios as anchor units, and creating an ecosystem of home-grown studios. In tourism, Tamil Nadu must focus on attracting long-stay & high-spending tourists by developing theme-based circuits, amplifying its marketing, and creating a strong institutional framework.



In infrastructure, Tamil Nadu should focus on enhancing installed energy capacity, improving green energy mix and energy efficiency, while enhancing road & rail connectivity across corridors, and further improving the airport and seaport infrastructure in the State. It is also imperative to focus on housing, urban planning, urban regeneration, and mobility solutions.

In human capital, Tamil Nadu must aim to upskill people towards higher value jobs and increase women participation in the workforce, while ensuring best-in-class infrastructure and services for the current and future disease burden impacting the workforce.

Innovation is another enabler to propel growth, and the State should drive Research & Development (R&D) across emerging topics by facilitating collaboration between academia and the industry. Tamil Nadu must also further empower the startup ecosystem by providing support on talent pool access, funding / capital, support ecosystem, and access to addressable markets.

Orchestrating ecosystems is another key area for Tamil Nadu, and the State should focus on enhancing its MSME ecosystem by undertaking interventions to increase formalization, improve financial inclusion, enhance value chain linkages, drive capability development, and offer skilled manpower, in addition to providing institutional support.

Logistics is the backbone of trade, and Tamil Nadu must undertake efforts to improve connectivity, warehousing & Multi Modal Logistics Parks (MMLP), order processing & administration, while leveraging technology & data for logistics infrastructure planning & performance monitoring. The State should ensure the availability of logistics skill capability and capacity, and institute robust governance mechanisms to ensure logistics efficiency.

While focusing on economic growth, Tamil Nadu must also continue to spearhead regionally holistic, climate conscious, and socially inclusive growth.





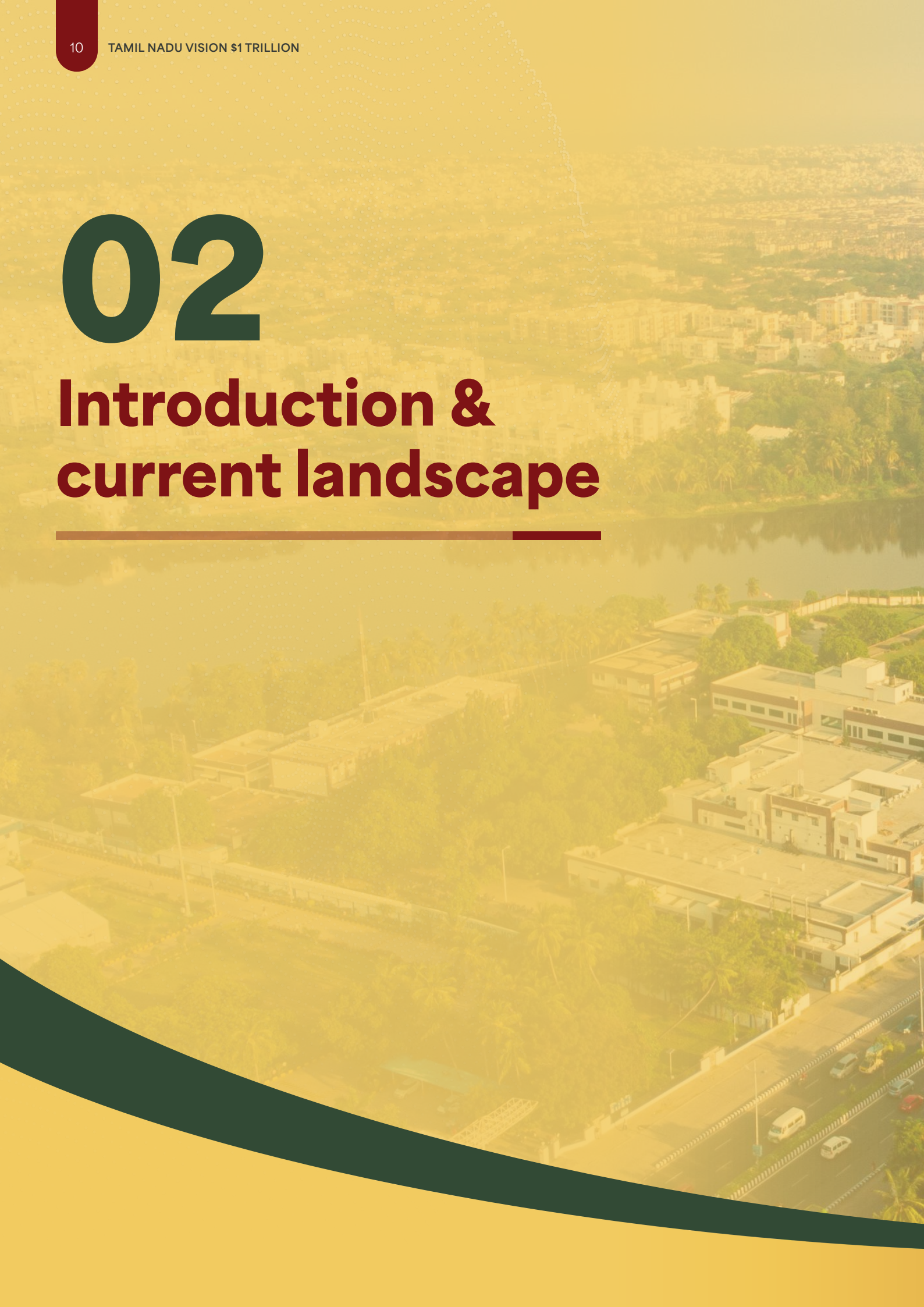




# 02

## Introduction & current landscape

---









# Introduction & current landscape

Tamil Nadu, accounting for ~6% of the country's population<sup>2</sup>, is a leading example of economic dynamism and growth. With its rich cultural heritage juxtaposed against a rapidly modernizing landscape, the State has consistently showcased its economic strength. Tamil Nadu's robust growth over the years has been led by a combination of traditional industries and new-age sectors. The State's growth trajectory has been accelerated by 6 key drivers, as showcased below.

## Tamil Nadu's growth drivers



### Economic prowess

- India's 2<sup>nd</sup> largest economy, with GDP of INR 23.64 Lakh Crores (FY23)<sup>1</sup>
- Growth with social inclusivity & regional distribution at its core - per capita income is 1.75x of India<sup>4</sup>, average urbanization of ~48%<sup>7</sup>



### Multi-faceted growth

- Leading player across diverse sectors- tertiary contributes 53%, secondary 34%, and primary 13%<sup>4</sup>
- Rank 1 in Export Preparedness Index<sup>11</sup>
- Home to 130+ Global Fortune 500 companies<sup>13</sup>



### Human capital focus

- Frontrunner in human capital, with LFPR of ~63%<sup>4</sup> & amongst the leading states in terms of skilled workforce in India
- Strong healthcare infrastructure - 4 doctors per 1000<sup>18</sup> patients vs India average of 1.34; bed to population density 2x better than India average<sup>18</sup>



### Strong governance

- Rank 3 in Ease of Doing Business, up from rank 18<sup>19</sup> in 2018
- Single window offering with 140+ G2B offerings<sup>13</sup>, and robust policy making to foster investor-friendly climate



### Robust infrastructure

- 3<sup>rd</sup> highest installed power capacity in India<sup>13</sup>
- Extensive network of roads, airports, railways & seaports offering seamless connectivity



### Sustainable development

- 3<sup>rd</sup> rank in SDG India Index<sup>22</sup>
- Launched 3 major missions - Climate Change Mission, Biodiversity Conservation and Greening Mission, and Wetlands Mission<sup>23</sup>
- Established district-level climate change missions





## **Economic prowess** The backbone of Tamil Nadu's progress

Tamil Nadu, the 2<sup>nd</sup> largest state economy in India, is an economic powerhouse with a GDP of INR 23.64 Lakh Crores in FY 23<sup>1</sup>. This GDP is comparable to that of the top 50 global economies and has witnessed robust growth, averaging ~11% over the past decade<sup>3</sup>.

While focusing on economic development, the State has also ensured that the growth is socially inclusive, with its per capital income being 1.75 times higher compared to the Indian average<sup>4</sup>. Tamil Nadu has one of the lowest poverty rates among states, at 2.20%, compared to the national average of 14.96%<sup>5</sup>.

The State has also focused on ensuring regionally distributed growth, which can be observed from the fact that ~50% of the State's GDP is spread over ~25% districts, compared to 10-15% for peer states<sup>6</sup>. This regional distribution of growth has, in turn, led to widespread urbanization rates across the State, with an average urbanization of ~48%, which is among the highest in India<sup>7</sup>.



## **Multi-faceted growth** The pillars of a vibrant economy

Tamil Nadu's economic prowess is supported by its diverse economic structure, where the tertiary sector contributes 53%, followed by secondary at 34%, and primary at 13%<sup>4</sup>.

In the primary sector, Tamil Nadu has diverse agricultural production with extensive cultivation of cereals, oilseeds, horticulture, pulses, and cash crops. It ranks among the top states in the production of rice, maize, coconut, groundnut, fruits, and vegetables<sup>8</sup>. The State is also a leading player in poultry and egg production in India<sup>9</sup>, and its long coastline is the backbone of a thriving fishing industry.

Tamil Nadu is a hub for diverse industries in the secondary segment across food processing, textiles, leather, machineries, auto, chemicals, electronics, footwear, metals, and non-metals. It is also the most industrialized state in India, and the presence of ~45,000 registered factories underscore the State's industrial might<sup>10</sup>.

The State is a notable player in the services industry, being a key hub of IT & allied services and BFSI, while its rich natural resources and cultural heritage make it a popular tourist destination.

Tamil Nadu is also a key export hub and ranks 1<sup>st</sup> in the Export Preparedness Index in India<sup>11</sup>. It has the highest electronics exports in India, is 2<sup>nd</sup> in terms of capital goods export, and has the 3<sup>rd</sup> largest merchandising exports in the country. In services, it accounts for the 2<sup>nd</sup> highest exports in the country<sup>12</sup>.

These inherent strengths attract global businesses, making the State a favored destination for both domestic and international investors. Tamil Nadu has a vibrant business ecosystem with the presence of 130+ global Fortune 500 companies<sup>13</sup>.



## Human capital focus Building a progressive society

Tamil Nadu's blueprint for growth has human capital at its heart and the State has significantly invested in building its social infrastructure. The State is a front-runner in human capital with a Labor Force Participation Rate (LFPR) of ~63%<sup>4</sup>. It is home to high quality educational institutions, with 22 of top 100 Indian universities present in the State<sup>14</sup>. Tamil Nadu also boasts of having one of the largest pools of skilled workforce in India, accounting for ~38% of its labor distribution vs ~11% for India<sup>4</sup>. Also, ~145k engineering & ~115k Industrial Training Institute (ITI) graduates pass annually in the State<sup>15</sup>. The emphasis on education is reflected in the Gross Enrollment Ratio (GER), with Tamil Nadu's secondary school GER at 96% vs 80% for India, higher secondary education GER at 82% vs 58% for India, and higher education GER at 47% vs 27% for India<sup>16</sup>.

The State ranks 2<sup>nd</sup> in Niti Aayog's Composite Health Index (CHI)<sup>17</sup> and the robust healthcare system in Tamil Nadu reflects its commitment to public welfare. Tamil Nadu boasts of a high doctor-patient ratio of 4 doctors per 1000 people vs 1.34 for India, which is comparable to leading countries like Norway (4.2) & Sweden (4.2)<sup>18</sup>. It also has 1 bed per 935 people, which is 2x better than the national average, along with advanced medical facilities providing a robust healthcare infrastructure<sup>18</sup>.



## Strong governance Fostering an industry-friendly climate and improving market efficiency

In governance, Tamil Nadu's approach is characterized by effectiveness and efficiency. The State has leapfrogged in the Ease of Doing Business rankings - climbing to the 3<sup>rd</sup> position from 18 in 2018<sup>19</sup>. This has been primarily driven by its single-window offering, which provides 140+ Government-to-Business (G2B) services<sup>13</sup>. The State also has a robust policy making framework, underscoring its commitment to fostering a favorable business environment and enhancing market efficiency.





## **Robust infrastructure** The foundation of growth

Tamil Nadu's infrastructure is a key factor powering its economic and social development. The State boasts of excellent connectivity with an extensive network of roads, airports, and railways, which not only supports its industrial growth, but also enhances the quality of life for its residents. It is the only State which has all its districts covered under industrial corridors. It has the 2<sup>nd</sup> largest coastline in the country, comprising three of the country's 13 major ports which account for ~21%<sup>20</sup> of India's capacity. It is also a leading power generator, with the 3<sup>rd</sup> highest installed power capacity in India<sup>13</sup>. The State also boasts a ~53% share of renewables in total power capacity, which is the 2<sup>nd</sup> highest in the country<sup>21</sup>. In terms of telecom, the State has one of the largest bandwidth availabilities, at 15 TBps<sup>13</sup>. The State's comprehensive infrastructure network ensures seamless connectivity and accessibility, serving as the backbone of its industrial and commercial endeavors.



## **Sustainable development** Consciously balancing growth with sustainability

The State's emphasis on sustainable development is evidenced by its 3<sup>rd</sup> rank in the Sustainable Development Goals (SDG) India Index<sup>22</sup> and its proactive environmental policies. Tamil Nadu has become a frontrunner in climate action by announcing three major missions namely Climate Change Mission, Biodiversity Conservation and Greening Mission, and Wetlands Mission<sup>23</sup>. It has also set up district climate change missions in all districts, each headed by the respective District Collector as the Mission Director, to develop strategies for reducing greenhouse gas emissions and promoting eco-friendly technologies.



**Driven by its multifaceted growth and bolstered by its many strengths, Tamil Nadu aspires to accelerate its journey towards becoming a \$1 Trillion economy**

# 03

## \$1 Trillion economy vision & growth framework

---



**Thiru. M. K. Stalin**  
Hon'ble Chief Minister of Tamil Nadu





# \$1 Trillion economy vision & growth framework

As Tamil Nadu stands on the verge of an economic revolution, it becomes imperative to chart a course that is both visionary and actionable. The Hon'ble Chief Minister of Tamil Nadu, Mr M. K. Stalin, has articulated a vision for the State to achieve a \$1 Trillion economy by 2030. The State's strategy for accelerated economic growth is based on the foundation of its starting context & objectives. The starting point considers available resources including financial, natural, institutional, and human assets. This strategy aims to bolster the GDP, increase employment, ensure economic stability, promote equity, and enhance the overall social well-being of its citizens.

## Goals and objectives



## The growth framework

The growth framework encapsulates the State's holistic strategy and aims to catapult the economy to the coveted \$1 Trillion mark. The framework has been derived from globally recognized economic development models.

At the heart of this strategy are the 'Growth Vectors', segmented into primary, secondary, and tertiary sectors, each representing a part of the State's multifaceted economy. While the growth vectors are the essential engines of economic growth, they require a robust foundation to thrive. This foundation is provided by the 'Enablers'. Enabling infrastructure ensures that Tamil Nadu remains seamlessly connected to facilitate smooth operations and trade. Enabling human capital helps to nurture a healthy, skilled & motivated workforce. Enabling innovation is essential, as thriving startups and a vibrant R&D ecosystem are catalysts to transform groundbreaking ideas into reality & drive economies into new frontiers of development.

## The roadmap and action plan

The roadmap and action plan are meticulously drawn across pivotal sectors within primary, secondary & tertiary, with spotlights on certain 'Big Bets'. The strategy also lays out the roadmap for building robust infrastructure, skilled human capital, and a thriving innovation ecosystem to serve as catalysts, propelling Tamil Nadu swiftly towards its ambitious \$1 Trillion vision.

The subsequent chapters offer a glimpse of some of the 'Big Bets' that form a part of the broader roadmap



# The growth framework encompassing vectors & enablers for \$1 Trillion vision

## TAMIL NADU \$1 TRILLION GDP

### GROWTH VECTORS



#### PRIMARY

Crops & Agro-Processing

Dairy, Poultry & Animal Husbandry

Fishing & Aquaculture



#### SECONDARY

Auto, EV & Mobility solutions

Electronics & Semiconductors

Metals, Non-Metals & Others

Chemicals

Machinery

Leather & Footwear

Textiles & Apparels



#### TERTIARY

Tourism

IT & GCC

Animation & VFX

Financial Services

Trade

### ENABLERS



#### INFRASTRUCTURE

Energy & other utilities

Transport

Water & sanitation

Social & commercial



#### HUMAN CAPITAL

Education & skilling

Workforce participation

Healthcare



#### INNOVATION

R&D ecosystem

Startups



#### ORCHESTRATE ECOSYSTEMS

MSMEs

Logistics

Credit economy



#### GOVERNANCE

Policies

Institutional & regulatory framework

# 04

## Critical tenets for achieving the vision

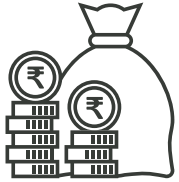
---





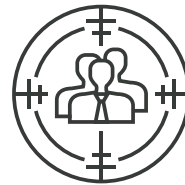


# Critical tenets for achieving the vision



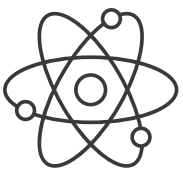
## INVESTMENTS

- Attract \$3.8-4.3 Trillion investments (public & private) to accelerate growth
- Become the go-to destination for FDI, & enable local investments for expansion and growth



## HUMAN CAPITAL

- Add 60 Lakh women to the workforce by upskilling & reskilling them
- Skill 1 Crore people participating in the economy and transition them to high value jobs



## INNOVATION

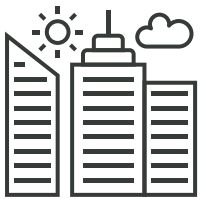
- Pioneer industry-academia partnerships to become the R&D citadel
- Become a preferred destination for startups in the region





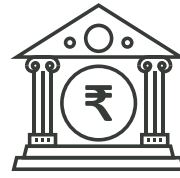
## MARKET EFFICIENCY

- Foster an industry friendly climate by enabling seamless access to land, labour, and capital
- Attain a leading position in 'Ease of Doing Business' by streamlining all G2B processes and simplifying regulations



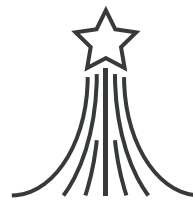
## INFRASTRUCTURE

- Develop well-planned, best-in-class, sustainable and resilient infrastructure to lay the foundation for growth
- Develop robust social and commercial spaces, seamless transport networks, and sustainable water and sanitation systems for a thriving economy and empowered society



## GOVERNANCE

- Ensure robust policy-making, along with transparent and efficient governance committed to drive economic development
- Strengthen institutional and regulatory frameworks, and establish specialized agencies to drive vision delivery



## HOLISTIC & INCLUSIVE GROWTH

- Ensure that all districts and regions of the State emerge as growth centers, while driving prosperity for all sections of the society
- Embed climate consciousness and sustainability at the center of all initiatives

# 05

## Big bets for Tamil Nadu & sectoral imperatives

---







# Crops and Agro-Processing

Tamil Nadu is India's 8<sup>th</sup> largest state in terms of cultivable land<sup>8</sup>. The State cultivates an array of crops ranging from cereals like rice, maize, and jowar, to oilseeds including coconut and groundnut. It also produces a rich variety of fruits, vegetables, and spices along with pulses like black gram. Further, cash crops such as sugarcane and cotton also contribute to its agricultural landscape.

There is significant potential to further strengthen the agriculture output by enhancing value through post harvest processing, expanding exports to tap into global markets, optimizing the usage of fallow lands, diversifying to high realization crops based on market needs, increasing cropping intensity, improving yield by promoting mechanization, and encouraging agriprenuership. Further, it is important to invest in irrigation infrastructure and technologies, as well as conduct programs to promote ground water recharge and sustainable agriculture practices.

## Big bets to accelerate to \$1 Trillion



To improve price realization and provide higher value realization to farmers



Towards high realization crops and reduce strain on natural resources



To maximize agriculture productivity and minimize fallow lands



## Boost value-addition & exports



### 18+ focus crops identified for value-addition & exports across districts

Corresponding clusters and high value addition opportunities identified across the focus crops

### Post-harvest and processing infrastructure at crop - cluster level to enable greater value realization for the farmer

New infrastructure establishment and enhancement of current infrastructure, led by Farmers Producer Organization (FPO) / Private Player / Public-Private Partnership (PPP) / Government



### Wide-spread awareness campaigns to mobilize farmers for the value-added opportunities

Driven via demonstration sites, videos, websites, testimonials, grassroots awareness campaigns, WhatsApp, and SMS campaigns



### Orchestrate comprehensive market access and linkages for the value-added opportunities

Simplify the intricacies and complexities of the agri-marketplace, to guarantee expansive market access to foster growth



### Drive clusterization for multi-stakeholder participation and enable scale efficiencies

End-to-end clusters for input value chain, storage and post-harvest infrastructure, processing facilities and establishing a knowledge-rich ecosystem



### Institutional framework to operationalize clusters and build accountability for outcomes

Dedicated team to promote value-addition and exports, with field team at crop - cluster level to undertake execution



# 18+ focus crops identified across districts

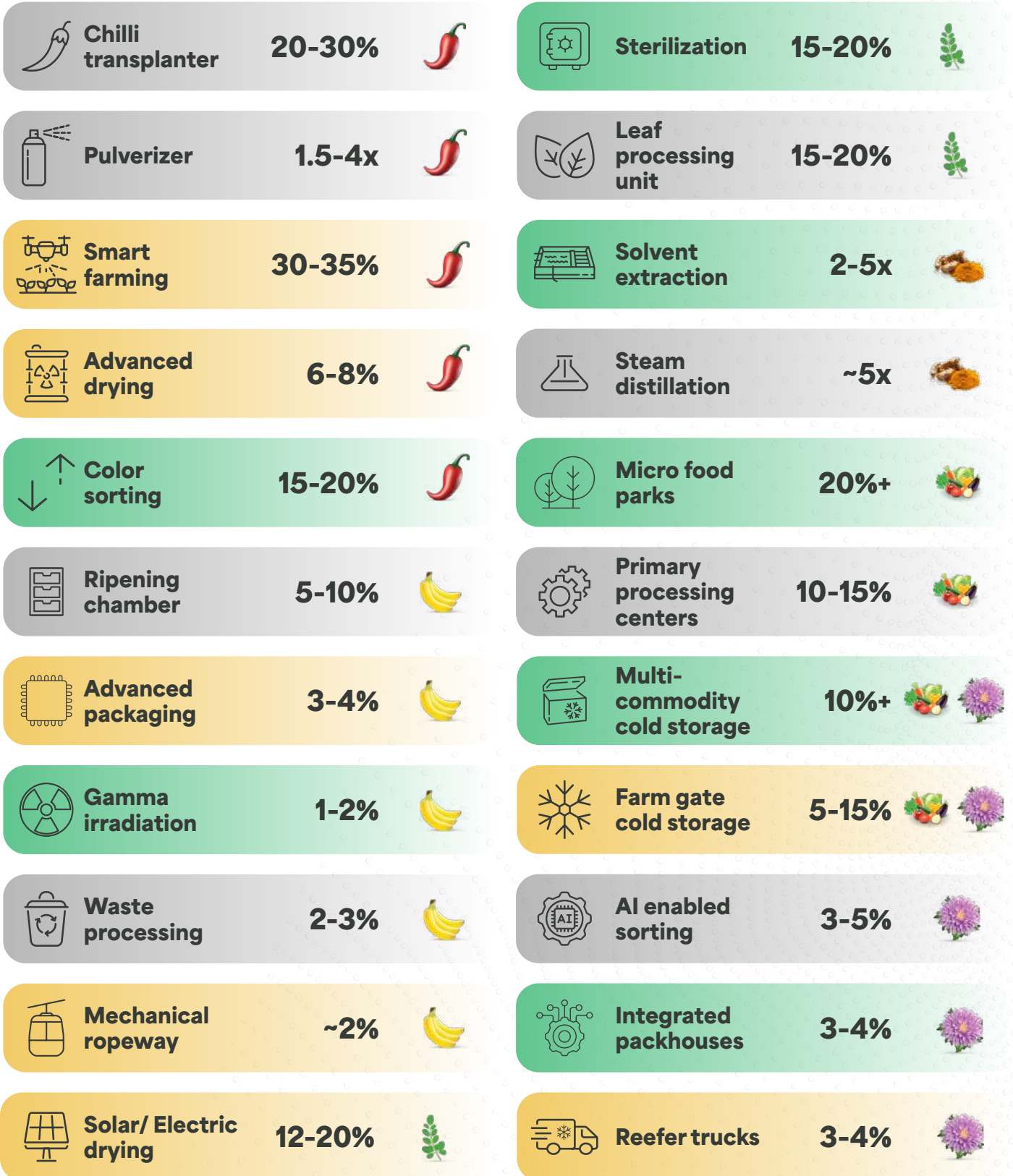




# Post-harvest & processing infrastructure interventions identified across crops to enable greater value realization for farmers

Select crop examples

% / X - Value realization improvement



● FPO ● Private ● Government via PPP

Value realization improvement pertains to the specific stage of value addition / processing, and is not additive for the overall crop

## Orchestrating cluster development for value addition

### Government to play a more proactive role in orchestrating for success

1

#### Tamil Nadu State Government

- Ecosystem development with value chain players
- Support in accessing schemes and convergence support
- Support in certification
- Support in farmer mobilization & FPO formation
- End-to-end cluster support

2

#### Buyer/exporter (cluster lead)

- Adopt crop-cluster
- Develop sales channels and improve access to global markets
- Investment in specific infrastructure for target product and market
- Invest in marketing and branding
- Setup quality control team

3

#### FPOs/farmers groups

- Aggregate farmers and produce to ensure trade efficiency, create a purchase plan
- Handhold members and ensure compliance as per standards
- Drive small-scale investment

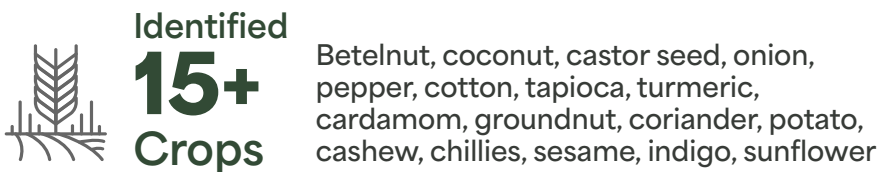
4

#### Ecosystem players (including agripreneurs and startups)

- Joint investment in common infrastructure, logistics, other services
- Support in financing, providing agriculture input, etc.
- Bring best-in-class practices from the industry, unlock efficiency, train farmers

Farmers with significant scale can also be empowered to assume the role of processor/exporter for their farms & eventually take responsibility of larger areas to realize the vision of making more farmers agripreneurs

### Drive market-led diversification



Crops identified based on feasibility, market demand, agro-climatic conditions, eco-sustainability, and optimal risk-reward strategies for farmers

### Increase the utilization of arable lands



Fallow land as % of arable area in Tamil Nadu, of which ~70%+ has been left fallow for 1-5 years<sup>24</sup>

#### 3 key focus areas

- 1 Systemic identification, prioritization, and agglomeration of fallow lands
- 2 Support in land reclamation and providing adequate infrastructure, including irrigation
- 3 Provide financial incentives and establish partnerships – leases or managed services to rekindle agriculture



# Dairy, Poultry & Animal Husbandry

Tamil Nadu ranks 11<sup>th</sup> in milk production in India, accounting for ~5% of the country's total milk output. In terms of egg production, it ranks 2<sup>nd</sup> in the country and accounts for ~16% of the country's total egg output<sup>25</sup>. The State is ranked 6<sup>th</sup> in meat production, dominated by poultry, accounting for ~8% of the country's total meat production<sup>25</sup>.

The trends of increasing income and ease in accessibility will drive breakout growth in the demand & consumption of milk, eggs, and meat. The domestic growth will be enabled primarily by the organized sector, as seen in developed countries. As the per-capita availability of milk and egg are greater than the per-capita requirement of the State, Tamil Nadu can now shift its focus to high-value addition opportunities and exports in milk and eggs.

To recognize its full potential, it is essential for Tamil Nadu to undertake a cluster approach to boost market reach, incentivize high-yield breeds, and ensure consistent fodder supply. Efficient veterinary services paired with targeted educational efforts, and effective dissemination of government financial schemes can enhance productivity and product quality.

## Big bets to accelerate to \$1 Trillion



To ensure higher margins for farmers and access to new markets, with increased shelf-life



To improve productivity, leading to additional 1-2 liter/day/animal



As caged eggs are being phased out by nations and retailers globally

## Organize Tamil Nadu's milk sector for value added dairy products

### 2-pronged approach to organize Tamil Nadu's milk sector

#### Attract private players



##### Comprehensive dairy policy

Incentives for new plant/ plant expansion, cattle feed production, and cold chain storage



##### Dairy investment facilitation team

Analyzes supply trends, enables market linkages, facilitates investments, and ensures ease of doing business



##### Shelf of projects in 11 focus districts

Earmark ~120 acres for processing units & build customized acceleration kits

#### Mobilize milk in bulk from Small Holder Farmers (SHF)



##### Activate & mobilize farmers

via village outreach, SHF awareness, & Cluster Level Federations (CLFs) in high milk potential clusters



##### Enable market linkages

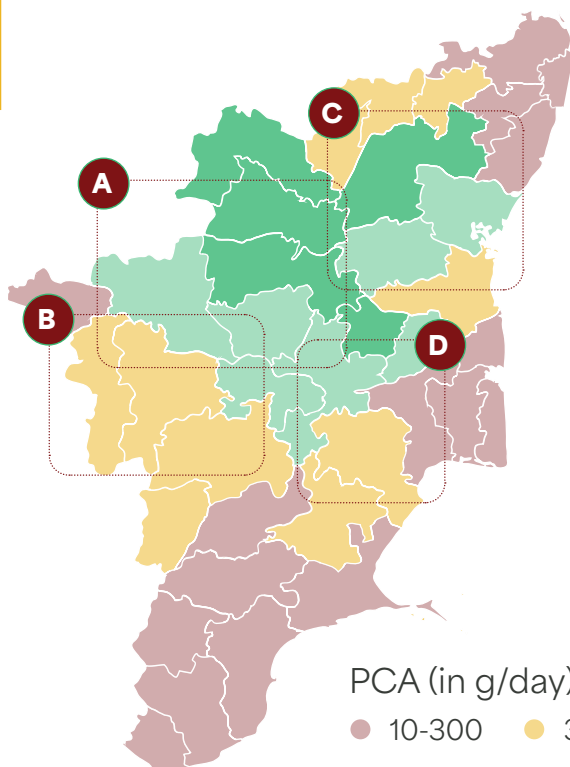
Between farmers & organized buyers to ensure assured demand for farmers



##### Enable credit to farmers

Support in Detailed Project Report (DPR) preparation, asset planning and management, with empaneled vendors

### Milk supply heatmap of Tamil Nadu<sup>18</sup> highlighting 11 focus districts across 4 clusters



A

#### NORTH-WESTERN CLUSTER

Salem, Erode, Nammakal & Dharmapuri

B

#### WESTERN CLUSTER

Coimbatore & Tiruppur

C

#### NORTH-EASTERN CLUSTER

Tiruvannamalai & Villupuram

D

#### EASTERN CLUSTER

Pudukkottai, Thanjavur & Tiruchirappalli



## Improve Tamil Nadu's milk yield by 15-20% through optimal feed management

### Move from availability-based feeding to ration balancing

Ration balancing is a process to balance out the level of nutrients in the feed for optimal outcomes, and help the farmers with a 'diet plan'



**Potential increase in farmer margins**

#### 2 key focus areas



Train & deploy extension services network to recommend diet plan for each animal by leveraging the Information Network for Animal Productivity & Health (INAPH) portal by National Dairy Development Board (NDDB)



Bridge the green-fodder gap by leveraging ~1LHa of grazing lands, and extending high quality compound feed for non-cash credit to farmers

## Capitalize on free-range egg opportunity in domestic markets and exports



### Awareness of free-range farming of pullets & laying hens

Across 16 elements encompassing choices in rearing systems, genetics, equipment, health, training, inspections, environmental conditions, and facility enhancements

### Incentives to encourage adoption

For farmland, shed construction, and farm enrichments

### Curated term loans aligned to business cycle

Loans to reduce the burden on working capital

# Fishing & Aquaculture

With ~15% of India's coastline and 12.8 Lakh fishermen<sup>26</sup>, Tamil Nadu's fishing community is vast and vibrant. The State ranks 3<sup>rd</sup> in marine production, 13<sup>th</sup> in inland production, and contributes to ~11% of national export<sup>26</sup>. Tamil Nadu's fish production is predominantly driven by marine capture. Marine areas cover 4141 kHa with ~55% utilization and produce 595 kT, freshwater spans 385 kHa at ~13% utilization and yields 212 kT, while brackish regions encompass 56 kHa with ~10% utilization<sup>27</sup>.

The fisheries sector is witnessing pivotal trends, with aquaculture poised to outpace marine capture fisheries by 2030. Climate-induced shifts, including unpredictable rainfall, are impacting marine life migration and inland fishing patterns. As sustainability takes center stage, countries are recalibrating policies with emphasis on eco-friendly practices.

In order to bolster the fisheries sector, a renewed focus on aquaculture is critical. This can be achieved by fostering innovation, building reliable input value chains, and amplifying focus on exports. Promoting deep-sea fishing, value-added processing, seaweeds and ornamental fish can propel the sector forward.

## Big bets to accelerate to \$1 Trillion



As Tuna-dominated deep sea of Tamil Nadu is untapped with significant scope for value-added exports, leading to 15x realization over current Tuna catches



As HOSO carries 40-50% price premium and is growing 1.5x faster compared to Headless Shell On (HLSO) and peeled shrimp



## Lead the way in Sashimi grade Tuna export



### Provide hands-on training with experts

Onboard experts from select countries to train fisherman on pole/line fishing method & onboard handling of Sashimi grade Tuna



### Facilitate buyers & exporters to adopt villages / clusters

To ensure effective knowledge dissemination of catching & onboard handling of Sashimi grade tuna, & provide support in attaining certifications, while ensuring assured market access



### Ensure adequate vessel & onboard infrastructure

Vessels and supply infrastructure viz. ice boxes, mats, tools, long line hooks, drag reels, gloves & more

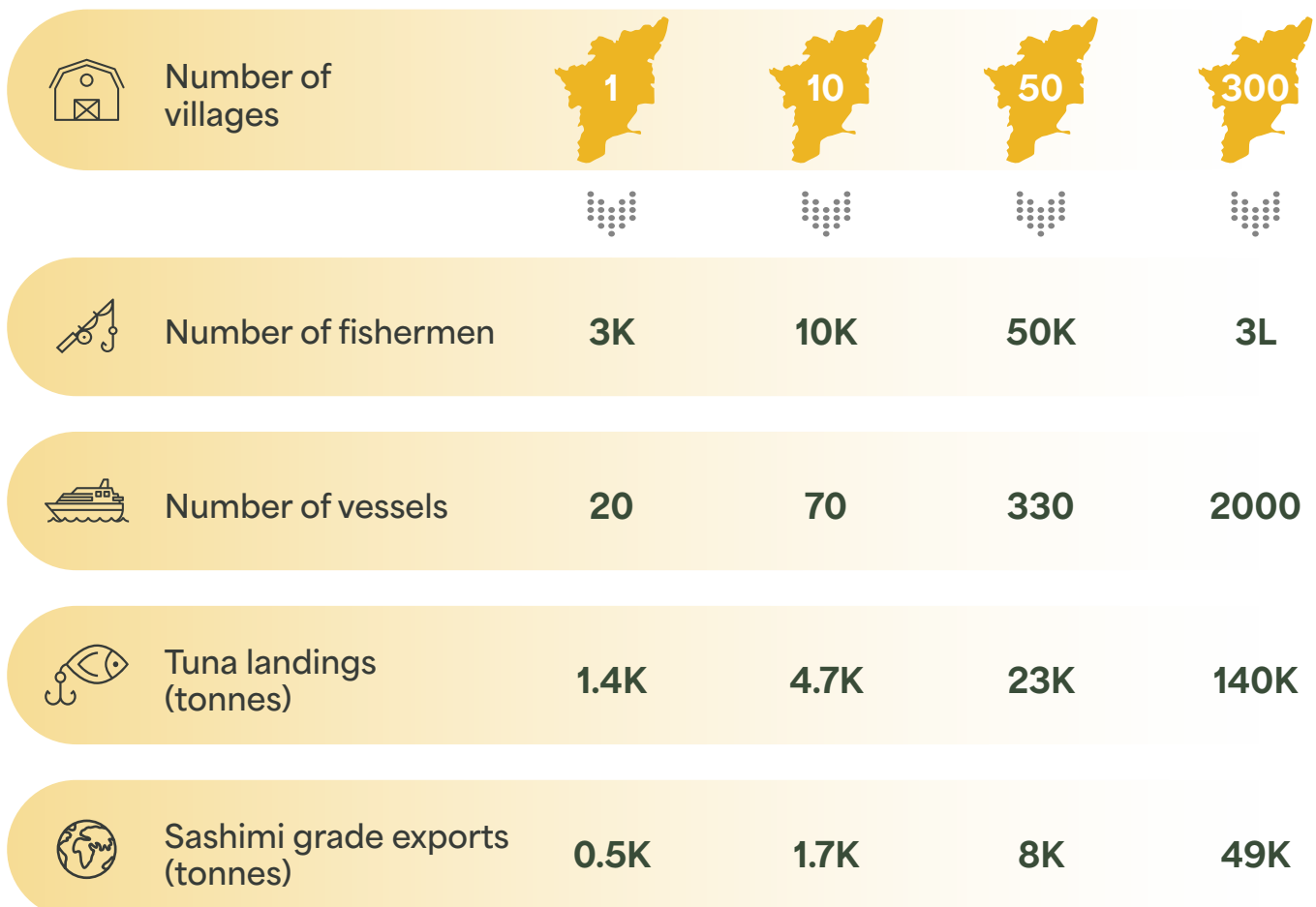


### Establish and refurbish key off-shore infrastructure

Landing centers for deep sea vessels, cold chain facilities through effective Public-Private Partnerships

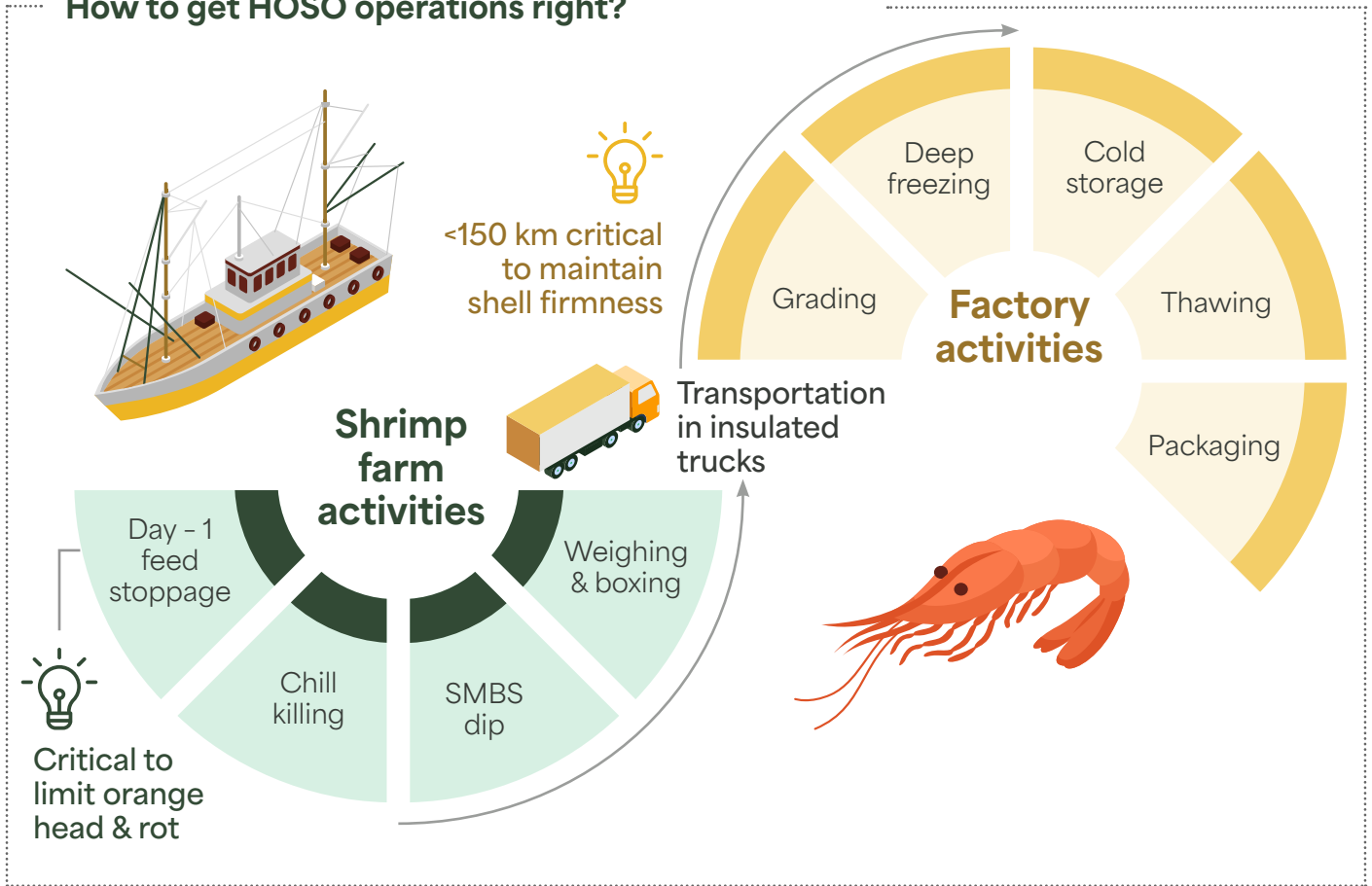
## Pilot and scale-up in phases

### Tune deep-sea fishing opportunity potential



## Head On Shell On (HOSO) Shrimp export hub of India

### How to get HOSO operations right?



### 3 key action areas to realize the potential



#### Ensure safety-net to sustain & attract new farmers

- By linking farm power costs & subsidy to market price realization
- Farm insurance for disease out-breaks

#### Plan scale-up of factory & farms with excellent connectivity

- Facilitate setting up of processing units which are within a 150 km radius of the farm for effective HOSO operations



#### Identify 55 kHa brackish and 40 kHa mariculture parcels for shrimp farms

- Create 3 clusters- Northern, Central, and Southern clusters with Chennai, Nagapattinam, and Tuticorin as cluster nodes

#### Attract 20-25 shrimp processing units across the 3 nodes with 50-100 MT capacity per day

- Earmark land parcels of 20-50 acres per unit in strategic locations with infrastructure to meet sustainable standards

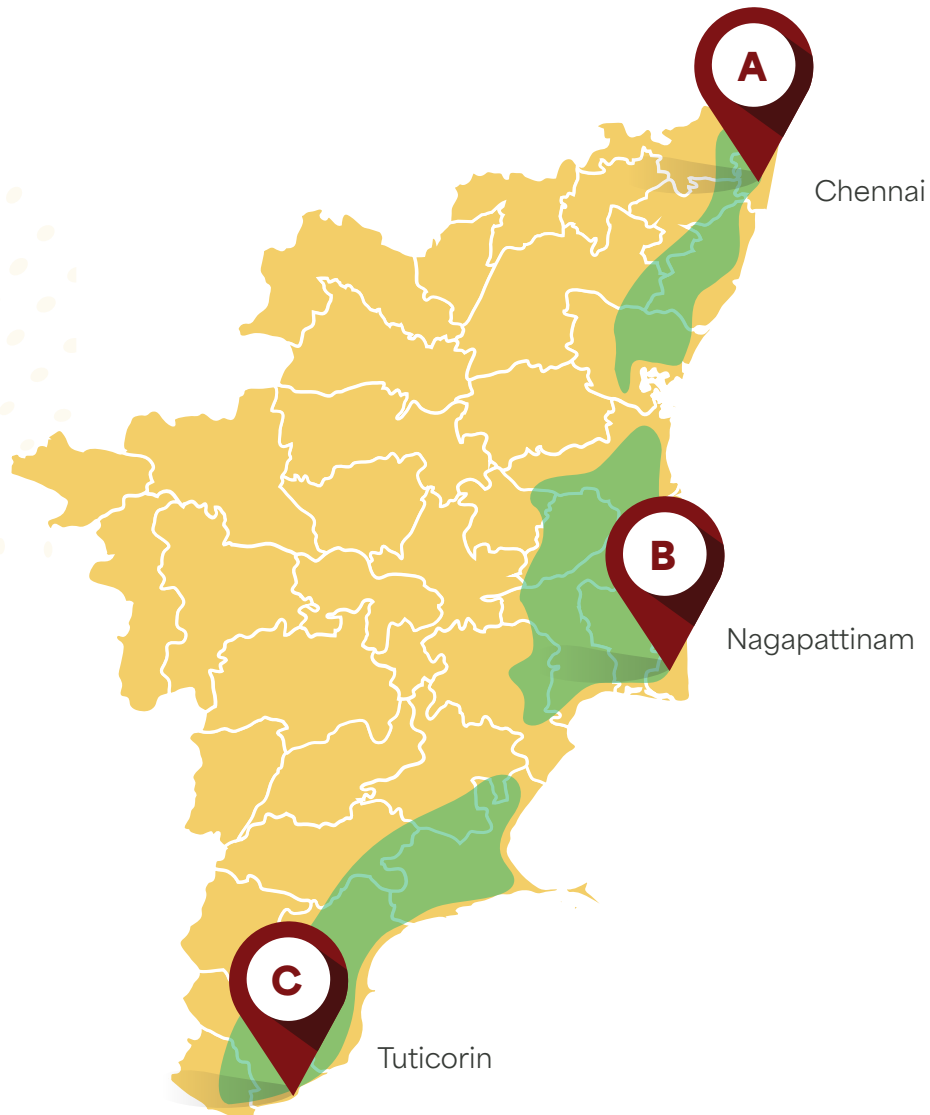


#### Incorporate sustainable farming practices to establish Tamil Nadu as the top choice for exports

- Shrimp farming regulations for water treatment, usage of prophylactic antibiotics, socially responsible labor norms, etc



## 3 potential clusters with anchor nodes identified to setup shrimp processing factories

**A**

### **NORTH-WESTERN CLUSTER**

Ennore to Marakkanam

**Node**  
Chennai

**Target Farm Area**  
~31 kHa

**B**

### **CENTRAL CLUSTER**

Cuddalore to Vedaranyam

**Node**  
Nagapattinam

**Target Farm Area**  
~48 kHa

**C**

### **SOUTHERN CLUSTER**

Ramanathapuram to Kanyakumari

**Node**  
Tuticorin

**Target Farm Area**  
~17 kHa

# Auto, EV & Mobility Solutions

Tamil Nadu is the automotive capital of India, producing a passenger vehicle every 20 seconds and a commercial vehicle every 90 seconds<sup>28</sup>. The State accounts for ~45% of India's auto exports and ~35% of auto component exports<sup>29</sup>.

With its strong starting point in auto, the State has naturally transcended to become the EV capital of India, with leading EV OEM players such as Ola, Ather, Simple, Ampere setting up their manufacturing base in the State and producing ~70% of electric 2-wheelers sold in India<sup>30</sup>.

As Tamil Nadu looks ahead, it can build on its current strengths to attract critical investments across the EV value chain, to kickstart a virtuous cycle of investments to further strengthen the ecosystem. Further, it can grow stronger in traditional pools (ICE) segment by capitalizing on the supply chain shifts observed due to the geo-political scenario.

Additionally, Tamil Nadu should look to position itself as the go-to destination for other mobility manufacturing viz. aerospace, railways, ships, and defense.

## Big bets to accelerate to \$1 Trillion



Leverage the State's geographical advantage enabling smoother flow of raw material supply through ports & proximity to demand nodes in neighboring states



Attract investments from specialized players & enable the vibrant MSME ecosystem to manufacture high-value components



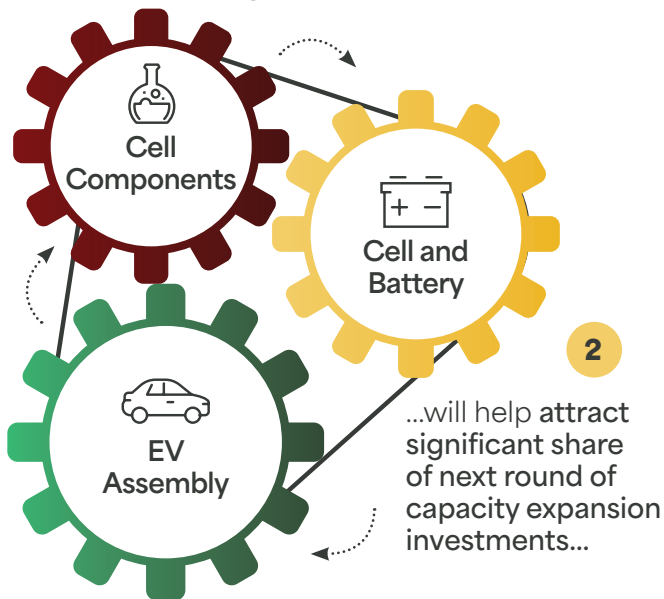
Extend the strong starting point to become a global export hub by capitalizing on global trade shifts as well as import substitution opportunities



## Spearhead cell component manufacturing

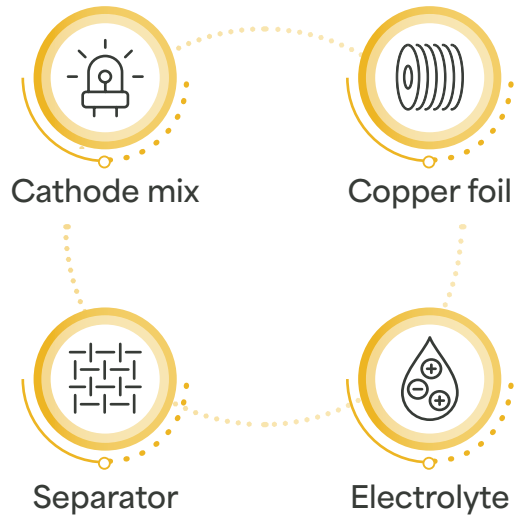
A robust cell components ecosystem will ensure that Tamil Nadu attracts the next wave of investments in cell manufacturing, battery & EV plants

- 1 Investing in developing a cell component manufacturing hub in Tamil Nadu...



- 3 ...inherent advantage will make Tamil Nadu the destination of choice for EV plants

### 4 key components for focus



### 2 key action areas

#### Ensure raw material availability

- Leverage graphite deposits, establish trade partnerships and state buying groups for key raw materials viz. Lithium, Cobalt, Nickel and Copper

#### Infrastructure & special policy

- Develop power infrastructure and policy framework customized for the sector

## Pioneer EVSE component manufacturing

### 5 priority components



DC chargers

- Rectifier
- Connector
- Controller



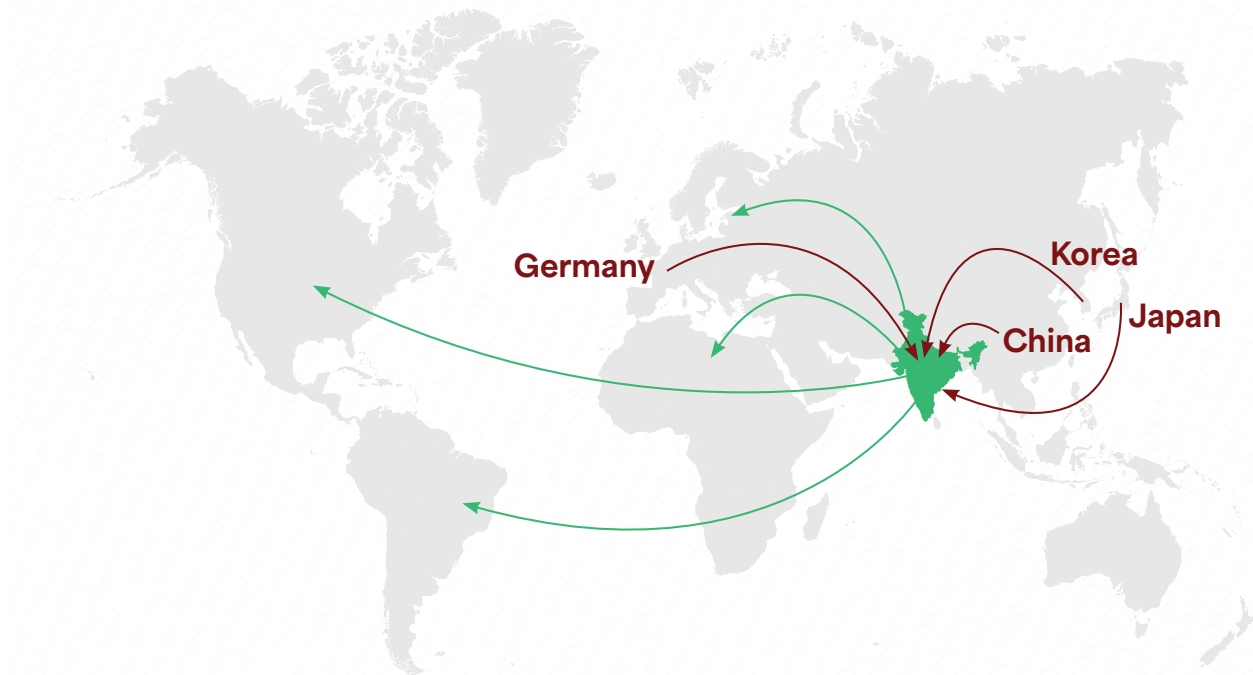
AC chargers

- Charger units
- Connector

### 2 key action areas

- Attract specialized power semiconductor players
- Enable scale with demand side interventions
  - Incentivize and promote local sourcing for EVSE manufacturers
  - Add local sourcing as qualification criteria for government buying

## Evolve as the auto component export hub for the world



### Import substitution

- Gearbox systems
- Steering wheel systems
- Brake systems
- Axles
- Wheels

### Export opportunity

- Brakes
- Steering wheel
- Suspension
- Airbags

## 4 key focus areas

### Earmarked land parcels

1000+ acres earmarked in Chennai-Hosur-Coimbatore dedicated to auto components

### Plug & play set-up

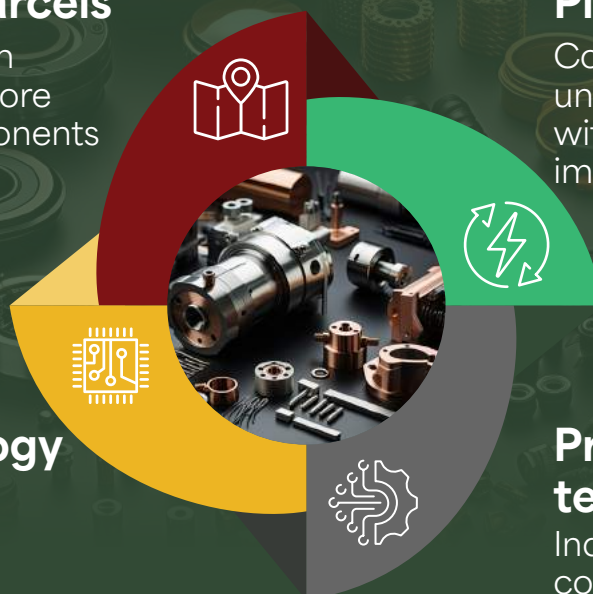
Connectivity infrastructure, uninterrupted power with back-up, water, and immediate approvals

### Facilitate technology partnerships

Incentives extended for strategic partnership, technology acquisitions, licensing, and JVs

### Promote indigenous technology

Industry-Academia collaboration for focus auto components and explore rebate on R&D expenses



# Electronics and Semiconductors

The electronics industry, including upstream (semiconductor value chain), midstream (component, design & EMS) & downstream (aftermarket), is expected to bring an incremental contribution of ~\$450 Bn by 2025<sup>31</sup>.

Tamil Nadu's electronics industry contributes to 1/3<sup>rd</sup> of India's electronics exports<sup>32</sup> and has a strong presence across segments. The State also has a strong starting point in Electronics Manufacturing Services (EMS), with the presence of major global and Indian players across mobiles, PCs, consumer electronics, automotive, industrial, networking, aerospace and defense sectors.

To recognize the sector's full potential, it is essential for the State to encourage investments in cutting-edge semiconductor manufacturing facilities, backward integrate to component manufacturing, focus on creating policies that incentivize the growth of local businesses to create an ecosystem in this sector, and develop a skilled workforce specialized in electronics and semiconductor technology.

## Big bets to accelerate to \$1 Trillion



Fabrication (FAB), Assembly-Testing-Marking-Packaging (ATMP) and Outsourced Semiconductor Assembly and Test (OSAT) in the upstream semiconductor value chain represent ~\$180 Bn opportunity<sup>33</sup>

With players looking at India, Tamil Nadu is well positioned to attract leading Integrated Device Manufacturers (IDMs), as well as FAB and ATMP/OSAT players, to set up anchor units in the State



The EMS market in India is expected to grow 10x+ over the next 8 years, from \$18-20 Bn in 2022 to \$200 Bn+ in 2030<sup>34</sup>

Tamil Nadu can capitalize on this by leveraging its strong starting point, driving value addition in the State and exploring locations beyond Chennai for manufacturing operations



## Frontier semiconductor ecosystem for India

### 3 action areas to attract FAB and ATMP/OSAT

#### Incentives

Customized incentives as part of Advanced electronics and Semiconductor policy, for players approved under the India Semiconductor Mission (ISM), for both FAB and ATMP/OSAT investment.

#### Best-in class infrastructure



##### Earmark land parcels



- Earmark land with low flood vulnerability, earthquake risk
- Vibration free & soil strength bearing capacity  $>101/m^3$



##### Ultra-pure water



- 24x7 uninterrupted 40-50 MLD water supply
- Wastewater treatment plant & Common Effluent Treatment Plant (CETP)



##### Uninterrupted power supply



- 24x7 uninterrupted power supply of 250 - 300 MW, 2 feeders
- 130/220 kV transmission line with minimal voltage & frequency variations; backup power plant of ~250 MW



##### Connectivity



- Bonded aircon facility at nearest airport for storage
- Connectivity to key value chain players across the globe



##### Other infrastructure



- Hazardous waste management of used photo resist, packaging materials, specialty gas cylinders, etc.
- Laying pipelines for natural gas delivery (5000  $m^3/hr$ ) at doorstep

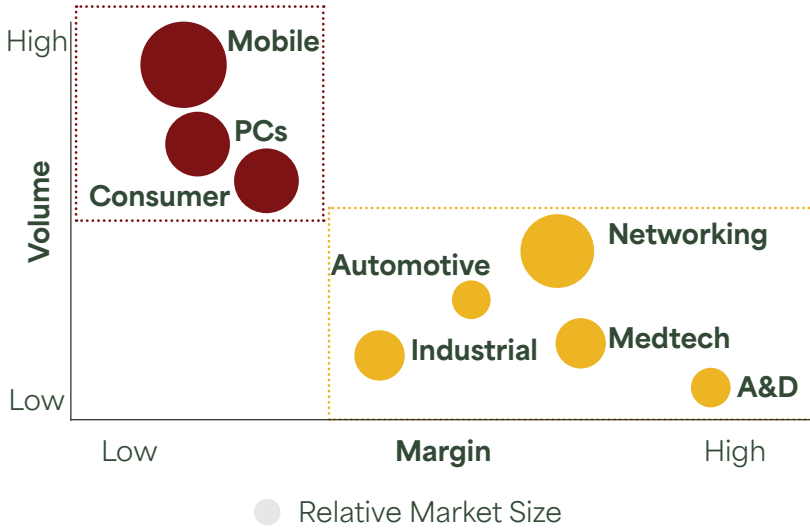
#### Industry ready workforce trained on 25+ skills

##### Select skills

- Process engineering
- Roadmap planning
- Device improvement
- Module assembly
- Equipment diagnostics
- Yield improvement
- Packaging
- Cost optimization
- Capacity planning
- Non-exhaustive machine operation

# Drive value addition & localization in EMS - focus beyond Chennai

## 2 potential plays in EMS



**High Volume Low Margin (HVLM)**

Drive more value addition / localization for mobile & laptop EMS ecosystem

**Low Volume High Margin (LVHM)**

Attract new EMS investments in LVHM - will automatically drive investments beyond Chennai

## 5 additional districts identified for electronics manufacturing

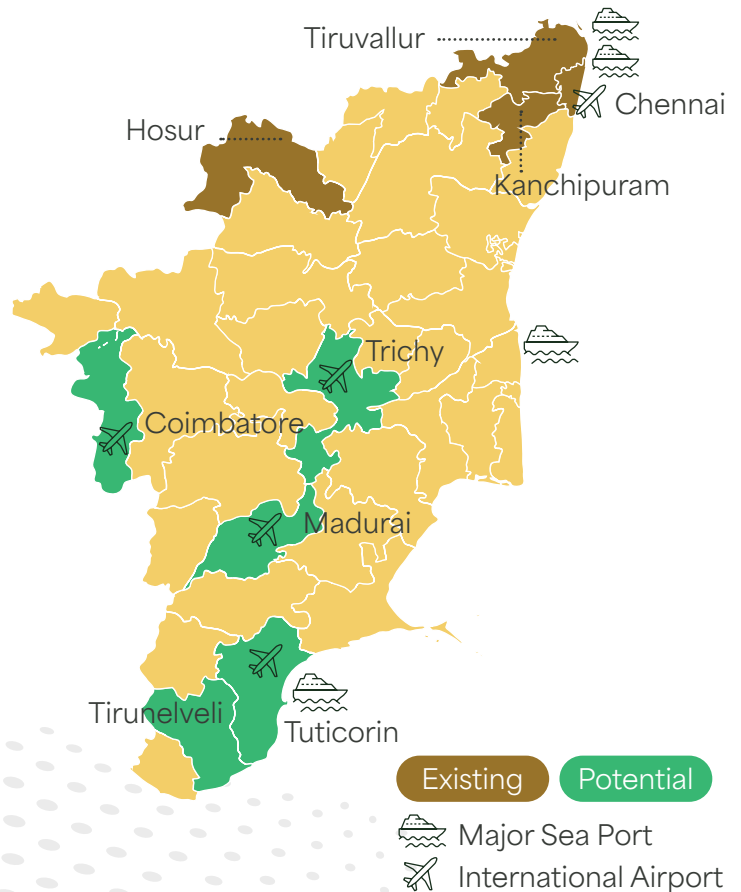
With excellent air, sea connectivity and sufficient labor availability

**For High Volume Low Margin (HVLM) investments**

50-100 acres land parcels with special focus in Chennai, Kancheepuram, Thiruvallur, Hosur, and Coimbatore

**For Low Volume High Margin (LVHM) investments**

30-50 acres land parcels with special focus in Trichy, Madurai, Tuticorin, and Tirunelveli



## Ready built factories across the Electronics Manufacturing Clusters (EMCs) to provide 10-12% additional NPV for EMS players



Reduce time for start of production by 2-3x



20+ building specifications customized for EMS Players

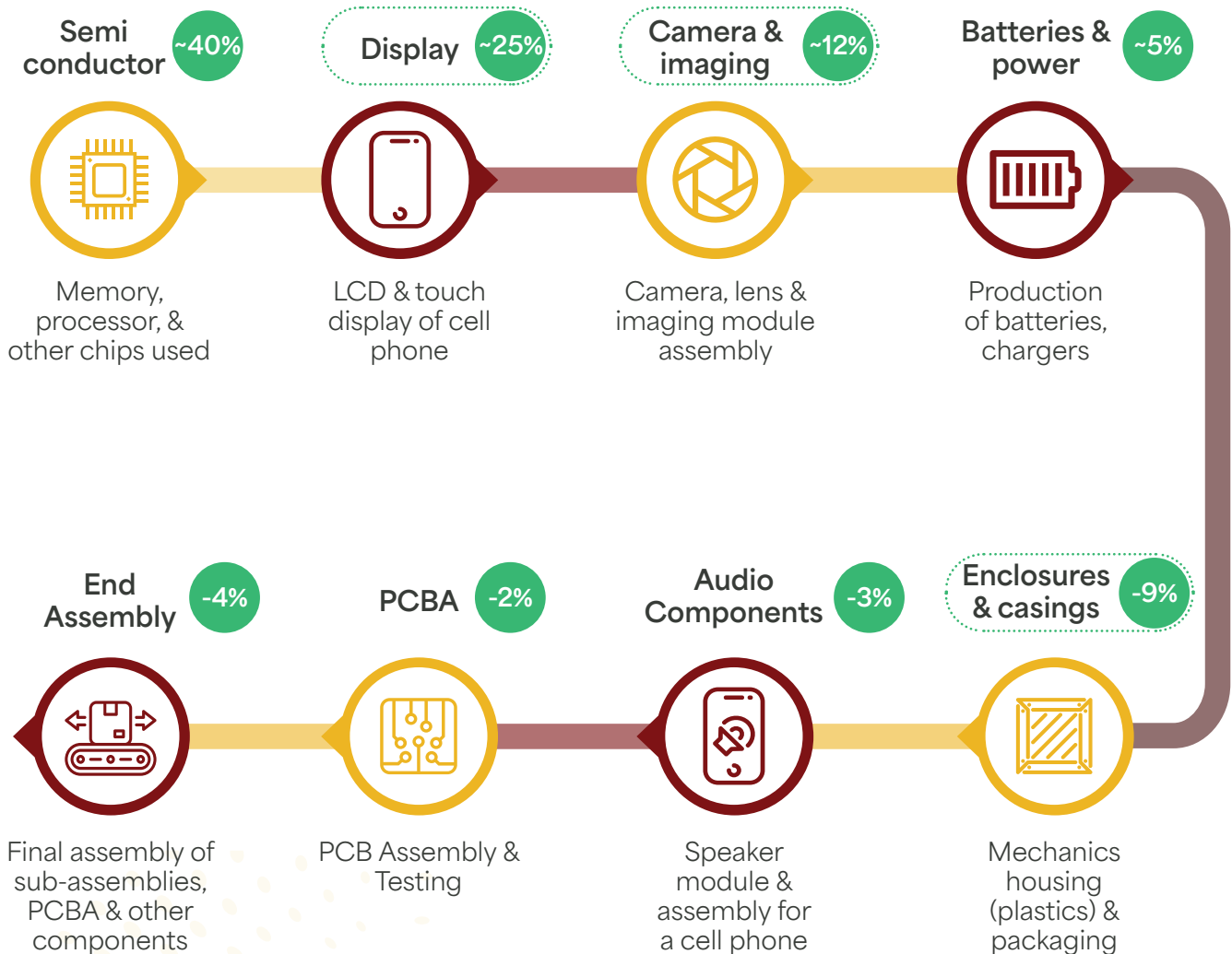


320-400k sq. ft. space for 16-20 lines HVLM set-up



80-120k sq. ft. space for 4-6 lines LVHM set-up

## On value addition, focus on **display, camera & imaging, enclosure & casings** in the near-medium term





# Chemicals

The global chemicals market is estimated at ~\$4.7 Trillion<sup>35</sup>, of which India holds ~4% share<sup>4</sup>. The Indian chemicals market is expected to reach ~\$380 Bn by 2030, growing at ~7% CAGR for the next 7 years<sup>36</sup>. This makes India the 6<sup>th</sup> largest chemicals market in the world and the 3<sup>rd</sup> largest in Asia<sup>4</sup>.

Tamil Nadu has a strong starting point in the chemicals sector, as the State contributes to ~5% of the country's chemical sector GVA<sup>4</sup>. It is also the largest contributor to India's dyes, pigments, paints, and varnishes production<sup>37</sup>. With the strong presence of key end-user industries like auto, textiles, electronics, and machinery, the State's chemicals demand is expected to grow significantly, thereby creating a strong opportunity for local production.

To bolster the sector, a policy can be introduced with a focus on providing impetus to priority opportunities by offering tailored incentives, as well as special incentives for product R&D and green feedstock utilization. Also, enhancing the ease of doing business is paramount and should be achieved by streamlining clearance processes.

## Big bets to accelerate to \$1 Trillion



- Forecasted to become a **\$1.1 Trillion market by 2047**<sup>38</sup>, the Indian petrochemical market will be driven by significant local & export demand
- The petrochemical sector exhibits a **GDP multiplier of ~2.6x** and an **employment multiplier of ~4.8x**<sup>39</sup>
- Local petrochemical production can provide cost efficiencies for industries and consumers



- Specialty chemicals is expected to become a **~\$65 Bn market by 2035**, growing at **~12% CAGR**<sup>50</sup>
- Specialty chemicals space is vast with **20+ segments**
- AgChem growth in India is **4-6x of global growth**<sup>44</sup>, potential to capitalize on CDMO opportunity
- **Leverage strength** in flavors & fragrance and nutraceuticals to attain leadership

## Sustainable petro-chem hub with a thrust on upstream & downstream products

**2-3**  
**Naphtha**  
**crackers**

To be established for domestic & export demand

With green Naphtha compatibility

Offer support to improve IRR by offering incentives and minimizing implementation risk

**150+**  
**Players**

Identified for reach-out to setup production units in Tamil Nadu

Potential chemical products identified for creating a personalized value proposition for the players

## Strategic play in specialty chemicals by leveraging strengths

AgChem

**15+**  
**Large players**

AgCDMO players identified for reach-outs

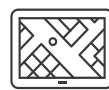
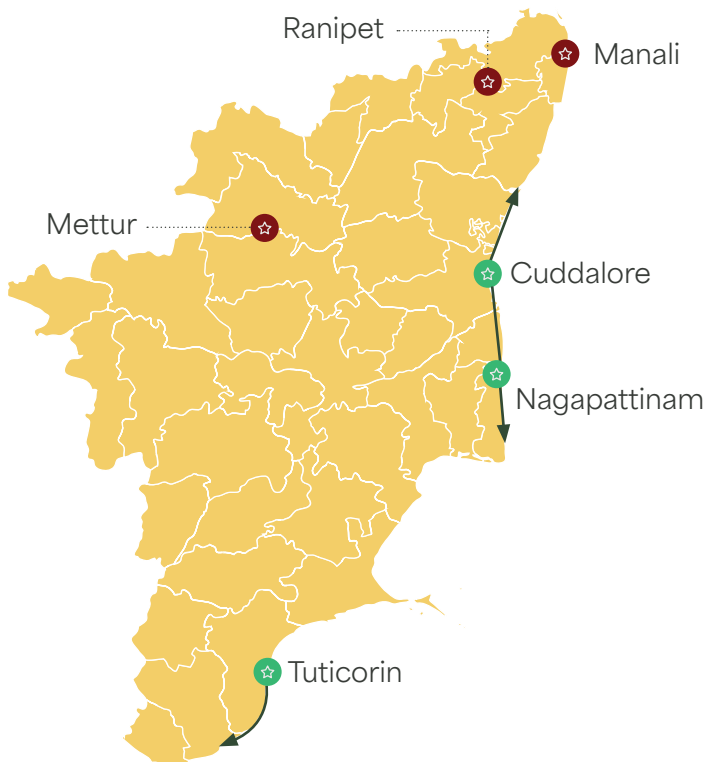
\$6.0-6.7 Bn opportunity with \$4.5-4.7 Bn untapped; Tamil Nadu to target 25% of untapped potential

F&F, Nutraceuticals

- Establish complexes in Madurai, Dindigul, and Mettupalayam
- Attract ingredient manufacturers and composition players to the complexes

## 4 focus areas for creating a thriving ecosystem

Consolidate 3 existing pet-chem clusters & develop at least 3 new clusters



**Zoned industrial lands**

**9-10k**  
**Acres**

of zoned industrial lands across 6 locations to be developed at affordable leasing prices



**Common infrastructure**

Industry specific infrastructure like boilers and pipelines to be built, with port connectivity



**Ease of doing business**

Methanol Policy & Tamil Nadu-Pollution Control Norms to be standardized in line with global/Indian best practices



**Attractive policy support**

Support across land, capital, tax, utilities

☆ Existing chemical complexes

☆ Potential locations for new chemical complexes

# Machinery

Machinery and capital goods is a wide market with 15+ segments including general purpose equipment, specialized equipment, industrial automation, industrial IT, hybrid manufacturing, etc., and 100+ sub segments. These segments span across the automotive, electronics, food & beverage, plastics, and textile sectors. The industrial automation segment has a higher concentration of large, global players due to the technical complexity and investment required, while the specialized equipment segment has a mix of large and niche players, and the general-purpose machinery market is more fragmented with a diverse range of companies.

Tamil Nadu is one of India's leading states for capital goods and machinery manufacturing. The State stands 3<sup>rd</sup> in the production of general and special purpose machinery, holds 2<sup>nd</sup> rank in the export of heavy engineering goods, and has a \$40+ Bn output from capital goods production<sup>40</sup>.

Given the shifting preferences of global brands for alternate manufacturing locations with lower factor cost of production, shorter lead time to end-markets, and presence of skilled labor, machinery manufacturing investments in India are expected to pick up in the future.

Tamil Nadu, with its strong presence of end use industries, can focus on attracting investments in this space while revitalizing the existing machinery clusters to scale new heights in this sector.

## Big bets to accelerate to \$1 Trillion



\$250 Bn<sup>41</sup> global market with strong end-use industry in Tamil Nadu

### 4 focus segments



Industrial robots



Plastic machinery



F&B machinery



Electronics assembly machinery



Encompassing manufacturing pumps, compressors, fluid power equipment, bearings, textile machinery, metal products, machining & coating, forging, pressing, stamping, steam generators, tanks and, reservoirs



## Investment hot-spot for machinery manufacturing

### 6 factors evaluated by investors while choosing location



Local supply chain of raw materials and component parts



Tamil Nadu has 100+ companies in precision manufacturing



Availability of engineering talent with requisite skills



Tamil Nadu has 700k+ workforce with required skillsets across focus segments<sup>42</sup>



Local market demand for machineries



Tamil Nadu's demand is driven by its large industrial base across segments



Low factor cost of production & total cost of manufacturing



For focus segments, Tamil Nadu's manufacturing cost is lower vs other manufacturing sites



Proximity to port providing easy access to export markets



Shipping from Tamil Nadu to global markets is cheaper than existing manufacturing sites



Tailored incentive schemes for investments



Robust policy with incentives for manufacturing, R&D, and skilling

### 3 action areas to realize the goal



Support home-grown companies within machinery component clusters to become suppliers to target players



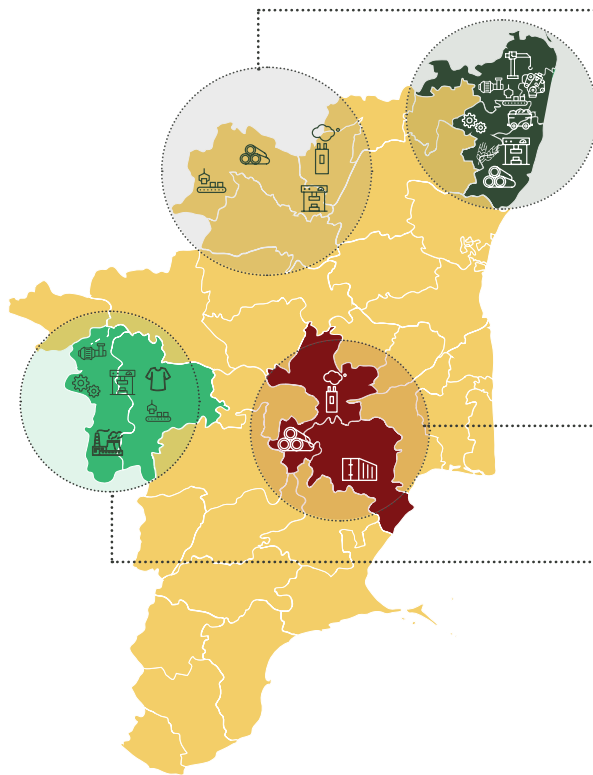
Attract ancillary companies supplying components and systems to co-invest with target players



Promote partnerships with academic institutes to create steady pipeline of industry ready talent

## Rejuvenate and reposition existing machinery clusters

### Key machineries & distinct characteristics of each cluster<sup>37</sup>



#### Vellore & Krishnagiri:

- 500+ mid/small units in fabricated metal products offering 15k+ jobs

#### Chennai cluster:

- 150+ units involved in general purpose machines employing ~50k people
- 120+ units in special purpose machines employing ~40k people
- 500+ mid/small units in fabricated metal products employing ~20k people

#### Trichy cluster:

- 400+ mid/small units in fabricated metal products offering 50k+ jobs

#### Coimbatore cluster:

- 300+ units involved in general purpose machines employing 1L+ jobs
- 100+ textile machinery manufacturers with 30k jobs
- 150+ fabricated metal products units with 8k+ jobs

#### General purpose



#### Special purpose



#### Fabricated metal products



## 3 key areas to revitalize clusters



### Cluster specific enhancement centers

- Facilitates market linkages
- Offer business counseling services for diversification
- Provide other value-added services for buyer relationships



### Technology know-how and adoption

- Setup expert panel to provide technical expertise for new opportunities
- Facilitate the adoption of emerging technologies
- Collaborate with local academia for research and innovation



### Credit availability & incentives

- Booster incentives for diversification, new technology and new market opportunity
- Offer credit products aligned to the cash cycle to ease investment and working capital

# Leather & Footwear

The footwear industry is growing globally, with the non-leather footwear industry surging rapidly alongside the traditionally strong leather footwear industry. The non-leather footwear market is poised to grow to \$400 Bn+, with ~43% of the market currently being serviced by trade<sup>43</sup>, and this is expected to grow even further.

Known as the 'Footwear capital of India', Tamil Nadu has a strong presence in the sector with ~26% of India's production & ~45% of exports<sup>37</sup>. In leather, Tamil Nadu is a hub for global brands viz. Louis Vuitton, Gucci, Clarks, and many more. On the non-leather front, the State has already made significant strides with MoUs of INR 6,000+ Cr signed with leading global players such as High Glory Footwear India (subsidiary of Taiwan-based Pou Chen Corp.) & Hong Fu, which is the maker of shoes for leading players like Nike, Puma, Vans, and Converse<sup>13</sup>.

With global footwear players looking to de-risk their supply chain concentration, Tamil Nadu can capitalize on its advantage over China & Vietnam in terms of labor and lead-time efficiencies, to become the go-to-choice for high quality footwear manufacturing.

## Tamil Nadu to become the most favored destination in Asia

### 5 bold moves to capture and realize the opportunity



#### Unlock 20%+ productivity

Factory-partner led onsite skill institutes and incentivizing low-cost automations



#### Showcase 15-20 locations

6000+ acres of land for the development of 15-20 footwear parks in districts with stable labor pool and quick port access



#### Promote women participation

Incentivize 'township like' facilities by investors viz. creches, schools, housing



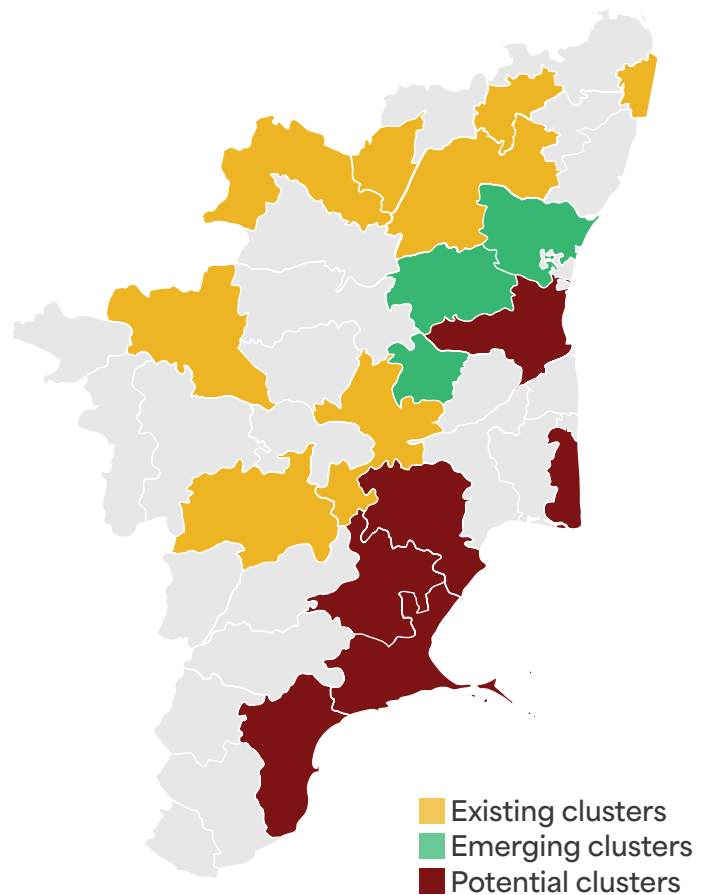
#### Fast tracking start of production

Provide ready build factories which can help reduce the time for start of production by 6-12 months



#### Drive ease of operations

Set up rapid response teams for the quick resolution of issues



**6 potential districts**  
for 15-20 non-leather footwear clusters



# Textiles & Apparels

The global textiles & apparels market is predominantly serviced by trade (~50%)<sup>45</sup>, offering an attractive opportunity to service the export market. Apparel is the largest segment with ~58% share in global trade, and has the potential to become ~\$500 Bn market by 2027<sup>45</sup>.

Tamil Nadu is the leading state in India in the textiles & apparels sector. The State accounts for 1/3<sup>rd</sup> of India's textile business<sup>29</sup> (including apparel, home textiles, and technical textiles), and hence, is aptly called the 'Textile valley of India'. It has a strong presence in all the sub-sectors of the industry viz., spinning, weaving, processing, knitwear, apparel, and garmenting.

Leveraging its strengths across the skilled workforce, the existing ecosystem, and the strong buyer relationships, the State can capitalize on the potential of the sector to emerge as a 'Global Hub' for the ever-evolving world of fashion & fabric.

As Tamil Nadu aspires to become a trillion dollar economy, textiles as a sector should focus on capturing a significant share of the trade market, move to high value-add products, enable scale for players, revitalize existing clusters, create new clusters, pioneer technical textiles & Man-made Fibers (MMF), and promote sustainability practices.

## Big bets to accelerate to \$1 Trillion



Tamil Nadu should aim to capture a significant share in value-added textiles, capitalizing on global trade shifts, with apparel as the primary focus

### Focus categories

-  Tops
-  Bottoms
-  Jackets
-  Pullovers
-  Baby garments



With deep-rooted expertise in textiles, combined with a large end-use industry base, Tamil Nadu should target to become a dominant player in technical textiles market

### Focus categories

-  Mobiltech
-  Indutech
-  Meditech
-  Protech
-  Hometech

## Export epicenter of value-added textiles

### 3 focus areas to capture and realize the opportunity



#### Establish 3-4 vertically integrated and environmentally sustainable mega textile clusters

Enabling efficiencies of cost and scale for the development of the ecosystem, while reducing lead time to the retailers



#### Cluster-based skilling for enhanced labor productivity

Facilitate private training providers to address skilling needs in partnership with brands, retailers, machinery manufacturers, and textile units



#### Targeted investment attraction across the value chain

400+ companies identified across archetypes, to be specifically targeted for bringing investment to the State



### The vision for Tamil Nadu's mega textile clusters

#### Zoning to accommodate ecosystem players, ensuring 65-80% self-sufficiency within clusters

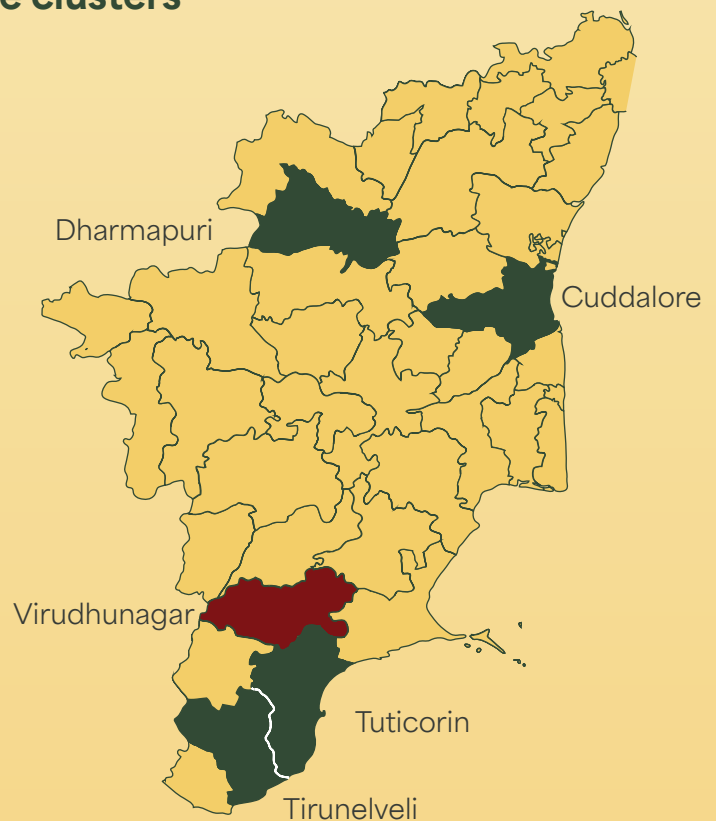
Exclusive zones for players across the value chain and ancillary activities. Specially earmarked areas for packaging and logistics players

#### Best-in class infrastructure with special focus on sustainable and ethical compliance

Core infrastructure; ready build factories; common facilities for water, waste water, recycled water, and waste management; skill development center; residential, commercial, and social infrastructure

#### In-house common services, certification, and branding

Product development, testing and quality control infrastructure, quality certification, etc.



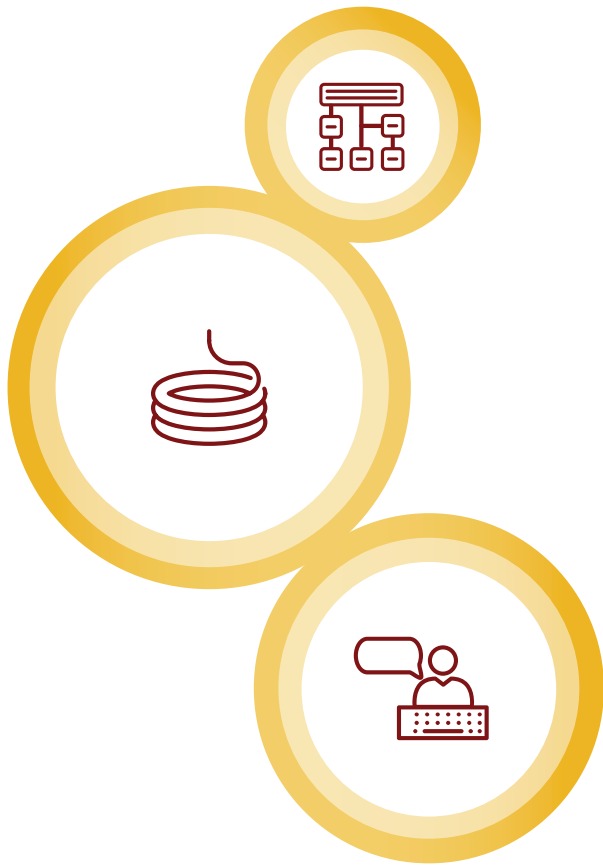
■ In Progress

■ Potential

## Pioneer technical textiles for India

### Promote diversification of traditional players to technical textiles

Setup 'Tamil Nadu Technical Textiles Mission' to facilitate traditional players across 3 areas



#### Help establish market linkages

- Understand demand of 5 focus categories and disseminate information
- Facilitate buyer-maker linkages

#### Coordinate Center of Excellence (CoE) facilitation

- Act as a one-stop shop to liaise with CoEs
- Assist in prototype testing & certification
- Assist in the identification of fiber compositions aligned with market demand

#### Offer manufacturing consultation

- Offer solutions to challenges faced by industry players through periodicals, bulletins & conferences for continuous improvement and expertise in manufacturing

## Undertake a targeted drive for attracting global and domestic investments

# 100+

**Target companies identified across 5 key focus sub-sectors for investment outreach and facilitation**

Craft and communicate a personalized strong value proposition to potential players to attract substantial investments in the State





# Tourism

Tourism is one of the fastest-growing economic sectors globally, and has one of the highest GDP-Investment ratio & job multipliers. Described as 'Tamil Nadu: where stories never end', the State has a rich variety of tourist attractions to cater to tourists of varied tastes. Tamil Nadu boasts of ~33k<sup>46</sup> ancient temples including world-renowned Meenakshi temple, as well as rich heritage sites including Thanjavur, Ariyalur, Mahabalipuram. The State is also home to 5 UNESCO world heritage sites & 412 ASI monuments<sup>47</sup>. Further, it has a ~1,000 km<sup>18</sup> coastal line with pristine beaches, as well as ecotourism & wildlife sites such as Nilgiri Biosphere, Gulf of Mannar & Guindy National Park.

To propel growth in the sector, Tamil Nadu has undertaken an array of initiatives recently. The first ever Tourism Policy was launched in 2023. It aims to attract INR 20,000 Cr investments over the next 5 years, employ 25 Lakh people & skill 3 Lakh people<sup>48</sup>. Additionally, new special guidelines for adventure tourism, caravan tourism, camping sites & homestays were released.

As Tamil Nadu aspires to become a \$1 Trillion economy, it should aim to position itself globally as a unique destination, focusing on attracting high-value, long-stay & high-spending tourists. Central to this should be the creation of memorable experiences, leveraging the State's diverse historic, natural, & cultural assets, while emphasizing on sustainable tourism. It should look at integrating local communities into the tourism value chain, creating employment opportunities, & encouraging private investment & FDI. Further, Tamil Nadu should harness the full potential of technology & data across the value chain.



## 6 key focus areas

- 1 Theme-based tourism circuits**  
 Superior product offering to increase the length of stay and spend per day of tourist
- 2 Destination Management Committee**  
 Accountability, ownership, and empowerment to develop and maintain the destination
- 3 Amplify promotion & marketing**  
 Targeted, multi-pronged & comprehensive institutional marketing strategy & strategic partnerships
- 4 Tamil Nadu Institute of Travel & Tourism Studies**  
 One-stop for skilling & training needs across the tourism value chain
- 5 Single window clearance & shelf of projects**  
 For increased private participation
- 6 Digital & data analytics hub**  
 Facilitate targeted & data-led decision-making for government actions

## 6 key interventions for the tourism sector



### Theme-based tourism circuits

## 20+ circuits

- Circuits identified with high-footfall regions as nodes, across 10+ themes viz. adventure, coastal, culture & heritage, spiritual, wellness, pilgrimage, eco-tourism



### Destination Management Committee

- Setup DMC under the District Collector's leadership, to undertake the destination's development, maintenance and management, with involvement of private stakeholders



### Amplify promotion & marketing

## 30-35% of tourism budget

- State to focus spending on promotion and marketing
- Leverage Union Government schemes and private funds for infrastructure development



### Tamil Nadu Institute of Travel & Tourism Studies

- To cultivate competent & responsible personnel to drive sustainable growth of the State's tourism sector
- To feature interactive classrooms, training halls, hostels, and research centers



### Single window clearance & shelf of projects

- One-stop single window clearance for tourism projects
- Investment ideas on tourism for the list of 20+ circuits
- Availability of land banks for tourism development



### Digital & data analytics hub

- Leverage big data for targeted marketing & decision-making
- Boost tourist engagement with AI tools & live travel suggestions
- Track the progress of initiatives using a dedicated KPI dashboard

# SOUTHERN CLUSTER ECO TRAIL



Example of a theme-based tourist circuit is outlined above. Similar circuits are proposed to be developed across the State to harness their potential.







# IT & GCC

The global IT industry, comprising of IT software, IT services & ITeS (BPO/BPS), was valued at ~\$2.6 Trillion in 2022, with India holding ~12% share at \$300 Bn<sup>49</sup>.

The IT landscape is being reshaped by the rise of emerging technologies like IoT, AI, & AR/VR, with their share in software predicted to jump from 78% to 87%<sup>56</sup>. Parallely, 'as-a-service' models, such as SaaS and PaaS, are surging as the fastest-growing IT segments. A significant shift is also observed in workplace dynamics with IT professionals adopting a work-from-home approach, thereby reducing near term demand for traditional office spaces and spotlighting Tier 1 and 2 cities as potential hubs.

Another emerging phenomenon is the Global Capability Centers (GCCs). India is poised to be a global hub for GCCs with ~50% of global share & metro cities becoming primary hosts for ~97% of GCCs<sup>51</sup>.

Tamil Nadu is the 4<sup>th</sup> largest state in India in terms of IT/ITeS output, with ~9% share<sup>52</sup>. The State has a strong starting point with the presence of 4 IT/ITES hubs in addition to Chennai, and with new IT parks being constructed in Tier 1/2 cities<sup>13</sup>. Tamil Nadu also has a well-established GCC ecosystem with 160+ GCCs present (~10% of India)<sup>51</sup>. Chennai is also the best choice for SaaS start-ups looking for lean scale-up due to its low opex & talent cost vs other peers, along with high-quality life for talent.

As Tamil Nadu embarks on the \$1 Trillion vision, it is critical to offer the best ecosystem in terms of infrastructure and talent pool, in line with the emerging trends in the sector, to chart the next wave of growth.

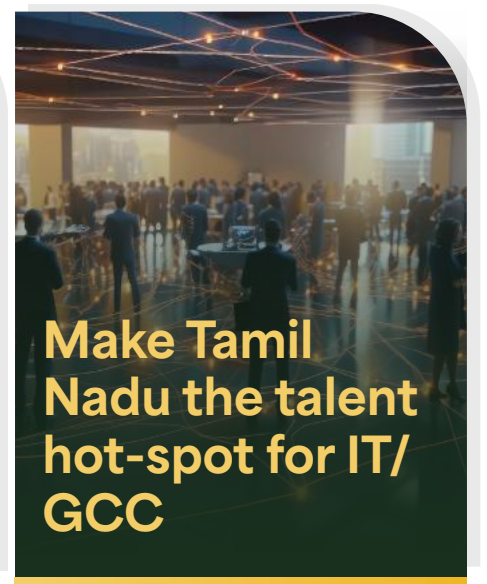
## 3 key interventions



Be the go-to investment choice by catering to the emerging needs of all stakeholders



To meet the growing demand for high-quality offices, as well as residential, retail, and entertainment spaces



As top-tier talent is the catalyst for innovation, driving quality and service delivery

## Offer the best proposition for the employer & employee

### Value Proposition of Chennai

~1.2x

Cheaper opex vs other metros<sup>53</sup>

~8%

Lowest attrition rate<sup>54</sup>

3<sup>rd</sup>

Best city for quality of life<sup>55</sup>

~1.2x

Low cost of living vs other metros<sup>55</sup>

## Develop IT/GCC corridors across 10 cities

- 1 Greater Chennai
- 2 Coimbatore
- 3 Trichy
- 4 Madurai
- 5 Salem
- 6 Erode
- 7 Tiruppur
- 8 Vellore
- 9 Tirunelveli
- 10 Hosur

## Potential corridors for Chennai

### Outer Ring Road - Vandalur - Minjur

Key industrial corridor; access to the current airport



### Quadrilateral (Kanchi - SPDR - MM Nagar - MWC)

Key industrial corridor; access to the new airport

■ Potential corridors for development ■ Existing corridors

## Make Tamil Nadu the talent hot-spot for IT/GCC



### Retain talent

Attract investments to further create lucrative opportunities in the State for local talent, particularly mid-senior level



### Attract talent

Critical to develop 15-20 cosmopolitan hubs (80-200 acres each) across corridors with mixed-use amenities



# 4 key bets for Tamil Nadu in IT sector

## Big Bets



**SaaS capital  
of the world**

**1**



**GCC epicenter  
of the world**

**2**



**Go-to-choice  
for Tier 1/2 IT  
expansion**

**3**



**Leading  
data center  
hub in India**

**4**

## Why this opportunity?

Fastest-growing sub-segment (24% CAGR)<sup>56</sup> in the Indian IT industry

GCC market expected to double by FY30, adding \$45 Bn revenue<sup>51</sup>

Anticipated \$60 Bn revenue from Tier 1 & Tier 2 IT services by FY30<sup>57</sup>

Data centers projected to grow at ~20% CAGR, a \$4.5 Bn<sup>58</sup> opportunity

## Why Tamil Nadu is well positioned?

Chennai's low operational costs (5-10%) are ideal for SaaS scalability; its high engineer output (2 lakhs engineers/year) is a significant advantage

With 160+ GCCs<sup>51</sup>, Tamil Nadu's knowledge and industry know-how make it a prime location for more GCCs

Tamil Nadu's urbanization and availability of female talent place it at an advantage for Tier 1/2 expansion

Tamil Nadu offers superior policies, fiber availability, DC hub proximity, and reliable power

## What more can Tamil Nadu do?

- Cultivate connections with N-1 leaders for early SaaS start-up access
  - Establish Grade A incubation centers
  - Organize global events to enhance Tamil Nadu brand and promote SaaS collaborations
- 
- Adopt a two-fold approach targeting F2000 companies & Indian GCC expansion
  - Leverage Tamil Nadu's industrial foundation for knowledge immersions
  - Foster innovation through Tamil Nadu CoEs
- 
- Link the strength of Tamil Nadu's Tier 1/2 cities to IT/GCC sub-sectors
  - Share success stories from cities like Coimbatore and Trichy
  - Offer competitive office space and other infrastructure across Tier 1/2 cities
- 
- Allocate 3-5 acre lands with infrastructure for 20 MW in Chennai metropolitan area
  - Enhance the power infrastructure
  - Streamline approval processes

# Animation & VFX

Animation & VFX globally was a ~\$160 Bn market in 2023, and is expected to become a \$300 Bn market by 2030, growing at ~9% CAGR<sup>74</sup>. The Indian VFX & Animation market was ~\$1 Bn in 2022 and is poised to become a ~\$6 Bn market by 2030, growing above 20% every year<sup>59</sup>. The sector has a significant job creation potential and is expected to create ~20 Lakh jobs in India by 2030<sup>75</sup>.

Tamil Nadu is well positioned in the Indian VFX & animation industry, with a significant presence of Tier 3-4 studios & freelancers, especially in Chennai. As the market is expected to grow, Tamil Nadu can aim to potentially capture upto ~20% of the Indian market, which can lead to the creation of ~2 Lakh jobs.

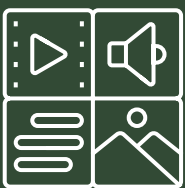
## 3 key intervention areas



### Tamil Nadu AVGC policy

### Attract 2-3 global VFX studios as anchor units

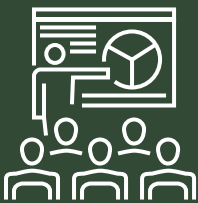
The Animation, Visual Effects, Gaming and Comic (AVGC) policy framework should incentivize domestic and international production via grants, employee benefits, incentives for patent registration, marketing, and promotion



### Common facilities & development fund

### Create an ecosystem of 60-80 home-grown studios

Common facilities for advanced motion capture tools, post-production labs, high-end workstations, dedicated Venture Fund, and market development fund



### Integrated curriculum & finishing school

### Create 2 Lakh skilled workforce in AVGC sector

Digital Arts Centers in 300-400 colleges, finishing school with world-class trainers, and annual hackathons to mobilize talent



# Infrastructure

---

Infrastructure is the bedrock of Tamil Nadu's economy and pivotal to achieving its ambitious \$1 Trillion vision. Building modern, resilient, and sustainable infrastructure is paramount to ensuring the State's continued growth. Planning infrastructure investments in advance is vital, given their scale and long gestation in implementation, to facilitate economic progress. Tamil Nadu boasts of impressive connectivity with an extensive transport network, India's second-largest coastline, 3 of the country's 13 major ports, and the 3<sup>rd</sup> highest installed power capacity<sup>60</sup>. To further stimulate the economy, the State must continue investing in sectors like energy, transportation, water, sanitation, and housing. This involves broadening the focus on clean energy and undertaking transportation enhancements, while employing urban planning techniques that embrace resilience, waste management and efficient water usage.

However, infrastructure decisions should transcend economic growth. They need to bolster long-term productivity and remain resilient against global challenges, including climate change and pandemics, to ensure consistent economic output and protect investor trust. Investments should also be geographically balanced, incorporate local perspectives, and emphasize inclusivity and sustainability, while avoiding environmental or social repercussions. Strategies like relocating vulnerable populations, protecting existing structures, optimizing disaster response, climate proofing new infrastructure, and continuous environmental monitoring are essential.

In light of the evolving challenges and opportunities, it is essential to embrace a comprehensive infrastructure approach, emphasizing environmental sustainability and inclusivity. This will not only strengthen Tamil Nadu's economic landscape, but also secure its future against unforeseen challenges.



## Key initiatives across 10 key tenets of infrastructure to enable a \$1 Trillion economy



### Energy

- Enhance installed capacity to meet rising demand of the growing economy
- 3 focus areas: Green energy, competitive power cost, energy efficiency



### Road & road transport

- Expand 3 corridor networks totaling ~1000 km
- Upgrade ~450 km stretches in 2 corridors; expand ~1000 km of spur roads
- Explore Toll, Operate, Transfer (TOT), Variable Build Operate Transfer (VBOT) and Hybrid annuity (HAM) models of PPP for road projects
- Expand bus fleet strength to 15-25k in near-mid term, induct e-buses & other fuels



### Airports

- Expedite the development of second airport to Chennai & air-cargo augmentation across airports
- Expand passenger capacity across Coimbatore, Madurai, Trichy, Tuticorin, Salem



### Seaports

- Accelerate capacity augmentation to meet FY 30 demand
- Improve Quay crane productivity, yard performance & evacuation efficiency
- Explore development of Ennore as a mega-port to cater to the East coast catchment
- Explore development of Nagapatinam minor port



### Rail & rail transport

- Explore development of Chennai-Bengaluru dedicated RFC, connectivity to Katupalli & Cuddalore port
- Explore development of semi high-speed regional rail connectivity, upto 150km from Chennai
- Explore the development of High Speed Rail (HSR) corridors for Tamil Nadu



### Water

- Demand of 170-180 BLD, with industry demand at 8-10 BLD and domestic demand at 10-12 BLD
- Increase wastewater treatment infrastructure with recycling alternatives; encourage TTRO plants for industrial use
- Drive renewable energy powered de-salination for cost efficiencies



### Waste management

- Limit waste generation at source with regulation & monitoring
- Promote waste segregation with incentives & technology
- Improve waste collection coverage with technology & citizen engagement
- Maximize recovery from waste with regulation & infrastructure



### Housing

- 10 Mn+ new houses required across economical, mid-range, and premium housing
- Unlock hurdles on land utilization, develop appropriate financial products for different income groups, and increase productivity



### Land

- Undertake land pooling for development & de-bottleneck construction



### Urban planning

- 8 principles of urban planning strategy for cities of Tamil Nadu
  - City plan, compacity, land management & monitoring
  - Regulation & codes, urban identity, regeneration
  - Livable communities and urban innovation

Note: Critical to evaluate each of the initiatives with detailed techno-economic feasibility studies

# Energy





# Road and road transport

## 3 key focus areas

### Corridor network



**1500 km**  
across

Develop / expand 3 corridor networks of ~1000km

- Chennai - Coimbatore
- Coimbatore - Hosur
- Coimbatore - Karikal

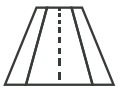
Upgrade ~450km stretches in 2 corridors

- Coimbatore - Tuticorin
  - Kumarapalayam - Madurai
- Chennai - Kanyakumari
  - Chennai - Tindivanam
  - Samayapuram - Viralimalai
  - Melur - Tirumanagalam
  - Tirunelveli - Kanyakumari



**5**  
Corridors

### Spur connectivity



Across **90**  
state highways

### Bus fleet & electrification



- Enhance bus fleet to meet new and replacement demand
- Electrify the fleet in gross cost contract model

# Airports

## 3 key focus areas



### Expedite second airport to Chennai

To meet the region's passenger and cargo demand



### Expedite the announced expansions of air cargo

To meet the catchment air-cargo demand

- 8k MT - Coimbatore
- 6k MT - Trichy
- 3k MT - Madurai



### Passenger capacity augmentation above planned expansion

To meet the catchment passenger demand

- Coimbatore, Madurai, Trichy, Tuticorin & Salem

# Seaports

## 3 key focus areas



### Accelerate augmentation of planned capacity

- Kamarajar port: Expedite coal, POL & container handling capacity
- V.O. Chidambaranar port: Expedite container handling capacity, mechanization



### Enhance container terminal efficiency

- Enhance Quay Crane productivity
  - Automation, dual cycling, twin-lift ratio
- Boost yard performance management
  - Skilling, equipment upgrade
- Improve evacuation efficiency
  - Automation, gate appointment



### Evaluate Ennore as mega port

- Explore land availability to create sustainable industrial ecosystem
- Explore effective hinterland connectivity to facilitate best-in-class evacuation

# Rail and rail transport

## 3 key focus areas



### Enhance freight connectivity

- Explore Chennai - Bengaluru dedicated rail freight
- Evaluate rail connectivity to Katupalli & Cuddalore ports
- Augment capacity of over utilized (>70%) corridors



### Explore the development of high speed rail corridors

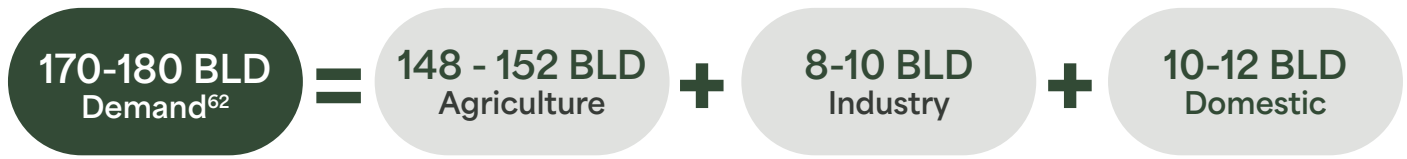
- Connect Chennai upto 150 km
  - Chennai - Vellore
  - Chennai - Villupuram
  - Chennai - Gummidipoondi
- Reduce travel time by ~50% on each of the routes



### Explore potential for high speed rail corridor

- Chennai - Kanyakumari Corridor
- Chennai - Coimbatore Corridor
- Reduce travel time by 60-70%

# Water



## 3 focus areas



### Increase freshwater availability & optimize its consumption

- Large scale ground water recharge programs & maximize rainwater absorption
- Incentivize water efficient technologies



### Improve waste-water treatment coverage

- Implement water treatment infrastructure and technologies to reuse water
- Interceptors and storage facilities to improve collection & transportation

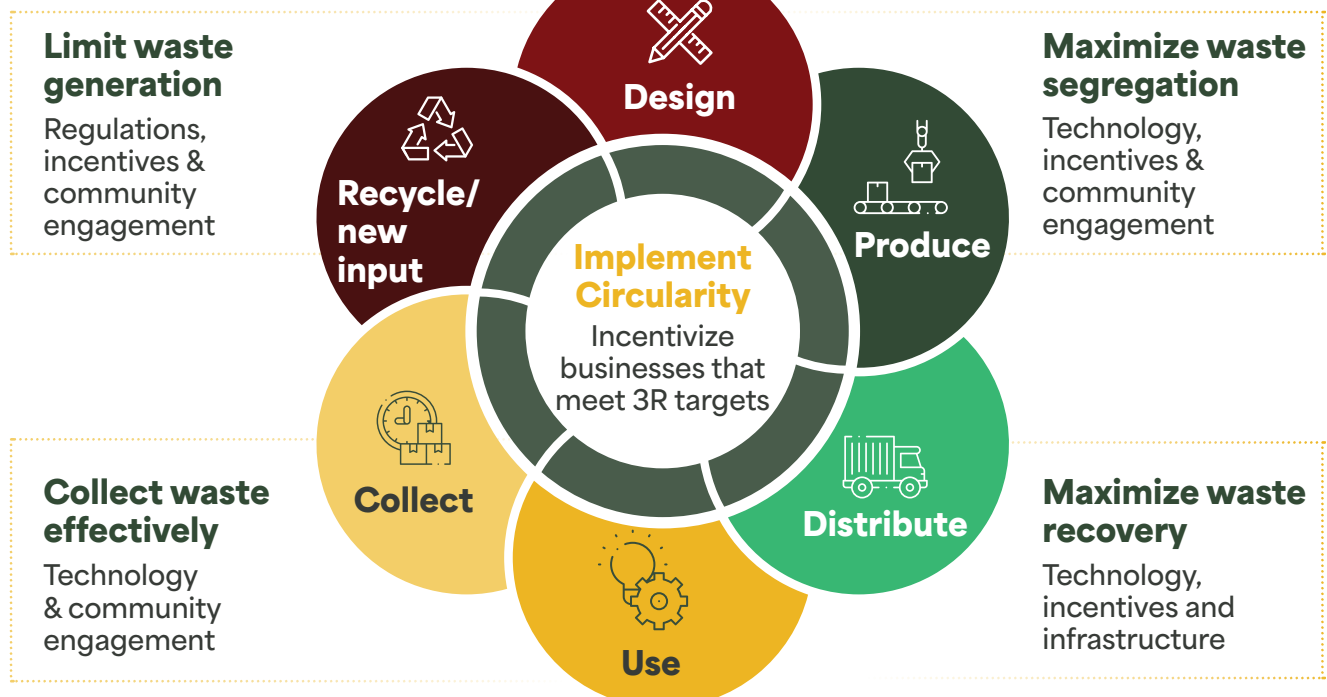


### Desalination with efficient cost economics

- Invest in renewable energy-based desalination to make it green & sustainable

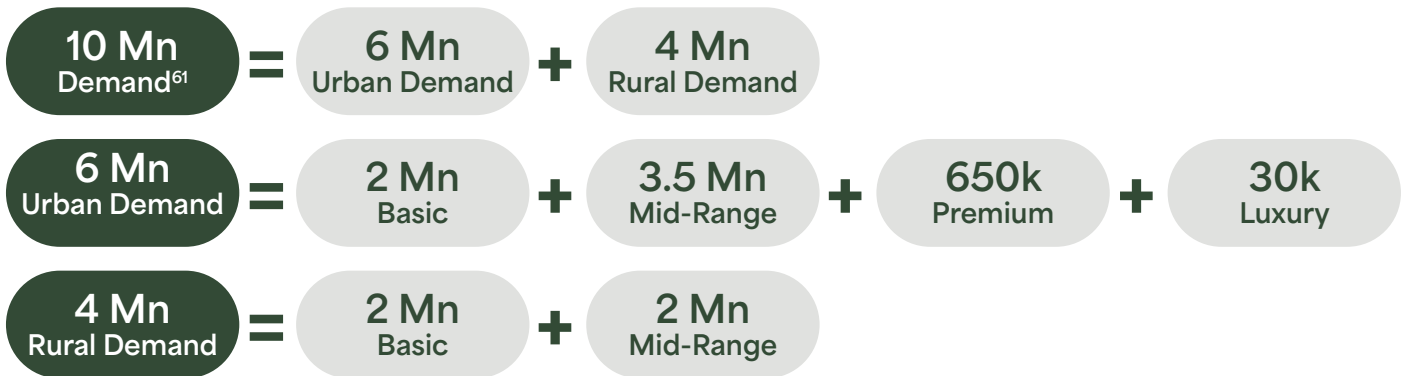
# Waste

## 5 key focus areas





# Housing



## 4 key focus areas



### Unlock land

By effective land management, accelerating development permissions



### Unlock finance

Bouquet of financing options to different markets, customized by type of housing



### Increase productivity

Availability of construction skills, construction materials & efficiency of construction methods



### Drive market resilience

With low entry barrier for new entrants & diverse nature of players

# Land pooling and construction

## Leverage land pooling to unlock the value of vacant & underdeveloped lands

4 models can be leveraged to develop urban areas, roads & highways, industrial parks, etc.



State Led



Public Private Partnership



Cooperative



Joint Venture

## 2 focus areas to de-bottleneck construction



### Design & engineering

Increase Floor Space Index (FSI) to allow more construction & increase property values



### Approvals & permits

Setup a single application for all state related compliances with centralized inspection system

# Urban planning and regeneration

## 8 critical elements of a comprehensive urban planning strategy



### City plan

Build cities which balance economic development, livability, and governance with community engagement to ensure sustainability & continuous monitoring for successful deployment



### Compacity

Create self-sufficient neighborhoods offering access to all basic needs like healthcare, recreation, shopping, etc., to residents and ensure seamless inter/intra city connectivity



### Land management & monitoring

Undertake data collection to help maintain accurate records & ensure effective land management, supported with the launch of e-portals to build transparency & efficiency in land use governance



### Regulation & codes

Create online platforms/ interactive tools outlining clear development regulations, including residential & non-residential design guidelines to help streamline efforts



### Livable communities

Deploy dedicated teams to ensure community engagement, while also leveraging public-private collaboration & coordination across departments to create meaningful spaces



### Urban identity

Invest in culture, tourism and sport for building robust urban identity, as well as attract tourism, economic opportunities & social upliftment



### Regeneration

Involve the private sector to ensure the successful implementation of modernization efforts, and engage with the community to make the regeneration scheme sustainable



### Urban innovation

Ensure digital inclusion and universal access for all citizens via open data, collaborative ecosystem, and data privacy to build truly digital cities





# Education and Skilling

---

Education and skilling are essential to the economic dynamism of any region. By increasing labor force participation and augmenting productivity, they prepare a workforce that is adept in innovation and agile in adapting to the ever-shifting global landscape. Apart from fueling economic expansion, they are also the cornerstones of societal advancement and the drivers of sustainable, inclusive prosperity. Thus, targeted education and skill-building is crucial for Tamil Nadu to achieve its \$1 Trillion economic vision.

As Tamil Nadu shapes its comprehensive education and skilling strategy, it is essential to ensure that the strategy is in synergy with the shifting dynamics of market demand, and inclusively caters to workers across a spectrum of skill levels. The State should aim to upskill 1 Cr people in its workforce towards high value jobs across organized sector, gig economy and entrepreneurship. It must target making the skill level of ~60% of Tamil Nadu's workforce equivalent to higher secondary qualification. This approach should encompass identifying innovative training methodologies, tailoring programs to meet industry-specific needs, and ensuring their effective delivery. Integrating continuous learning opportunities and fostering a culture of lifelong education are also key to maintaining workforce relevance in a changing economy.



## Upskill 1 Cr people in the workforce towards high value jobs

### 3 key focus areas

#### 1 Institutional framework to understand skill demand in the State

Dedicated team of

**30-40** Account managers across

**38** Districts, individually mapped to

**45000+** Companies to understand skill demand

#### 2 Requirements by skill families mapped across sectors

**100+**

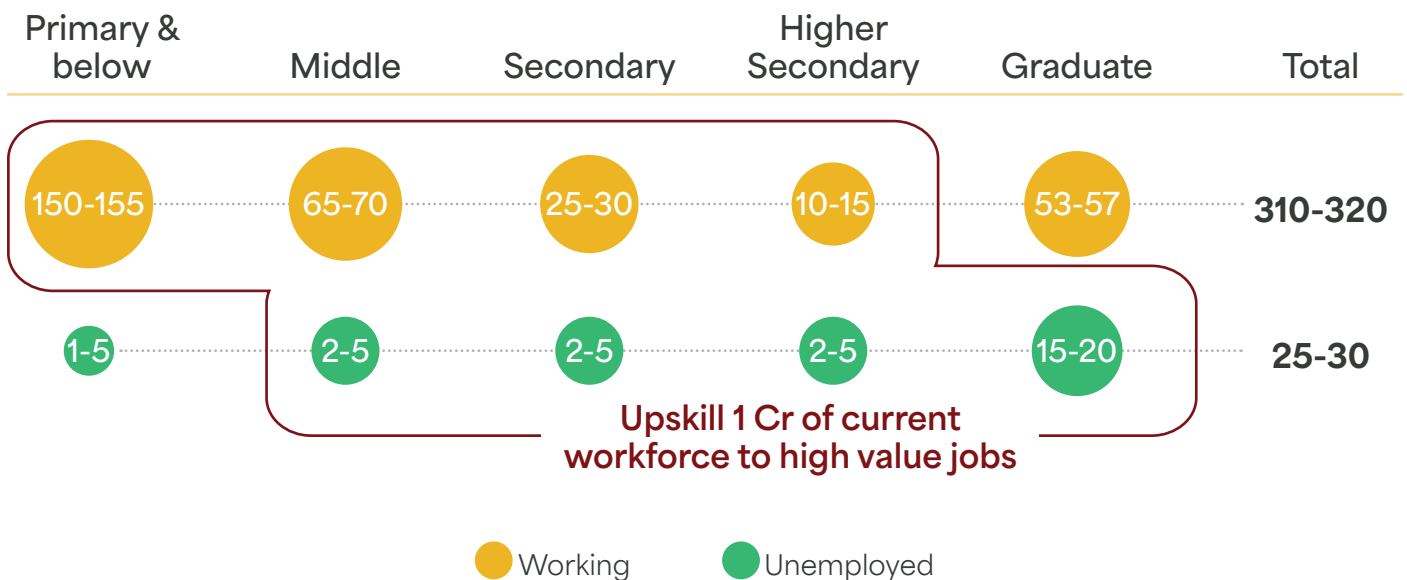
Skill families mapped across  
7 service sectors

**80+**

Skill families mapped across  
7 manufacturing sectors

#### 3 Targeted recruitment & mobilization basis the skill demand to move to high value jobs

Male + Female  
15-59 age population in Lakhs<sup>63</sup>



# Workforce participation

Labor force participation is vital for an economy as it directly influences its growth and stability. It leads to a larger workforce, enabling industries to fill skill gaps and fostering a healthy job market, which can drive innovation and efficiency.

Increasing women labor force participation is essential for robust economic growth and enhanced resilience. In addition to economic growth, it brings a wealth of diverse skills and perspectives, sparking innovation, and strengthening the economy's ability to weather market shifts. Women actively participating in the workforce can significantly boost household incomes and drive local economies.

Tamil Nadu is among the leading states in the country in terms of women workforce participation. Furthering strong female participation in the workforce would be vital as the State embarks on the \$1 Trillion goal. This is not just pivotal but transformative, paving the way for a more inclusive future. Tamil Nadu can target employing 60 Lakh women across 10+ sectors by implementing effective strategies to facilitate, empower & support women in their professional endeavors.

## 6 key focus areas for increasing women labor force participation



1

### Employment service center for women

- Dedicated facility to provide various job search related services to women



2

### Skilling & education programs for women

- Provide tailor made programs focused on employability and short-term training programs to upskill and reskill



3

### Returnship programs

- Short-term paid internships to enable women with career breaks to reintegrate into the workforce



4

### Incentivize the private sector

- Incentivize private companies to employ women
- Restrict the mention of gender as a criterion in job postings



5

### Affordable childcare/ eldercare facilities

- Establish a strong network of childcare & eldercare services
- Provide incentives to working women to make childcare affordable
- Institute strong paternity leave policies



6

### Run public service campaigns

- Normalize & promote women employment
- Increase awareness of incentives, facilities & programs for supporting working women



## Employment service center for women

### 6 key functions

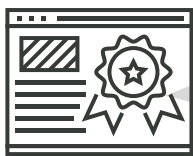


#### Offer career counseling

Offer advice on choosing a career basis on their interests, concerns, and reflections on work experience

#### Provide consultation on job search

Professional consultation on how to prepare for recruitment processes such as creating quality resumes, taking interviews, etc.

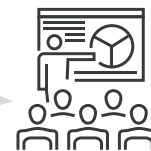


#### Extend recruitment information

Provide information regarding a wide range of elements including job listings, job descriptions, candidate specifications, application processes, and compensation

#### Organize seminars and training

Hold employment support seminars and trainings across topics such as interview preparation, resume building, business manners, and industry research



#### Offer vocational training guidance

Offer details on various vocational training options which equip individuals with the essential skills and knowledge to secure their desired job

#### Establish crèche space

Establish a dedicated 'Mothers' Corner' with a child-friendly space, designed to support mothers during their job search and recruitment preparation



# Healthcare

Tamil Nadu ranks among the top 3 states in India across various vital indicators of population health<sup>17</sup>. The State houses a robust public health system with ~11k primary, ~300 secondary, and 65 tertiary care medical institutions<sup>18</sup>. A model drug procurement and distribution system - the 'Chief Minister's Comprehensive Health Insurance Scheme (CMCHIS)', and the highest number of government medical colleges (36)<sup>18</sup> and hospitals are some of the key standouts. Tamil Nadu has also already achieved the SDGs for infant and maternal mortality, which were due in 2030<sup>17</sup>.

The State has been a pioneer in introducing door-to-door diagnosis for non-communicable diseases through a flagship program called 'Makkalai Thedi Maruthuvam', and a best-in-class program for tackling transport injuries called 'Innuyir Kaapoom-Nammai Kaakkum 48'.

As Tamil Nadu embarks on the \$1 Trillion journey, it is critical to have a comprehensive plan to tackle the disease burden impacting the working population today, as well as prepare for the future disease burden.

## Current disease burden

4 diseases in focus which are impacting the working age population, leading to an opportunity cost of ~\$22 Bn GDP in FY 22

**Mental health disorders**



**Cardiovascular diseases**



**Transport injuries**



**Musculoskeletal disorders**



## Future disease burden

3 areas of focus basis Tamil Nadu's demographics & global trends



**Ageing population diseases**



**Pandemic preparedness**



**Climate change diseases**

## Key initiatives & focus areas

### Current disease burden



#### Mental health disorders

- Launch mental health mission with a dedicated institutional structure for awareness, detection, and treatments
- Establish 3 Institutional Psychiatry institutions in Tamil Nadu, beyond Chennai
- Setup dedicated district level and taluk level mental health units
- Equip Primary Health Centres (PHCs) to treat mental health disorders and drive community psychiatry



#### Cardiovascular diseases

- Establish dedicated team to drive awareness and infrastructure planning for nutrition & wellness
- Strengthen the health infrastructure with increased number of specialists, advanced drug availability, and comprehensive insurance coverage



#### Transport injuries

- Explore setting up of a 'Road Safety Agency' with statutory powers to audit accidents & drive corrective measures
- Further strengthen the health infrastructure with additional front-line staff



#### Musculoskeletal disorders

- Draft guidelines on musculoskeletal disorders for employers, focusing on workplace practices

### Future disease burden



#### Ageing population diseases

- Increase the number of geriatricians in the State
- Upskill existing healthcare workers for palliative care
- Build a pipeline of long-term care workers



#### Pandemic preparedness

- Upskill all public health cadre for pandemic preparedness
- Build a robust pipeline of epidemiologists in the State



#### Climate change diseases

- Boost the strength of specialists linked to climate diseases - cardiologists, pulmonologists, oncologists, pathologists, infectious disease doctors, and epidemiologists



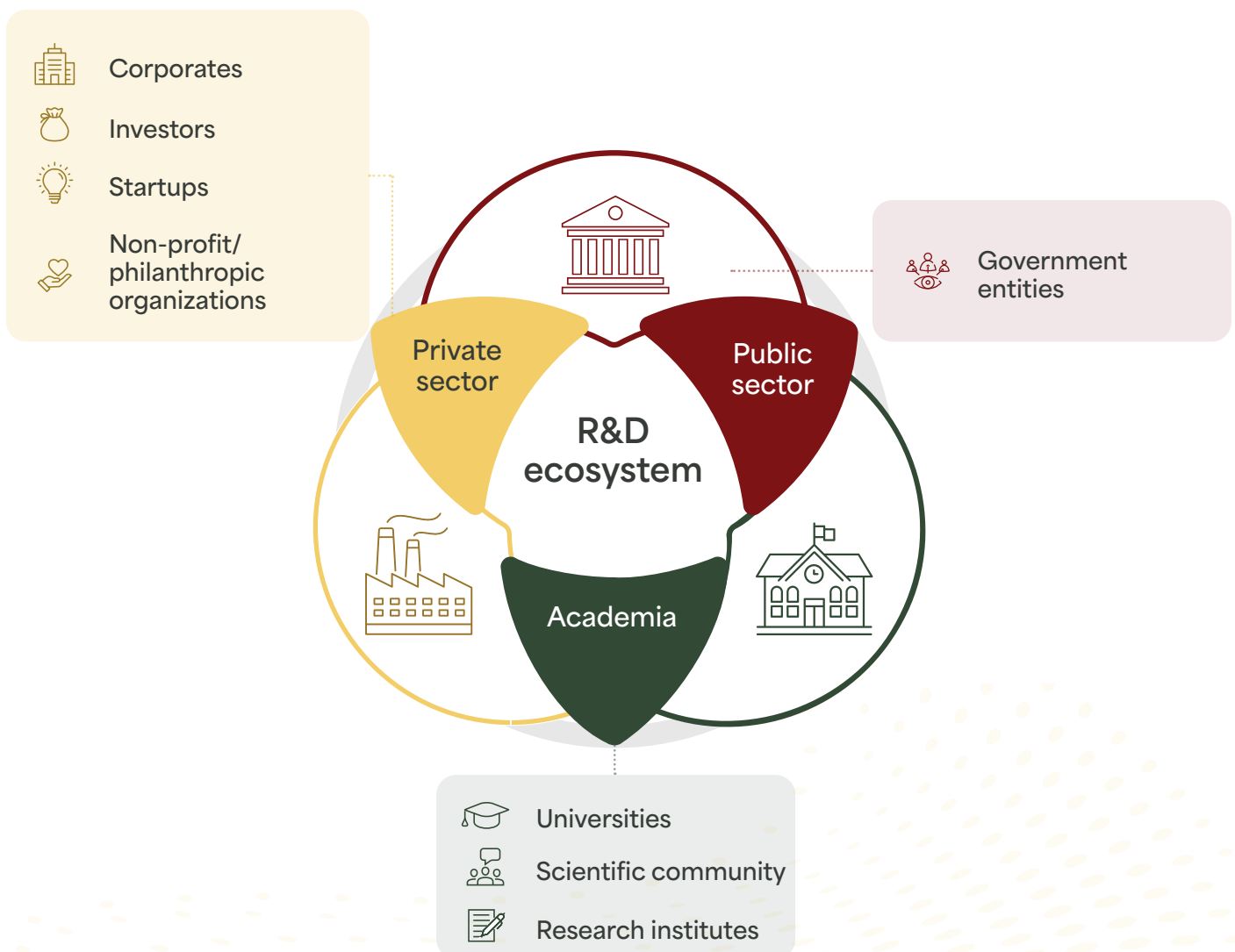
# R&D ecosystem

A robust R&D ecosystem propels innovation and fosters the creation of novel technologies, products, and services. These advancements catalyze economic growth by enhancing efficiency and productivity in diverse sectors, ranging from healthcare to manufacturing. By persistently nurturing innovation, states can adeptly navigate future global challenges.

Tamil Nadu has a leading position in the R&D landscape - it has the highest number of PhD holders in India with ~34k doctoral candidates, and the 3<sup>rd</sup> highest share of masters' students with ~4.6L enrolled students. The State is also home to several premier academic and research institutions such as IIT Madras, Anna University, NIT Trichy, and many more.

The State is well positioned to leverage its inherent strength in R&D and accelerate outcome-based R&D, which can lead to sustainable growth. It is essential to improve the synergy between academia and industry in order to bridge the gap from discovery to commercialization.

## Triple helix model where the Government, Academia, and the Private sector together shape a strong R&D ecosystem



## 6 focus areas



### Identify priority R&D areas

**28**

Emerging technology themes identified

**11**

Themes prioritized basis research capital, funding momentum & potential for market disruption



### Identify Academia & Industry partners

**340+**

Professors in Tamil Nadu identified across prioritized themes

**190+**

Collaborators identified across the globe for the prioritized themes



### Mobilize researchers for priority areas

- Incentives to nudge researchers to prioritized R&D areas
- Professional research support teams (research associates) to ease the process of R&D



### Set-up Technology Transfer Offices (TTOs)

- TTOs to be setup across universities to commercialize ideas in the market, develop and manage licensing agreements



### Build R&D infrastructure for priority areas

- Research centers and lab facilities to be built with collaboration among academia, private sector and public sector



### Facilitate international collaboration

- Leverage global networks to drive collaboration, commercialization of the research, and scale-up distribution internationally

# Startups

Startups are pivotal engines for economic transformation, propelling growth and igniting innovation. They not only open avenues for employment and technological advancements, but also address region-specific challenges, thereby laying the foundation for sustainable progress. Their vigor amplifies economic vitality and sketches a promising future for all.

Tamil Nadu has a vibrant startup ecosystem with the presence of 80+ incubators, the highest in India, and over 6000 startups<sup>64</sup>. The State has also witnessed a robust 37% CAGR in VC deals over the past 4 years<sup>64</sup>.

In order to further enhance this ecosystem, Tamil Nadu has rolled out multifaceted strategies in its 'Startup Policy 2023'. By diligently executing these strategies and offering support through select tactical measures, the State is well poised to emerge as the country's premier startup hub.

## 5 key focus areas



### Talent pool

Entrepreneur pool and skilled workforce with preference for startups



### Funding and Capital

Availability of capital for end-to-end financing of startups



### Favorable regulation

Legal & regulatory support for company establishment and ease of operations



### Startup support ecosystem

Presence of supporting organizations to assist startups



### Access to addressable markets

Easy accessibility to local and global markets



## Key interventions across the 5 key focus areas



### Talent pool

- Collaborate with universities for specialized startup courses & incubation cells
- Encourage entrepreneurship by hosting bootcamps, youth innovation challenges, rural entrepreneurship drives, programs for women-led startups, etc.
- Collaborate with startups to offer student internships
- Leverage the global Tamil diaspora for entrepreneur mentorship programs



### Funding and Capital

- Conduct regular events connecting startups with national and international investors
- Offer funding support: Partner with banks to offer collateral-free loans, encourage HNIs to invest, create platform for crowdfunding local innovations
- Offer incentives to startups addressing key challenges such as sustainability, rural challenges, etc.



### Favorable regulation

- Establish one-stop portal to simplify regulatory and compliance processes
- Offer fast-track licensing, simplify land acquisition for startup hubs & factories
- Conduct regulatory sandboxes to test products in a controlled environment



### Startup support ecosystem

- Facilitate partnerships between industries and startups
- Provide mentorship by experienced entrepreneurs
- Setup support infrastructure: Accelerators & incubators, prototyping labs, collaboration platforms, subsidized legal clinics, etc.



### Access to addressable markets

- Conduct State-backed expos, and offer dedicated space in international fairs
- Promote Government department sourcing from local startups
- Setup 'Market Access Cell' to support startups aiming for international markets
- Feature Tamil Nadu startups in local media, highlighting their products



# MSME

A strong MSME sector is the cornerstone of economic growth, driving job creation and fostering innovation. Its diverse contributions support economic inclusivity and regional development, making it crucial for a balanced and resilient economy.

In India, the MSME sector consists of approximately ~650 Lakh units (FY 21), spread across both manufacturing and service sectors<sup>65</sup>. The sector contributes to ~30% of the country's GDP<sup>65</sup>.

Tamil Nadu has one of the largest MSME bases in the country and is home to ~50 Lakh MSME units (FY 21)<sup>66</sup>. Of these, ~35% units are in the manufacturing sector<sup>66</sup>. MSMEs in the manufacturing sector contribute ~\$17 Bn, which is ~7% of the State's total GVA<sup>66</sup>. Also, ~70% of manufacturing MSMEs fall under the textiles and food processing areas<sup>66</sup>. Of the MSMEs in the service sector, nearly 55% fall under retail/wholesale trade and professional services categories<sup>66</sup>.

As the State aspires to become a \$1 Trillion economy, strengthening of MSMEs will be a crucial enabler in realizing its vision.

## 6 key focus areas for MSMEs

### State level interventions



#### Formalization

Improve awareness and ability of MSMEs to access government schemes



#### Financial inclusion

Improve access to formal credit for MSMEs by extending data for risk-assessment

### Sector - cluster level interventions



#### Value chain linkages

To provide efficiencies across the demand side and supply side



#### Capability development

To handhold and enable MSMEs to adapt to the latest developments



#### Skilled manpower availability

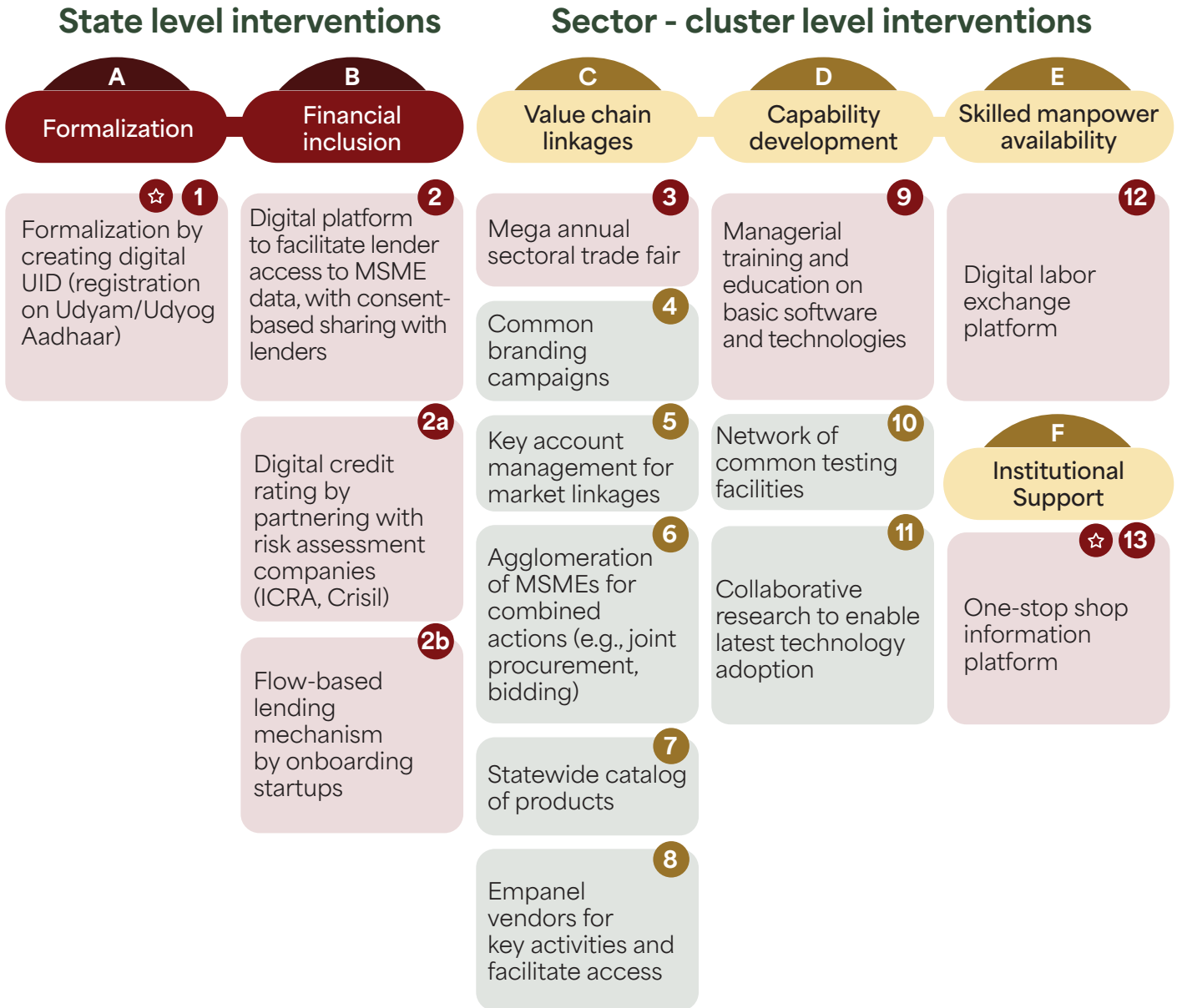
To improve access to high quality human capital for MSMEs



#### Institutional support

To act as a one-stop shop for MSME facilitation and support

# Key interventions for MSMEs across the focus areas



Execution of cluster level initiatives to be phased across clusters

*To be piloted in priority clusters*



# Logistics

Logistics forms the backbone of trade and commerce in an economy. An efficient logistics network enables swift and cost-effective movement of goods, both within and outside national borders, thereby providing a competitive edge in the global market.

As the State aspires to become a \$1 Trillion economy, a comprehensive approach towards the State logistics ecosystem is critical to ensure the right enabling environment.

## 7 key focus areas



## Key interventions in logistics sector to propel Tamil Nadu towards \$1 Trillion economy



### Connectivity

- Explore setup of dedicated rail freight corridors connecting industrial hubs
- Upgrade & maintain key road networks connecting industrial hubs
- Collaborate with local businesses for shared logistics solutions



### Warehousing & MMLP

- Launch Model Warehousing & MMLP Policy
  - Potential locations, basic infrastructure and value-added services to be provided in MMLPs should be detailed in the policy
  - Potential development models with role and support from the Government should also be detailed



### Order processing & administration

- Digitization, automation, and visual check to be leveraged for order processing, administration, and violation monitoring to minimize truck stoppages



### Logistics investment in the state

- Streamline licensing & approvals via single window, joint inspections, online processing
- Land acquisition facilitation via inventory of earmarked land, zoning facilitation & FSI relaxations
- Reformed construction permits process with clear design standards (including height, floor load, type of structure, etc.)



### Technology & data

- Use big data analytics for demand forecasting and route optimization
- Implement IoT solutions for real-time tracking and monitoring
- Employ simulation models for capacity planning and bottleneck identification, based on traffic patterns and commodity flows



### Skilling

- Introduce certification programs and skill development courses curated for the logistics sector
- Collaborate with industry for practical training and apprenticeship programs



### Governance

- Establish central logistics authority at the State level, and coordinate with district level committees for implementation
- Create task forces involving industry leaders for specific logistics challenges

# 06

**Climate conscious,  
regionally holistic, and  
socially inclusive strategy**

---





# Climate conscious growth

Climate and sustainability are pivotal for a resilient economy, protecting ecosystems, and securing long-term resources and environmental capital. Adopting sustainable practices opens new economic avenues, and enhances global competitiveness. In today's world, where environmental health directly impacts economic strength, sustainability transcends ecological necessity, emerging as a strategic economic decision.

Tamil Nadu has already taken significant steps towards a sustainable and climate conscious future, laying a strong foundation for transformative actions. Together with local communities, businesses, and organizations, the State should continue to spearhead innovative projects that prioritize climate forward sustainability.

## 160+

C&S initiatives identified across the high emitting sectors including energy, transport, infrastructure, manufacturing & agriculture

## 70+

C&S initiatives identified across other pivotal sectors

## Implementation framework



### Climate conscious growth

Interventions to be undertaken across sectors



Policy framework



Monitoring & evaluation



Sustainability in planning & development



Climate adaptation & resilience plan



Sustainability financing



Stakeholder engagement



Technology & innovation



Global collaborations

● Primary actions

● Enabling actions

## 8 key focus areas for implementation



### Policy framework

Detail a policy to mandate sustainable practices for industries to reduce GHG emissions. Incentivize renewable energy, sustainable mobility, and energy-efficient buildings



### Monitoring & evaluation

Establish & monitor sector-wise key performance indicators for sustainability goals with regular reporting, as well as periodic review and refresh of policies



### Sustainability in planning & development

Incorporate sustainability and circular economy as a design principle viz. material reuse, mandating 'Green Building' codes & investing in sustainable and resilient infrastructure



### Climate adaptation & resilience plan

Develop climate adaptation plans up to the local level, while enhancing the capacity for emergency response to climate-related disasters



### Sustainability financing

Leverage 'Green financing' & other economic avenues to support investments in sustainable projects



### Stakeholder engagement

Involve communities and stakeholders in the policy making processes, and conduct awareness campaigns for the public on sustainable practices



### Technology & innovation

Invest in R&D of sustainable technologies and practices, preferably via PPP, and encourage collaboration between Government, industry, and academia



### Global collaborations

Participate actively in international climate & sustainability agreements, and engage in international forums to exchange global best practices



Primary actions



Enabling actions



# Regionally holistic growth

Tamil Nadu has a diverse regional landscape, with an abundance of varied resources. It has consistently undertaken measures towards ensuring regionally holistic growth, which has led to an equitable growth across the State. This has resulted in ~50% of Tamil Nadu's GDP being derived from ~25% districts, while it is 10-15% for peer states<sup>6</sup>.

The emphasis on driving well-rounded growth across all districts is essential to ensure a balanced development model, mitigating rural-urban disparities and preventing overburdening of urban centers. The overall roadmap for achieving the \$1 Trillion vision also focuses on fostering regional specialties to build a resilient economy, where each region supports and complements the other.

Within the 'big bets' highlighted across the growth vectors and enablers, the vision has been set with the intent of leveraging the competitive advantage of each region, to create focus areas for economic development and provide a boost to investments. The following pages lay out the select few opportunities identified across each district, with a detailed regional strategy covered in the broader roadmap.





PURATCHI THALAIVAR DR. M.G. RAMACHANDRAN CENTRAL RAILWAY STATION



# NORTHERN REGION





## CHENNAI

- Fishing: Tamil Nadu's 3<sup>rd</sup> largest producer of fish, with ~16% contribution to State's output<sup>18</sup>. Well positioned for setting up tuna & shrimp processing facilities to unlock value-addition opportunities
- Auto & EV: Strong positioning with existing contribution of ~13% to Tamil Nadu's vehicle manufacturing GVA<sup>37</sup>. Allocated land for component manufacturing & regulatory support could spur growth
- Chemicals: Opportunity to further consolidate existing pet-chem cluster in Manali.
- Electronics: Potential to further consolidate existing clusters from good starting of 30+ factories & port connectivity to facilitate exports<sup>37</sup>.
- IT, R&D & GCC: Substantial growth potential due to strong starting position and various advantages, including lower opex, minimal attrition, lower cost of living & better quality of life
- Tourism: Attracts ~8% of Tamil Nadu's tourist footfall, with major attractions as beaches & temples<sup>18</sup>

## CUDDALORE

- Crops & agro-processing: Largest producer of vegetables in Tamil Nadu<sup>67</sup>. Ideal for setting up vegetable micro-parks
- Fishing: Potential for deep sea fishing & shrimp farming with its 50 km+ long shoreline<sup>72</sup>.
- Textiles: Equipped with port connectivity & ~7 Lakh semi-skilled/unskilled labor availability<sup>69</sup>. Ideal for new vertically integrated textile cluster setup
- Chemical: Potential for new pet-chem cluster with strong positioning of 35+ factories & coastline to facilitate exports<sup>37</sup>
- Non-leather footwear: Equipped with port access and cost-efficient labor force of ~7.3 Lakh unskilled/semi-skilled workers, well-suited for establishing footwear parks<sup>69</sup>
- Tourism: Attracts ~5% of Tamil Nadu's tourist footfall<sup>18</sup>. Major attractions: Beaches, monuments

## TIRUVALLUR

- Auto & EV: Strong positioning with 300+ factories contributing to ~11% of Tamil Nadu's vehicle manufacturing GVA<sup>37</sup>. Allocated land for component manufacturing & regulatory support could spur growth

- Electronics: Potential to further consolidate existing clusters from good starting of 20+ factories & port connectivity to facilitate exports<sup>37</sup>

## KANCHEEPURAM & CHENGALPATTU

- Fishing: Potential for deep sea fishing & shrimp farming with its 87 km+ long shoreline<sup>72</sup>
- Auto & EV: Leads Tamil Nadu's vehicle manufacturing with ~62% contribution across 400+ factories<sup>37</sup>. Allocated land for component manufacturing & regulatory support could spur growth
- Electronics: Spearheads Tamil Nadu's electronics sector with ~69% contribution, potential for further consolidation<sup>37</sup>
- Tourism: Attracts ~6% of Tamil Nadu's tourist footfall with Buddhist centers, temples as key attractions<sup>18</sup>

## VELLORE, RANIPET & TIRUPATHUR

- Textile: Good starting point with 40+ factories employing ~2k people<sup>37</sup>. Setting up vertically integrated textile clusters could unlock sector potential
- Chemicals: Opportunity to further consolidate existing pet-chem cluster in Ranipet

## TIRUVANNAMALAI

- Crops & agro-processing: Top producer of turmeric & chilli with 2.5 kHa+ area under spices cultivation<sup>67</sup>. Investment in and adoption of value-add infrastructure can spur growth
- Dairy: Contributes to 4%+ of Tamil Nadu's milk production<sup>68</sup>. Focus on building VADP capabilities

## VILLUPURAM & KALLAKURICHI

- Crops & agro-processing: Top producer of vegetables with 3.5 kHa+ area under cultivation<sup>67</sup>. Setting up vegetable micro-parks can help increase sector output
- Dairy: Contributes to 6%+ of Tamil Nadu's milk production<sup>68</sup>. Focus on building VADP capabilities
- Non-leather footwear: Port access and substantial labor force of ~5.4 lakh unskilled & semi-skilled workers, make the district well-suited for establishing footwear parks<sup>69</sup>



## DINDIGUL

- Crops & agro-processing: Tamil Nadu's 3<sup>rd</sup> largest producer of chilli and significant producer of moringa & flowers<sup>67</sup>. Adoption of value-add infrastructure and setting up vegetable micro-parks can spur growth
- Tourism: Attracts ~5% of Tamil Nadu's tourists and has hill stations, temples as key attractions<sup>18</sup>

## SALEM

- Crops & agro-processing: Tamil Nadu's 3<sup>rd</sup> largest producer of turmeric with ~17% share & has ~9% share in flowers<sup>67</sup>. Investment in and adoption of value-add infrastructure can spur growth
- Dairy: Tamil Nadu's largest producer of milk with ~9% contribution<sup>68</sup>. Focus on building VADP capabilities
- Chemicals: Potential to setup new pet-chem cluster, with strong starting point of 40+ factories and presence of end-use industries<sup>37</sup>
- IT, R&D & GCC: 6<sup>th</sup> largest district for Information and communication related services with 1300+ establishments<sup>70</sup>. Development of corridors can ensure office space availability

## ERODE

- Crops & agro-processing: Tamil Nadu's largest producer of banana, 2<sup>nd</sup> largest producer of turmeric, and significant vegetable producer<sup>67</sup>. Adoption of value-added activities can spur growth
- Dairy: Contributes to 4%+ of Tamil Nadu's milk production<sup>68</sup>. Focus on building VADP capabilities

## TIRUPPUR

- Crops & agro-processing: Tamil Nadu's 2<sup>nd</sup> largest producer of coconuts & significant moringa producer<sup>67</sup>. Opportunity for setting up integrated processing units for coconut and adopting value-addition activities for moringa
- Dairy: Contributes to 4%+ of Tamil Nadu's milk production<sup>68</sup>. Focus on building VADP capabilities
- Textile: Spearheads Tamil Nadu's textile industry, contributing over 50% to the sector's GVA<sup>37</sup>. Enabling skilling & incorporating sustainability practices can further boost the sector's output

## COIMBATORE

- Crops & agro-processing: Largest producer of coconuts in Tamil Nadu<sup>67</sup>. Ideal for establishing integrated processing units to increase price realization
- Dairy: Contributes to 5%+ of Tamil Nadu's milk production<sup>68</sup>. Focus on building VADP capabilities
- Auto & EV: Potential to develop EV & auto clusters, leveraging the existing base of 120+ factories and scope for expansion in auto component & EVSE component manufacturing<sup>37</sup>
- Machinery: Industrial powerhouse with 750+ machinery factories contributing ~34% to Tamil Nadu's machinery & equipment GVA<sup>37</sup>. Potential to create a machinery manufacturing hub
- Electronics: Opportunity for strengthening electronics manufacturing clusters by leveraging a solid foundation of 20+ factories, air connectivity & strong labor force of ~13 Lakh<sup>73</sup>
- IT, R&D & GCC: Leading destination for IT services with robust foothold in the sector (6-10% of Tamil Nadu's IT/GCC GVA), abundance of talent & added advantage of air connectivity<sup>57</sup>
- Tourism: Attracts ~4% of Tamil Nadu's tourist footfall, with major attractions as hill stations, temples<sup>18</sup>



## NILGIRIS

- Dairy: Opportunity to utilize department farm as model farm for demonstrating yield improvement through optimal feed management
- Tourism: Attracts ~3% of Tamil Nadu's tourist footfall, with tea farms, tiger reserves and tribal tourism as its key attractions<sup>18</sup>

## NAMAKKAL

- Crops & agro-processing: Top producer of vegetables with 29 kHa area under cultivation<sup>67</sup>. Setting up vegetable micro-parks can help increase sector output

## DHARMAPURI

- Crops & agro-processing: Tamil Nadu's largest producer of turmeric & flowers, and 2<sup>nd</sup> largest producer of vegetables<sup>67</sup>. Investment in and adoption of value-add infrastructure can spur growth
- Dairy: Contributes to 4%+ of Tamil Nadu's milk production<sup>68</sup>. Focus on building VADP capabilities
- Textiles: Ideally positioned for the development of a vertically integrated textile cluster owing to nearby chemical companies, port proximity, & sizable labor force of ~8.7 Lakh<sup>69</sup>

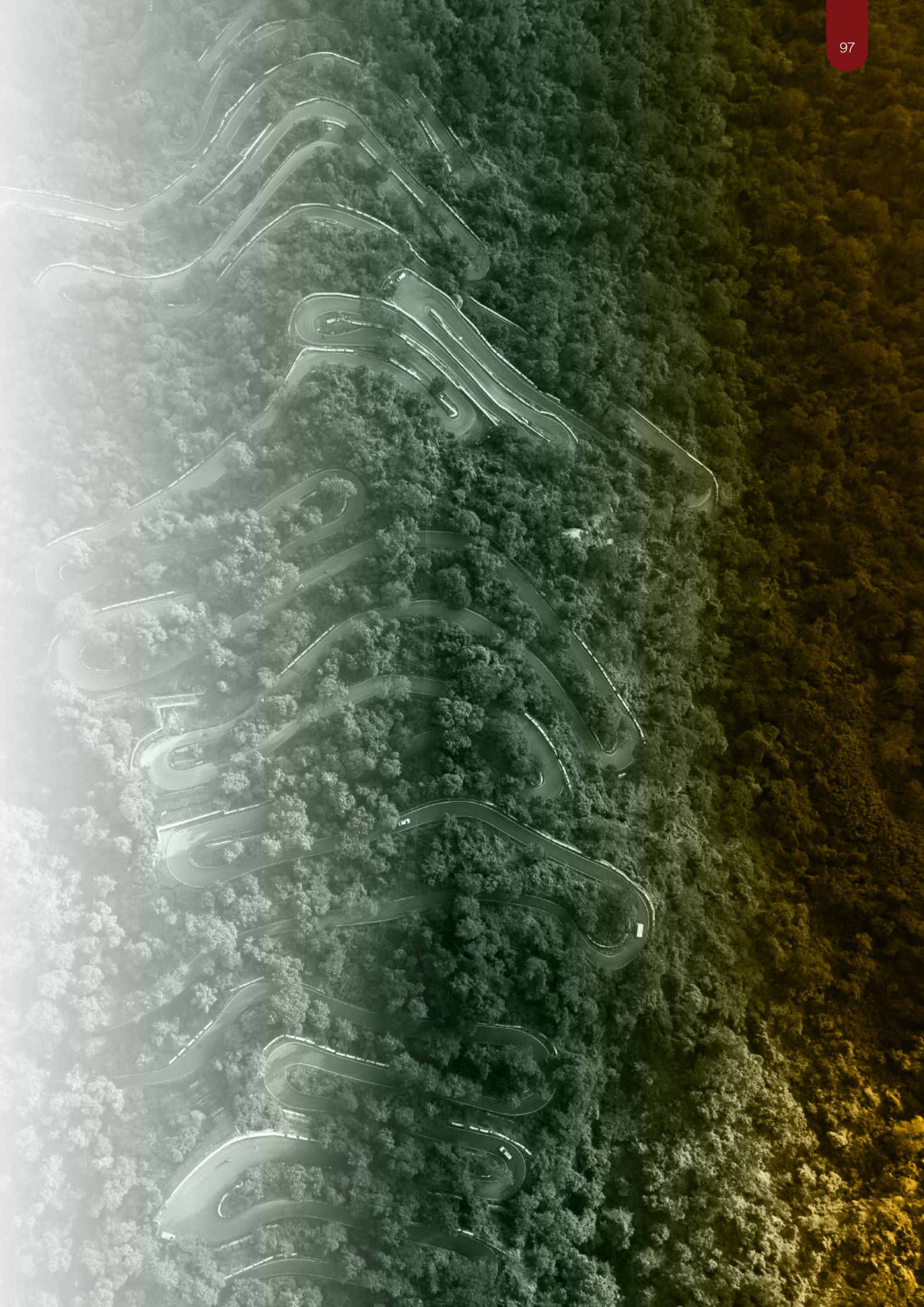
## KARUR

- Crops & agro-processing: One of the top moringa producing districts<sup>67</sup>. Investment in and adoption of value-add infrastructure can spur growth

## KRISHNAGIRI

- Crops & agro-processing: Tamil Nadu's 2<sup>nd</sup> largest producer of flowers and one of the top producers of vegetables<sup>67</sup>. Investment in and adoption of value-add infrastructure & micro-parks can spur growth
- Dairy: Contributes to 4%+ of Tamil Nadu's milk production<sup>68</sup>. Optimal feed management to improve yield and building VADP capabilities can unlock sector's potential
- Auto & EV: Contributes a significant ~9% to Tamil Nadu's vehicle manufacturing sector with 120+ factories<sup>37</sup>. Expansion of EVSE component manufacturing presents an opportunity to enhance the sector's growth
- Chemicals: Potential for new pet-chem cluster with strong positioning of 40+ factories, and presence of auto industry based downstream companies<sup>37</sup>
- Electronics: Opportunity for strengthening electronics manufacturing clusters by leveraging a solid foundation of 20+ factories, air connectivity & strong labor force of ~12 Lakh<sup>73</sup>
- IT, R&D & GCC: Presence of 600+ information and communication establishments and Hosur's proximity to Bangalore create a potential for attracting opportunities<sup>70</sup>











## TIRUCHIRAPPALLI

- Crops & agro-processing: One of the top banana producing districts. Banana fiber processing & scaling of exports can spur growth<sup>67</sup>
- Dairy: Contributes to 5%+ of Tamil Nadu's milk production<sup>68</sup>. Focus on building VADP capabilities
- Electronics: Offers air connectivity & ~6 Lakh skilled/semi-skilled labor availability<sup>69</sup>. Ideal for the development of a new LVHM electronics cluster
- IT, R&D & GCC: Ideal hub for BFSI services, due to the abundance of CA talent & strong starting point due to presence of over 100<sup>70</sup> financial service establishments—the highest in the State.
- Tourism: Attracts ~8% of Tamil Nadu's footfall, with temples & monuments as its major attractions<sup>18</sup>

## THANJAVUR

- Crops & agro-processing: 3<sup>rd</sup> largest producer of coconuts in Tamil Nadu & a top banana producing district. Suitable for setup of integrated processing units for coconut & banana fiber processing plant<sup>67</sup>
- Dairy: Contributes to ~3% of Tamil Nadu's milk production<sup>68</sup>. Focus on improving yield through optimal feed management and building VADP capabilities
- Tourism: Attracts ~4% of Tamil Nadu's tourists, with temples & agricultural tourism as its key attractions<sup>18</sup>

## PUDUKKOTTAI

- Dairy: Contributes to ~3% of Tamil Nadu's milk production<sup>68</sup>. Focus on improving yield through optimal feed management and building VADP capabilities
- Non-leather footwear: Equipped with port access and cost-efficient labor force of ~2.8 Lakh unskilled/semi-skilled workers, well-suited for establishing footwear parks<sup>69</sup>

## NAGAPATTINAM & MAYILADUTHURAI

- Fishing: Tamil Nadu's leading fish producer with 188 km+ long coastline. Improving tuna handling practices, sustainable shrimp farming & value addition activities can spur growth<sup>71</sup>
- Chemical: Potential to setup new pet-chem cluster with coastline to facilitate exports
- Non-leather footwear: Equipped with port access and cost-efficient labor force of ~8.4 lakh unskilled/semi-skilled workers, well-suited for establishing footwear parks<sup>69</sup>

## TIRUVARUR

- Dairy: Contributes to ~1.3% of Tamil Nadu's milk production<sup>68</sup>. Optimal feed management can help in improving yield

## ARIYALUR

- Crops & agro-processing: One of the top moringa producing districts. Investment in and adoption of value-add infrastructure can spur growth

## PERAMBALUR

- Crops & agro-processing: 10 kHa+ area under vegetable cultivation<sup>67</sup>. Setting up vegetable micro-parks can help increase sector output
- Non-leather footwear: Strong starting point with establishment of Perambalur footwear park, and a substantial labor force of ~2.2 lakh workers offers opportunity to further grow in the sector



# SOUTHERN REGION



## MADURAI

- Crops & agro-processing: Significant contributor to flower production in Tamil Nadu. Investment in and adoption of value-add infrastructure can spur growth
- Electronics: Good air connectivity & 7 Lakh+ skilled/semi-skilled labor availability<sup>69</sup>. Ideal for new low volume high margin electronics cluster development
- IT, R&D & GCC: Ideal location for engineering and research development, being a proven hub of innovation and having the added benefit of air connectivity
- Tourism: Attracts ~6% of Tamil Nadu's tourist footfall, with major attractions as temples, historical sites<sup>18</sup>

## TIRUNELVELI & TENKASI

- Crops & agro-processing: Top contributor to moringa & flower production in Tamil Nadu. Investment in and adoption of value-add infrastructure can spur growth
- Dairy: Opportunity to utilize department farm as model farm for demonstrating yield improvement through optimal feed management
- Textiles: Ideally positioned for vertically integrated textile cluster development owing to port proximity, and sizable labor force of 12 Lakh (~80% semi-skilled/unskilled)<sup>69</sup>
- Electronics: Air connectivity & 7 Lakh + skilled/semi-skilled labor availability<sup>69</sup>. Ideal for development of a new LVHM electronics cluster

## VIRUDHUNAGAR

- Crops & agro-processing: Significant producer of chilli & flowers. Investment in and adoption of value-add infrastructure can spur growth
- Textile: Strong starting point with 350+ factories contributing over 5% to Tamil Nadu's textile sector GVA<sup>37</sup>. A mega textile park of more than 1000 acres, has already been announced

## KANYAKUMARI

- Fishing: Tamil Nadu's 4<sup>th</sup> largest producer of fish, with 70 km+ coastline<sup>71</sup>. Enhancing tuna handling practices and undertaking value-addition activities can increase output
- Tourism: Attracts ~5% of Tamil Nadu's tourists, with key attractions as beaches, sunrise / sunset points<sup>18</sup>

## TUTICORIN

- Crops & agro-processing: Tamil Nadu's largest producer of chilli, 2<sup>nd</sup> largest producer of banana, and significant producer of moringa<sup>67</sup>. Adoption of value-add infrastructure and increasing exports can spur growth
- Fishing: Tamil Nadu's 5<sup>th</sup> largest producer of fish, with 160 km+ coastline<sup>71</sup>. Ideal for setting up shrimp & tuna processing facilities to unlock value-addition opportunities
- Auto & EV: Robust connectivity with domestic & export markets via port, air, road and rail, thriving industrial ecosystem & over 49 Industrial training institutes in the vicinity to ensure steady supply of skilled labor<sup>37</sup>
- Textiles: Ideally positioned for vertically integrated textile cluster development owing to the presence of an excellent port and sizable labor force of ~10 Lakh (~79% semi-skilled/unskilled)<sup>69</sup>
- Chemicals: Ideally positioned for new pet-chem cluster development with strong positioning of 140+ factories contributing ~10% to sector GVA, & presence of excellent port<sup>37</sup>
- Electronics: Air/port connectivity & 6 Lakh+ skilled/semi-skilled labor availability<sup>69</sup>. Ideal for development of a new LVHM electronics cluster
- Non-leather footwear: Equipped with port access and cost-efficient labor force of 7 Lakh+ unskilled/semi-skilled workers, well-suited for establishing footwear parks<sup>69</sup>



## RAMANATHAPURAM

- Crops & agro-processing: Tamil Nadu's 2<sup>nd</sup> largest producer of chilli<sup>67</sup>. Investment in and adoption of value-add infrastructure can spur growth
- Fishing: Tamil Nadu's longest coastline (200 km+) & 2<sup>nd</sup> largest fish producer<sup>71</sup>. Improving tuna handling practices, sustainable shrimp farming & value-addition activities can spur growth
- Non-leather footwear: Equipped with port access and cost-efficient labor force of ~5.7 Lakh unskilled/semi-skilled workers, well-suited for establishing footwear parks<sup>69</sup>

## SIVAGANGA

- Dairy: Opportunity to utilize department farm as model farm for demonstrating yield improvement through optimal feed management
- Non-leather footwear: Equipped with port access and cost-efficient labor force of ~6 Lakh unskilled/semi-skilled workers, well-suited for establishing footwear parks<sup>69</sup>

## THENI

- Crops & agro-processing: Tamil Nadu's 3<sup>rd</sup> largest producer of banana and significant producer of flowers<sup>67</sup>. Investment in and adoption of value-add infrastructure and increasing exports can spur growth



# Socially inclusive growth

An inclusive economy taps into a broader base of consumers, as well as a more diverse workforce to foster harmonious and sustainable societal growth, while attracting investments and driving economic expansion. Tamil Nadu has consistently ensured high priority on social inclusiveness. A continued emphasis on social inclusiveness, with a focus on providing equal opportunities and access to resources for all societal segments, irrespective of their socio-economic background, gender, age, disability, caste, ethnicity, or religion is critical as the State embarks on its \$1 Trillion vision.

## 5 key focus areas



### Social inclusion

**Family & social services**  
(Non-financial support programs)

**Gender, minority and vulnerable group engagement**



### Community participation

**Third-sector enablement (NGOs)**

**CSR adoption & efficacy**

**Social entrepreneurship & impact investing**



### Financial inclusion

**Microfinance & low-income lending**

**Banking services for the poor**



### Social protection

**Basic income support**

**Social safety nets**  
(disability, unemployment, retirement, insurance)

**Access to essential goods & services**



**Health**



**Infrastructure**



**Education**



**Housing**



**Safety & security**



**Culture & sports**

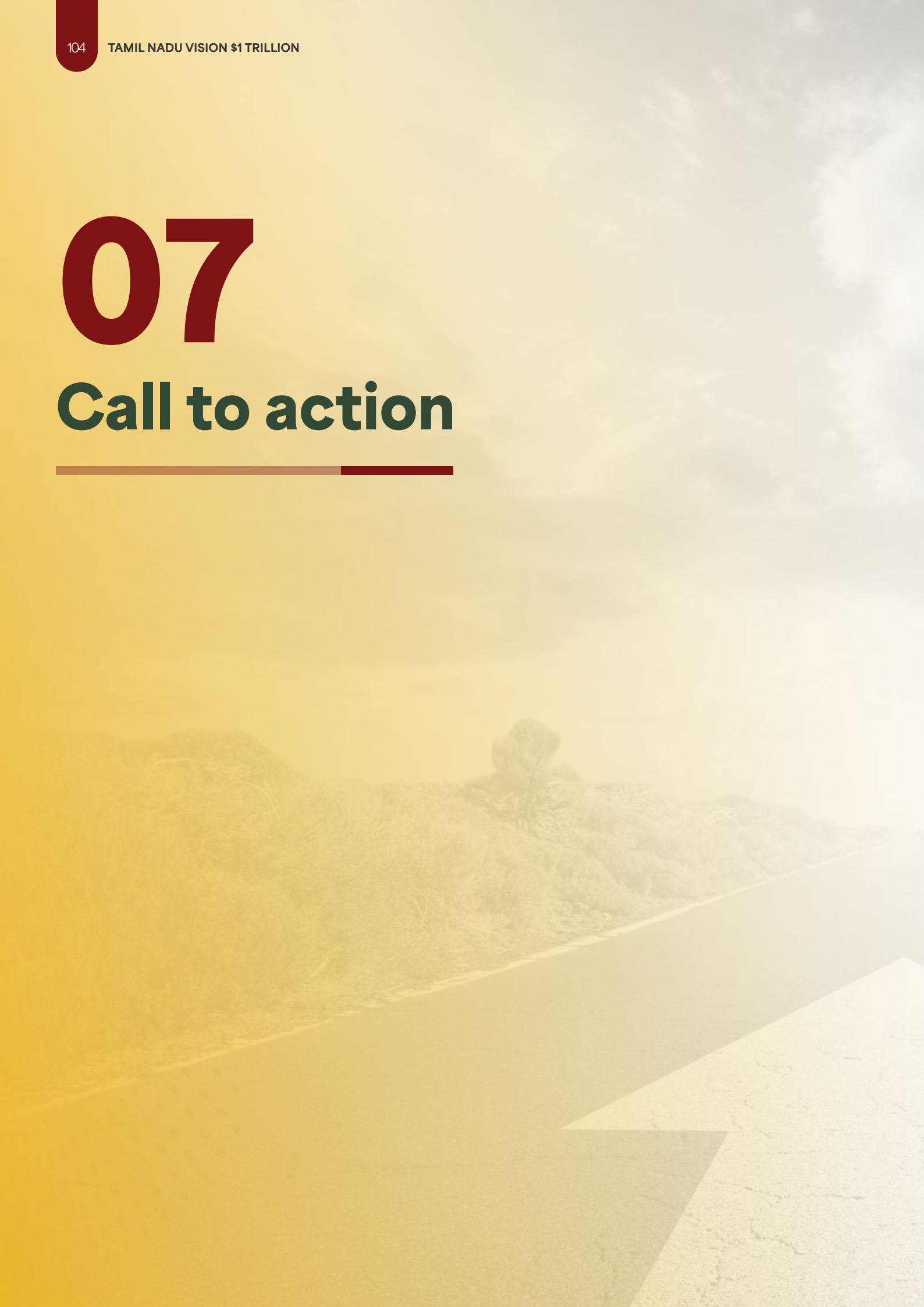




# 07

## Call to action

---





# Call to action

This report is a short glimpse of a detailed strategy which provides a blueprint for the State's ambitious journey, backed with a comprehensive action plan for each of the initiatives.

Achieving the goal of a \$1 Trillion economy is a collective endeavor, necessitating the involvement of multiple stakeholders. Given the scale and diverse nature of envisioned initiatives, active involvement of all stakeholders is critical to bring this vision into reality. It calls for a concerted effort from every citizen, business, and organization within the State.

## Proposed institutional structure for 'Vision - \$1 Trillion'



# List of sources

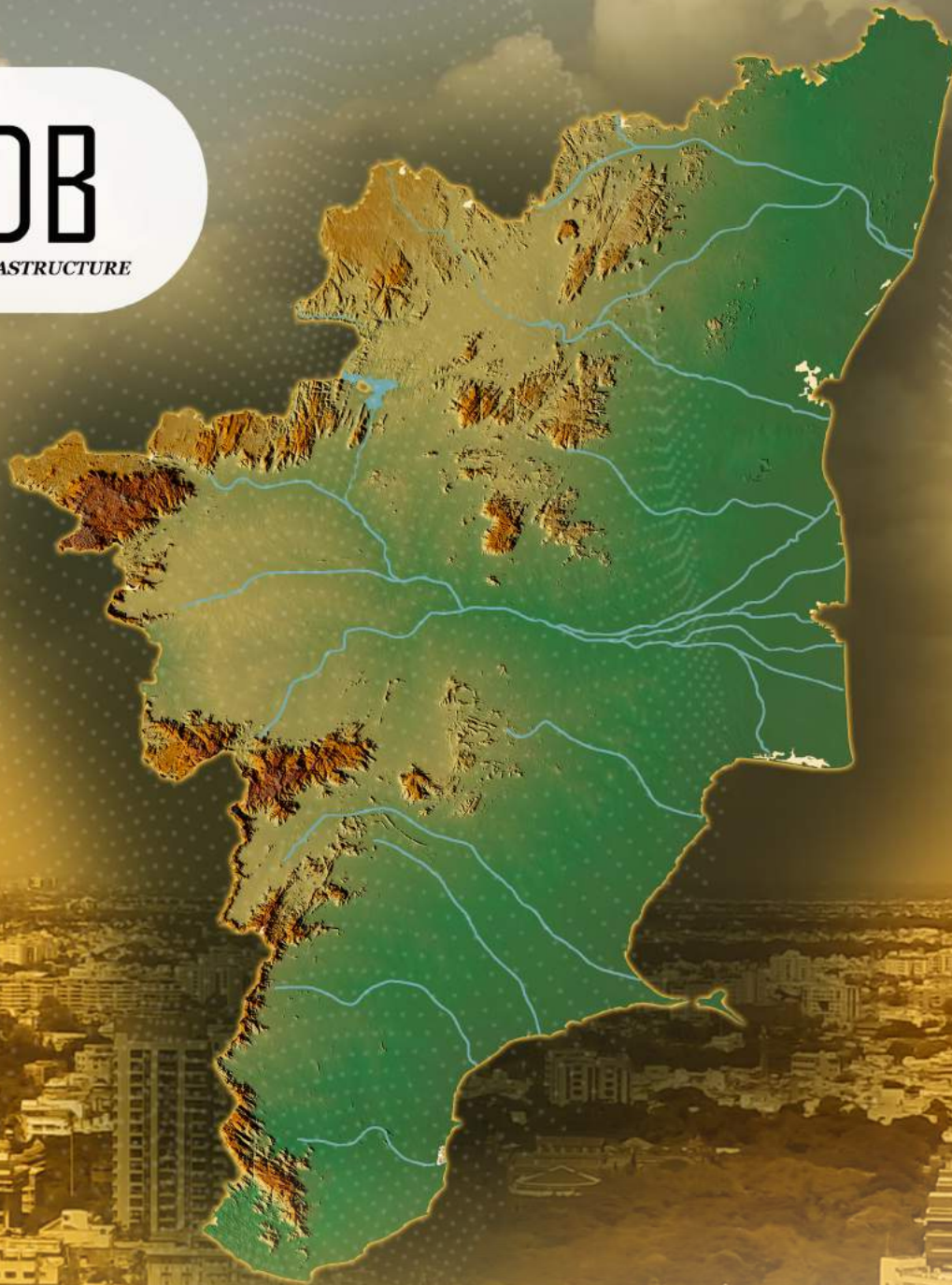
1. RBI - Handbook of Statistics on Indian States 2022-23
2. Census 2011
3. MoSPI, Government of India; World Bank
4. MoSPI, Government of India
5. National Multidimensional Poverty Index 2023, Niti Aayog
6. Department of Economics and Statistics, Government of Tamil Nadu
7. MoSPI, Government of India; Census 2011
8. Agricultural Statistics at a Glance 2021, Ministry of Agriculture and Farmers Welfare, Government of India
9. Basic Animal Husbandry Statistics 2022
10. Directorate of Industrial Safety and Health, Government of Tamil Nadu
11. Export Preparedness Index 2022, Niti Aayog
12. NIRYAT, Government of India; Statista database
13. Guidance, Government of Tamil Nadu
14. NIRF Rankings 2023
15. All India Survey of Higher Secondary Education 2020-21; Tamil Nadu Skill Development Corporation
16. Unified District Information System for Education Plus 2021-22; Annual India Survey on Higher Education 2020-21
17. Health Index 2019-20, Niti Aayog
18. Statistical Handbook of Tamil Nadu 2020-21
19. Ease of Doing Business State Rankings 2020-21, Department for Promotion of Industry and Internal Trade
20. Update on Indian Port Sector 2023, Ministry of Port, Shipping and Waterways
21. Statistical Handbook of Tamil Nadu 2020-21; Press Information Bureau, Government of India
22. SDG India Index 2020, Niti Aayog
23. Department of Environment, Climate Change and Forests, Government of Tamil Nadu
24. Directorate of Economics and Statistics, Ministry of Agriculture and Farmers Welfare, Government of India
25. Basic Animal Husbandry Statistics 2022; Statistical Handbook of Tamil Nadu 2020-21
26. Statistical Handbook of Tamil Nadu 2020-21; Handbook on Fisheries Statistics 2022
27. Handbook on Fisheries Statistics 2022
28. Society of Indian Automobile Manufacturers
29. Invest India
30. VAHAN Data, Ministry of Road Transport & Highways
31. Gartner Database; Analyst reports
32. NIRYAT, Government of India
33. Gartner database; Capital IQ database
34. Frost & Sullivan Report- 'Market Assessment for India EMS Industry', January 2023
35. The Business Research Company Report- 'Chemicals Global Market Report 2023', January 2023
36. CII Report - 'Mission Net-Zero: A Roadmap for the Indian Chemical Industry', November 2022
37. Annual Survey of Industries 2019-20
38. Ministry of Chemicals & Fertilizers, Government of India
39. Calculated from I/O Table
40. Invest India; Directorate General of Commercial Intelligence and Statistics (DGCIS); Annual Survey of Industries 2019-20
41. Omdia Industry database
42. LinkedIn Analysis
43. Statista database; UN Comtrade database
44. FICCI report- 'Indian Specialty Chemicals Industry', 2020; Allied Market Research Report - 'Agrochemicals Market Outlook - 2021-2030'
45. Wazir Advisors Report- 'Annual Report on Indian Textile and Apparel Industry', January 2019
46. Department of Tourism, Government of Tamil Nadu
47. Department of Tourism, Government of Tamil Nadu; Archaeological Survey of India 2019
48. Tamil Nadu Tourism Policy 2023, Department of Tourism, Government of Tamil Nadu
49. Ministry of Electronics and Information Technology, Government of India; Gartner IT Services forecast Q1 2023
50. KPMG Report- 'Specialty chemicals industry in India', November 2022
51. NASSCOM GCC Report 2023
52. Ministry of Electronics and Information Technology, Government of India
53. Anarock India office market update H1 FY23; Numbeo Database
54. Society for Human Resource Management Report 2022
55. Numbeo database
56. Gartner IT Services Forecast, Q1 2023
57. NASSCOM Report 2022
58. CRISIL report- 'Demand for data centres goes viral', November 2020
59. Statista database
60. Update on Indian Port Sector 2023, Ministry of Port, Shipping and Waterways; Guidance, Government of Tamil Nadu
61. Analysis conducted using Oxford Economics data
62. Analysis conducted using data from Public Works Department and JICA
63. MoSPI, Government of India; Census Population Projections
64. Venture Intelligence database; StartupTN, Government of Tamil Nadu
65. Annual Report 2020-21, Ministry of MSME, Government of India
66. 73<sup>rd</sup> National Sample Survey, NSSO, Government of India; NAS 2018-19 Report
67. Season and Crop Report of Tamil Nadu 2021-22
68. Department of Animal Husbandry and Veterinary Services
69. Tamil Nadu Skill Gap Report 2019
70. Economic Census 2012-13
71. Statistical Handbook of Tamil Nadu 2020-21; Department of Fisheries 2022
72. Department of Fisheries 2022
73. Annual Survey of Industries 2019-20; Tamil Nadu Skill Gap Report 2019
74. Mordor Intelligence Report- 'Animation and VFX Market Size & Share Analysis - Growth Trends & Forecasts (2023 - 2028)'
75. Press Information Bureau, Government of India



---

This document should not be construed as a fairness opinion or valuation of market transactions. Readers may independently satisfy themselves on the relevance and accuracy of the content of this document. Reference herein to any specific commercial product, process, or service by trade name, trademark, manufacturer, or otherwise, does not necessarily constitute or imply its endorsement, recommendation, or favoring by the authors.





**Tamil Nadu Infrastructure Development Board,**  
3<sup>rd</sup> Floor, CMDA Tower II,  
No.1, Gandhi Irwin Bridge Road,  
Egmore, Chennai - 600008

fininfracell@gmail.com  
04428550155/255/355/455  
<https://tnidb.tn.gov.in/en>