



**Report of the High Level Committee
on the Economic Impact of COVID-19
on Tamil Nadu**

September 2020

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PREFACE

It is an honour to serve on the Committee constituted by the Government of Tamil Nadu to look into the concerns, both immediate and medium term, raised by the spread of COVID-19 pandemic and to offer solutions. Working with other members, the Government and various analysts has been a great learning experience.

The economic crisis that we are facing today is vastly different from any other crisis that we have seen recently. In recent memory this is the first economic crisis that has been triggered by a non-economic factor – a pandemic. The lock-down imposed to prevent the spread of the virus has brought to a grinding halt nearly all economic activity. The lock-down had impacted the Indian Economy and the Tamil Nadu economy through the four channels of weakening of external demand and domestic demand, supply chain disruptions and disturbances in the financial markets.

Tamil Nadu is a highly industrialised and urban economy. Within the country, it ranks high on several economic and social parameters. The impact on the economy of the pandemic is going to be severe. Tamil Nadu economy may show a contraction in 2020-21. The extent of contraction will depend on many factors and most importantly on the length of lock-down. Sooner it is lifted, the better for the economy. At the same time, the vigil to prevent the spread of the virus cannot be lowered. We need to look at alternative measures to curb the spread.

The Tamil Nadu Government has taken several steps to meet the economic challenges posed by the pandemic. These are listed in the Report. COVID-19 has brought in its wake three sets of government expenditures which have become necessary. These are (1) healthcare expenditure, (2) relief to people directly affected such as daily wage earners and migrant labour and (3) expenditure to stimulate demand and revive affected sectors. The Tamil Nadu Government's package of measures covers all the three areas. In fact, the first two categories of expenditure are paramount. They are the first charge on the Government. The expenditure under the category of 'stimulus' will be determined both by what is needed and what is feasible.

The recommendations made by the Committee to kick-start the economy and to move on to a higher growth path fall into two groups. The first group contains what we call 'Relief and Revival measures'. They are partly a continuation of measures already taken and partly new measures. The second group of measures are structural in character and they need to be adopted in relation to various sectors of the Tamil Nadu economy such as Agriculture, Manufacturing, MSMEs and Services. The suggestions in relation to the various sectors are aimed at accelerating growth over the medium term.

Relief and Revival measures are required to acquire stability. Another round of cash disbursement may become necessary in the context of the impact of the pandemic including the continued lock-down. Continuance of additional supply of rice may also become necessary. The Committee has also recommended an urban employment guarantee scheme, which is some what similar to the existing Rural Employment Guarantee Scheme. Government's Capital expenditure must be maintained not only at the budgeted level but also increased by Rs. 10,000 crore. In relation to several sectors, there are recommendations which involve deferment or reductions of taxes, duties or licence fees to tide over immediate problems.

In Chapter IV we have listed the key recommendations in relation to various sectors. I do not want to repeat them. I only want to highlight a few. In agriculture, a shift in cropping pattern is very much needed. In the case of Manufacturing, we need to identify the emerging areas towards which Tamil Nadu should move such as Pharmaceuticals, Medical devices, etc. The Report indicates the measures that are to be taken to be successful in these areas. We need to strengthen the capital base of Tamil Nadu Industrial Investment Corporation (TIIC) to enable it to play a stronger role in strengthening manufacturing sector. MSMEs require not only immediate support but also strengthened infrastructure support over the medium term. Implementation of Inter-State Migrant Workmen Act will go a long way to improve the living conditions of migrant workers. In fact, labour in general needs affordable rental accommodation and a strong lead in this direction must be taken by the State. To promote the real estate sector, affordable Housing Schemes need to be intensively implemented. COVID-19 has also

shown that a decentralised healthcare delivery system is very much a necessity in urban and metropolitan areas. The banking network is quite strong in Tamil Nadu. It should be used as a lever to promote development. A State level Credit Guarantee Scheme can be established which will enable MSMEs to borrow more from banks. Government finances have come under a strain because of the fall in revenue and increase in expenditure forced by COVID 19. The need to borrow more has become a compulsion. Over the medium term, the tax – GSDP ratio has to be raised. Rationalisation of water charges and electricity tariffs and revisions in Motor Vehicles taxes have to be thought of. Low returns from large investments in public enterprises in the State also need to be corrected.

The Report covers a large canvas. Within the limited time that was available to us, we have done our best to indicate the key directional changes. I want to thank all the members of the Committee for their unstinted support and counsel. This is a joint production. I am thankful to Prof. Suresh Babu for his help in putting together the Report and incorporating suggestions as they came along. The Committee is extremely grateful to Thiru. S. Krishnan, Additional Chief Secretary to Government, Finance Department for the enormous work he put in to give shape to the Report. As Coordinator of the Committee, he brought together the views and suggestions from multiple sources and welded them into a consistent whole. In this context, his deep knowledge and understanding not only of Finance but also of other areas was of immense help. The Report bears the imprint of his wisdom and experience. We are also grateful to other officers in the Finance Department of Government of Tamil Nadu who have extended their assistance and co-operation to the Committee in putting this report together including Thiru H.Krishnan Unni, Thiru S.Arun Raj and Thiru R.Narasimha Raghavan, Deputy Secretaries in the Finance Department.

Chennai
7th September 2020

C. RANGARAJAN
Chairman
High Level Committee

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1.1 Constitution of High Level Committee

As the lock-down due to COVID-19 pandemic started on 24th March, 2020 and continued with some relaxations, it has had a medium term impact on Tamil Nadu's economy including different sectors like Agriculture, Industries, Construction and Real estate, Retail Trade, etc. The impact of the crisis on the finances of the Government of India and the Government of Tamil Nadu will be considerable. The Government of India and the Reserve Bank of India's responses to the crisis will also have macro economic consequences. Hence, it is essential to deliberate and to make recommendations on the policy measures to be undertaken by the State Government to bring the economy back to the expected growth trajectory, ensuring that the needs and requirements of the poor are addressed, the supply of essential commodities is maintained undisturbed, while limiting the longer term fiscal deterioration.

Therefore, the Government of Tamil Nadu in its order (G.O.Ms. No. 242, dated 09.05.2020) constituted a High Level Committee (HLC) headed by Dr. C. Rangarajan, former Governor of Reserve Bank of India, former chairman of the Prime Minister's Economic Advisory Council and currently Chairman, Madras School of Economics, with economists, experts and officials as Members. The Additional Chief Secretary to

Government, Finance Department is the Co-ordinator of the HLC. The order of the Government appointing the Committee is reproduced as Annexure-1.

In the reply to the general discussion on the Budget, on 20.02.2020, the Hon'ble Deputy Chief Minister had announced that an expert committee would be constituted to recommend measures to improve the tax-GSDP ratio of Tamil Nadu. As the COVID-19 pandemic has posed much more serious economic and fiscal challenges, the HLC is also requested to examine the fiscal challenges facing Tamil Nadu and the way forward to improve the fiscal position including the tax-GSDP ratio as part of the larger brief of suggesting policy measures to improve the economic situation.

1.2 Terms of Reference

The Terms of Reference (ToR) of the High Level Committee are as follows:

- (i) Assess the overall, immediate and medium term impact of the COVID-19 pandemic on different sectors of Tamil Nadu's economy, including the impact of the lock-down; additional costs and implications due to social distancing and other precautionary measures.
- (ii) Assess the opportunities and threats in the short and medium term.

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- (iii) Measures required to help the important sectors of the economy to overcome the impact of COVID-19 pandemic.
- (iv) Identify specific reform measures to be taken by the State Government to support and promote the growth of important sectors of the economy.
- (v) Assess the impact of the crisis on State Government's fiscal situation and way forward to improve the fiscal position, including increasing the tax-GDP ratio and diversifying revenue sources and re-prioritizing expenditure.
- (vi) The issues, including fiscal issues and economy promotion measures, the State Government should take up with Government of India for necessary action.
- (vii) Identify possible sources of financing and funding for different sectors including infrastructure projects, small businesses and other enterprises.

Nine Sub-Groups were formed with members after the first HLC meeting held on 14.5.2020 and the sub-groups had active engagement. The Sub-Groups conducted meetings with various stakeholders and draft

reports were prepared. The aspects covered in the reports of the Sub-Groups are:

- I. Assessment of the impact of the COVID-19 pandemic and the response on the sector.
- II. Immediate steps required to kick start activity in the sector.
- III. Medium term measures required to accelerate growth in the sector.
- IV. Policy changes required at the State level.
- V. Steps required to make effective use of the various measures relating to the sector announced by the Central Government.

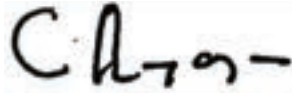
Further, the Committee solicited suggestions and recommendations from academicians including economists, policy experts and political parties. Their suggestions have been taken into account.

The report proceeds as follows: Following this brief introduction, Chapter 2 presents an overview of the state of the economy of Tamil Nadu. Discussions of the impact and responses towards the pandemic are contextualized against this background. Chapter 3 presents a macro assessment of the impact of COVID-19 on the State's economy and the policy responses

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of the State Government. Chapter 4 highlights major recommendations of the Committee. Detailed sector-wise analysis of the impact of the

pandemic and suggested policy interventions are provided in the subsequent chapters.



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Chairman, HLC



HANS RAJ VERMA
Member, HLC



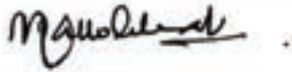
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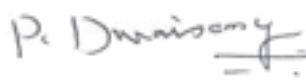
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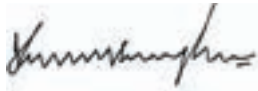
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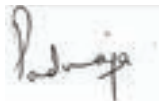
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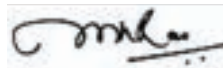
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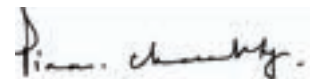
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2.1. Growth of Tamil Nadu Economy

Tamil Nadu (TN), with 6 percent of the total and 10.6 percent of the urban population of the country, has the second-largest economy in India. It is one of the highly industrialized States, contributing 10.4% of the industry GDP of the country. It ranks first in credit deposit ratio and number of factories. Tamil Nadu has also done well in terms of many social development indicators. It ranks first in urbanization, second in low Infant Mortality Rate (IMR) and low birth rate; third in literacy and female literacy; fourth in life expectancy and sixth in low poverty ratio among the States. Tamil Nadu has maintained a very strong growth performance in the period post the 1991 reforms with the State's per capita income which was below the national average in the early 1990s is currently about 80 per cent above the all-India per capita income. The average growth rate of Tamil Nadu has generally outperformed the all India growth rate over the past 3 decades. In line with the average annual growth rate nationally, in the boom years during 2005-06 to 2011-12, Tamil Nadu registered a

growth rate of 10.3 per cent, which has moderated subsequently to 7.23% during 2012-13 to 2019-20 period. In the most recent period, growth, after dipping to 4.92 per cent in 2014-15, has revived substantially and has averaged 8.19 percent from 2017-18 to 2019-20, which is an impressive performance and well above the all India growth rates.

During 2005-06 to 2019-20, Tamil Nadu's medium term (i.e., 15 years average) growth of 8.7% was higher than the all India average growth of 7.4% (Chart 2.1). It is, however, noticed that during 2005-06 to 2011-12, Tamil Nadu's average real (2004-05 base) GSDP growth of 10.3% was about 2 % points higher than all India GDP (2004-05 base) growth of 8.2%. In the last 8 years, Tamil Nadu's average real growth (2011-12 base) decelerated to 7.2% as against all India growth of 6.6%. In the last three years, we have seen an acceleration of the growth rate to 8.19 per cent, which is substantially higher than the all India level of 5.78 per cent.

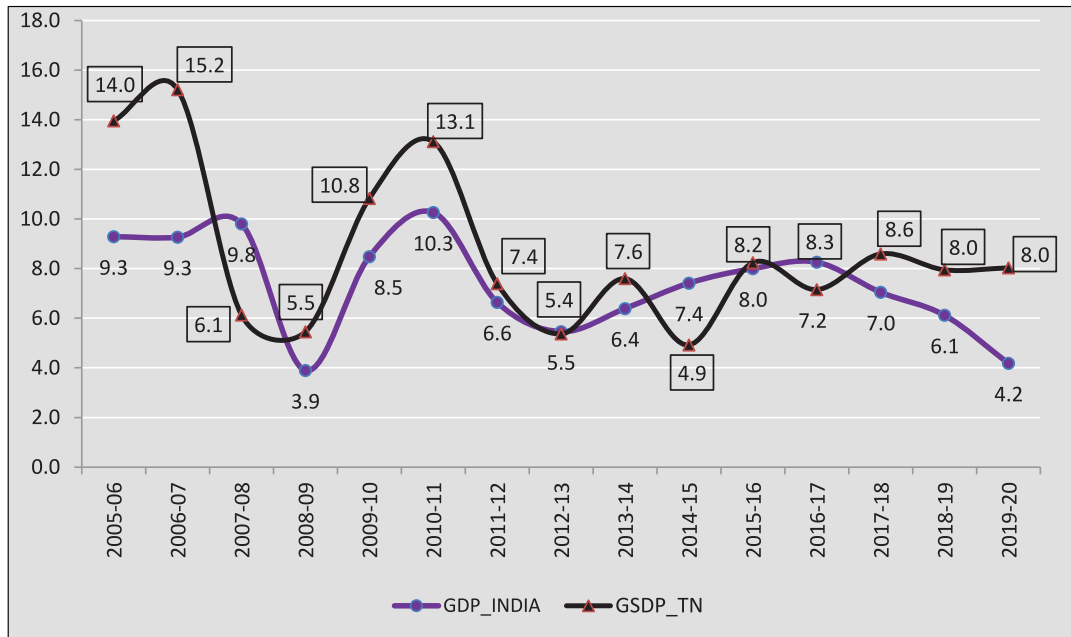
Tamil Nadu's growth pattern is more volatile compared to the all India growth pattern and appears more vulnerable to external shocks. Tamil Nadu is the major producer

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of automobiles, textiles, leather and IT products. These goods are consumed not only in the domestic market, but also in external markets

and globally. Hence, Tamil Nadu's growth is not independent of rest of India's and global economic growth.

CHART 2.1: MEDIUM TERM ECONOMIC GROWTH: TAMIL NADU AND INDIA



Source: CSO website; till 2011-12, the growth rate in 2004-05 constant prices and after that in 2011-12 constant prices.

Inter-State comparison reveals that Tamil Nadu ranked third among major States in average growth during 2004-05 to 2011-12. But during 2012-13 to 2018-19, it ranked 11th and its average growth came down to about 7.1% which is 3.2 percent points less than previous 7 years average growth of 10.3%. At the same time, poorer States such as Odisha, Madhya Pradesh and Assam grew faster than Tamil Nadu. Tamil Nadu ranked 7th in per capita

income (nominal) in 2018-19. Its per capita income was Rs.1.94 lakh in 2018-19. Haryana was number one with Rs.2.36 lakh, followed by Karnataka (Rs.2.12 lakh) and Telangana (Rs.2.04 lakh).

2.2. Growth Pattern: Broad Sectors and Sub-Sectors

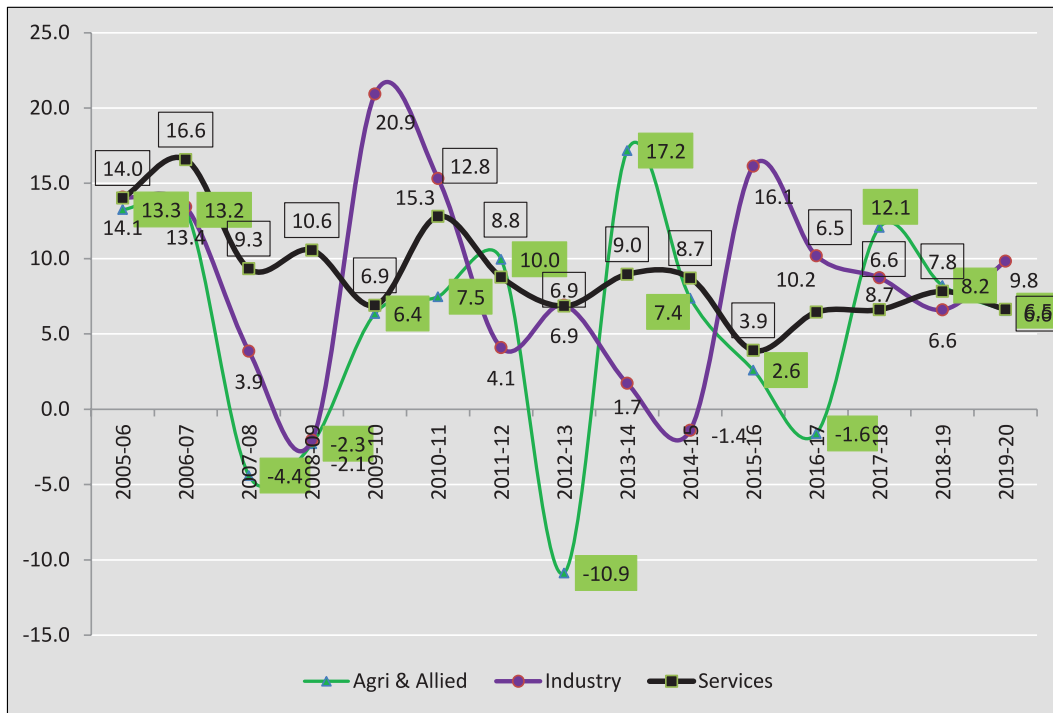
Sectoral Growth pattern reveals that during 2005-06 to 2011-12, services (at 2004-05 prices) grew at 11.3%, industry at 9.95% and agriculture and its allied activities at

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6.22% (Chart 2.2). However, in the last eight years (2012-13 to 2019-20), services growth (at 2011-12 prices) declined to 6.99%, industry to

7.34% and agriculture & allied activities to 5.18%. Slowdown in the performance of industry and services is an emerging concern.

CHART 2.2: SECTORAL GROWTH IN TAMIL NADU



Source (Basic Data): CSO website.

Further, the growth curve of agriculture and allied sector is more volatile than that of industry and services. The main reason is that agriculture production depends heavily on monsoon, which frequently (about two years out of every five years) fails in Tamil Nadu. This highly volatile growth of agriculture implies that the risk-adjusted return from this sector is low, which makes it difficult to attract private investments. Further, the share of agriculture has been continuously decreasing and

currently its share is about 10%. Growth of this sector is vital for food security in the State. As per Census 2011, 42 percent of the workers are still in agriculture (as cultivators and agriculture labours). Although Tamil Nadu has larger number of MSMEs, its industry growth pattern is also volatile.

The sub-sectoral data for real GSDP are available till 2019-20. There are 11 sub-sectors (output of these 11 sectors add up to GSDP at factor

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cost or GSVA) and an additional item “Others” (=Product taxes minus product subsidies to be added to get GSDP at market prices). Table 2.1 shows the growth rates of 11 subsectors during 2005-06 to 2011-12 and 2012-13 to 2019-20 and an additional item and their shares in total GSDP in 2004-05, 2018-19 and 2019-20.

The growth (real) of manufacturing sector was 10.86% during 2005-06 to 2011-12 and declined to 8.93% during 2012-13 to 2019-20. At the same time, construction also declined from 11.64% to 4.94%. Rising costs of construction materials such as

cement and sand could be the reasons for slow growth in this sector. Faster growth of these sectors is important for expanding employment growth in the economy. Within the services sector transport, storage and communication grew only at 3.24% during 2012-13 to 2019-20 compared its growth of 12.33% during 2005-06 to 2011-12. Average growth of real estate also declined from 13.26% during 2005-06 to 2011-12 to 8.16% during 2012-13 to 2019-20. Financial services growth also declined from 13.04% to 7.81% and trade, repair, hotels and restaurants from 10.03% to 7.19%.

TABLE 2.1: GROWTH RATES AND SHARES OF SUBSECTORS IN TAMIL NADU

Sectors	Avg. Growth %		Share (2004-05)	2018-19		2019-20	
	2005-06 to 2011-12	2012-13 to 2019-20		Share	Growth %	Share	Growth %
Agriculture & Allied	6.22	5.18	0.111	0.099	8.208	0.098	6.54
Public administration	7.39	3.46	0.042	0.027	10.09	0.026	3.407
Other services	10.53	9.00	0.089	0.074	16.64	0.073	7.164
Mining and quarrying	3.49	9.11	0.007	0.005	14.85	0.004	-3.81
Electricity, gas, water supply & utility services	-3.09	3.89	0.021	0.009	13.02	0.008	-1.547

2. TAMIL NADU ECONOMY: AN OVERVIEW

Sectors	Avg. Growth %		Share (2004-05)	2018-19		2019-20	
	2005-06 to 2011-12	2012-13 to 2019-20		Share	Growth %	Share	Growth %
Construction	11.64	4.94	0.09	0.101	4.064	0.103	10.49
Real estate, ownership of dwelling & prof. services	13.26	8.16	0.105	0.147	6.689	0.146	7.29
Financial services	13.04	7.81	0.072	0.054	2.207	0.056	11.71
Manufacturing	10.86	8.93	0.198	0.22	7.395	0.225	10.27
Trade, repair, hotels and restaurants	10.03	7.19	0.171	0.108	11.38	0.105	4.498
Transport, storage, communication & services related to broadcasting	12.33	3.24	0.093	0.054	-1.41	0.052	4.891
Others	-	11.39	0.000	0.103	12.900	0.105	9.937
GSDP (real)	10.3	7.23	1	1	7.951	1	8.033

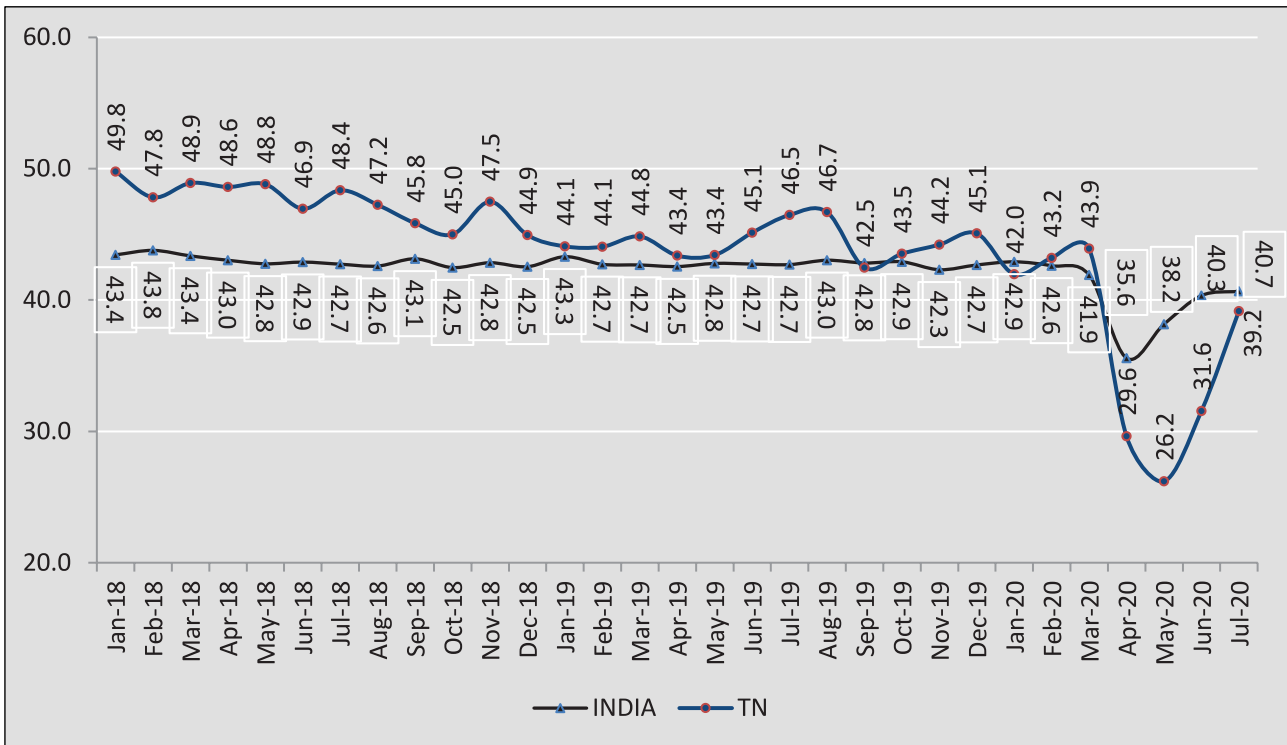
2.3. Employment

As per the CMIE monthly data series, the labour participation rate in Tamil Nadu in January 2016 was 55.23% as against all India rate of 47.7%. In September 2016, it increased to 61.13% as against all India rate of 47.94%. After that it has been steadily declining and reached 57.57% in January 2017, 49.78% in January 2018 and 44.08% in

January 2019 (Chart 2.3). The long term decline in labour participation rate in Tamil Nadu could be attributed to general economic shocks such as demonetisation and introduction of GST, on the one hand and a combination of industry specific issues such as changing tastes, tightening regulatory environment and growing international competition, on the other.

2. TAMIL NADU ECONOMY: AN OVERVIEW

CHART 2.3: LABOUR PARTICIPATION RATE IN TAMIL NADU (AND INDIA)

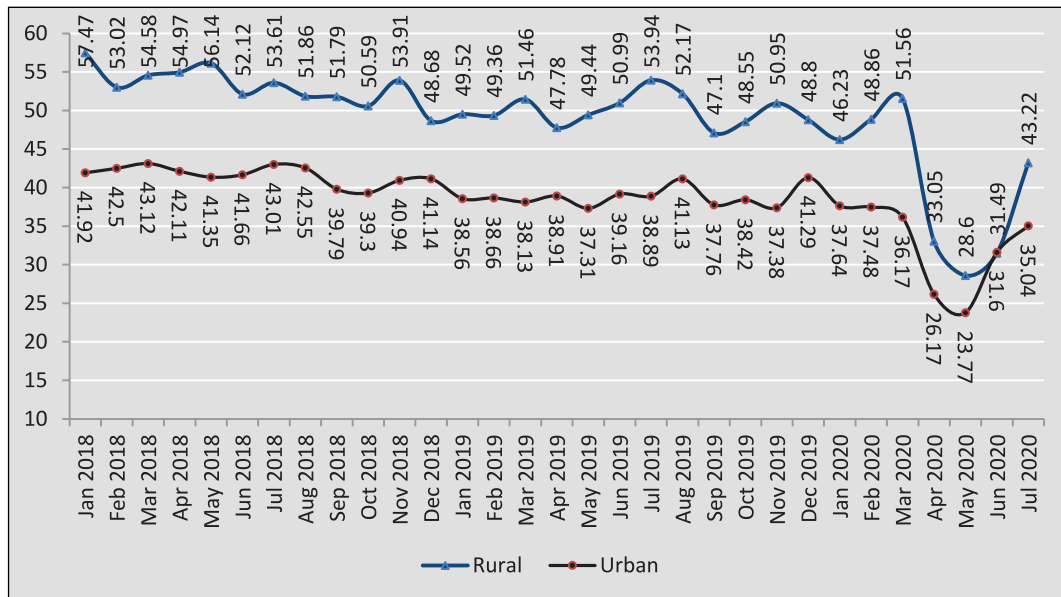


It is noticed that the lock-down due to COVID-19 from 24th March, 2020 affected the labour participation rate severely in Tamil Nadu. It declined from 43.9% in March 2020 to 29.6% in April and further to 26.2% in May 2020. After that it recovered and increased to 39.2% in July 2020. It is noticed that although the all India rate has been lower than the Tamil Nadu rate till March 2020, it has been higher than the Tamil Nadu rate after that and it started increasing from May 2020.

The labour participation in both urban and rural Tamil Nadu has been declining since January 2018 (Chart 2.4). It is noted that rural participation rate is always higher than urban rate. After March 2020, the pandemic affected both severely. The rural rate declined from 51.56% in March 2020 to 33.05% in April 2020 and further to 28.6% in May 2020. The urban rate declined from 36.17% in March 2020 to 26.17% in April 2020 and to 23.77% in May 2020. After that both started increasing.

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CHART 2.4: LABOUR PARTICIPATION RATE IN RURAL AND URBAN TAMIL NADU



2.4. Investments and Exports

Tamil Nadu is one of Asia's most preferred investment destinations. The global consultancy firm, Frost & Sullivan published a ranking of Indian States in 2018 in the Growth, Innovation and Leadership Index for Economic Development in India. In this, all States were ranked on 10 parameters including investment potential, Government effectiveness, infrastructure and digitization. Tamil Nadu ranked second in this and ranked first in investment potential. Tamil Nadu also attained the second position in the State Investment Potential Index (N-SIPI) 2018, published by the National Council of Applied Economic Research (NCAER). This index was prepared

after studying six parameters across Indian States which include economic climate, labour, infrastructure, land, political stability and governance. Quite significantly, Tamil Nadu improved its ranking by four places from N-SIPI- 2017 to N-SIPI - 2018.

Tamil Nadu is a leading destination for Foreign Direct Investments (FDI) into the country and has attracted USD 29,848 million of FDI from April 2000 - March 2019, making it the fourth largest FDI destination region in the country. During 2018-19 also, the State retained its top tier position by attracting USD 2,613 million. The State has attracted investors from all over the world, particularly from countries like Japan, South Korea, Taiwan, France, USA, Germany

and Finland. The State attracted investment commitments amounting to Rs.3,00,431 crore and 304 Memoranda of Understanding(MoU) were signed in the Tamil Nadu Global Investors Meet (TNGIM) in 2019. Apart from 147 MoUs signed during TNGIM 2019 by Industries Department, the Guidance Bureau facilitated 8 other investment proposals in the year 2018-2019, committing an investment of Rs.4,697 crore.

Tamil Nadu is also a leading exporting State in India. It is the third largest exporter of goods in India with exports worth USD 29,794 million in 2017-18. The State's major exports include automobiles and auto-parts, textiles, leather products and electronic goods. 45% of India's automobile exports, 34% of India's automobile component exports and 16% of India's electronic exports are from Tamil Nadu.

2.5. Poverty Reduction

Since 1994, Tamil Nadu has seen a steady decline in poverty, with the result that today, the State has lower levels of poverty than most other States in the country. Tamil Nadu has recorded commendable progress in poverty reduction in the recent years as is evident by the poverty scorecard in the SDG Index 2019-20 released

by the NITI Aayog. The index is aimed at measuring performance vis-a-vis the United Nations-mandated Sustainable Development Goals. The latest edition shows that India's overall score of 50 (out of 100) in this respect was, in fact, lower than 54 in the past year. However, Tamil Nadu, with a score of 72, topped the States in India. The scorecard factored in:

- The share of population living below the national poverty line
- Households with members covered under health scheme/ health insurance
- Persons provided employment as a percentage of those who demanded employment under the Mahatma Gandhi National Rural Employment Guarantee Act
- The proportion of the eligible population receiving maternity benefits; and
- Rural as well as urban households living in kutcha houses

Rapid economic growth over the past several decades has played a major role in the State's poverty reduction story. Tamil Nadu is among India's fastest growing States,

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with growth being driven mainly by services. Importantly, economic transformation has underpinned the State's growth, as people in Tamil Nadu have moved off the farm and into other types of work over

time. Nevertheless, parts of the State still record higher levels of poverty. Although consumption inequality in the State decreased slightly after 2005, it remains higher than in many other States.

IMPACT OF COVID-19 ON TAMIL NADU ECONOMY AND POLICY RESPONSES OF STATE GOVERNMENT

3.1: Growth Prospects for 2020-21

The impact of COVID-19 is debilitating almost all the economies including Tamil Nadu economy. While the Government of Tamil Nadu announced the continuation of lock-down till 31st August, 2020 with some relaxations, many businesses are restricted in red/containment zones. The impact of COVID-19 and subsequent policy measures to contain its spread has affected different sectors of the economy differently. Both the Central and State Governments have announced a number of policy measures to revive the economy. Given these, the question that emerges is: What could be the growth prospect for the Tamil Nadu economy for 2020-21. The actual outcome for Tamil Nadu would depend on the speed at which different sectors revive their operations and respond to the Government's policy support. This section briefly examines the growth prospects for 2020-21, making reference to real GSDP.

In 2019-20, which is kept as the base year, Tamil Nadu's real GSDP growth

was estimated at 8.03%. There are 11 sub-sectors and an additional item (product taxes minus product subsidies). While some sectors may be affected severely, others may be affected less severely and a few may not be affected. Therefore, these 11 sectors are divided into three groups and the additional item is kept as the fourth group.

In Group A, there are three sub-sectors, namely agriculture and allied activities, public administration and other services (education, health, personal services, etc.). In the case of agriculture, rabi crop harvesting is over and a good monsoon is predicted later in the year. The public services and other services have been nearly fully active, with the health services at the forefront of the COVID-19 fight. For the group A sectors, it may be possible to achieve a growth equal to 2019-20, that is, 100% of the growth performance of 2019-20.

Next group consists of five sectors that are likely to suffer average disruption showing 50% of 2019-20 growth performance (Group B). These sectors are mining and quarrying, electricity, gas, water supply and

3. IMPACT OF COVID-19 ON TAMIL NADU ECONOMY AND POLICY RESPONSES OF STATE GOVERNMENT

other utility services, construction, real estate and professional services and financial services.

In Group C, there are three sub-sectors: manufacturing, trade, hotels and restaurants and transport, storage and communication services. This group is likely to suffer maximum disruption. The State has the maximum number of MSMEs in the country. Manufacturing and particularly MSMEs suffered due to the lock-down. Hotels and restaurants are allowed to function minimally.

Transport sector also suffered severely. Therefore, in these sectors, two months output would have been affected severely. However, their output may increase once the lock-down is lifted. Considering these factors, it is projected that the output in these sectors will decline by 5%. For the last Group D, 60% growth realization is assumed. Considering these three groups together and an additional item, the overall GSDP real growth for 2020-21 (in scenario 1) is estimated at 1.31% (Table 3.1).

TABLE 3.1: GROWTH PROJECTION FOR SUBSECTORS OF TAMIL NADU ECONOMY IN 2020-21

Sectors	Group	Scenario 1			Scenario2		
		Growth Realization	Projected Growth (2020-21)	Contribution to Growth	Growth Realization	Projected Growth (2020-21)	Contribution to Growth
Agriculture & Allied	A	100%	6.54	0.64	1.0	6.54	0.64
Public administration	A	100%	3.41	0.09	1.0	3.41	0.09
Other Services	A	100%	7.16	0.52	1.0	7.16	0.52
Mining and quarrying	B	50%	-7.62	-0.03	0.5	-7.62	-0.03
Electricity, gas, water supply & utility services	B	50%	-3.09	-0.02	0.5	-3.09	-0.02
Construction	B	50%	5.24	0.54	0.5	5.24	0.54
Real estate, ownership of dwelling & prof. services	B	50%	3.64	0.53	0.5	3.64	0.53
Financial services	B	50%	5.85	0.33	0.5	5.85	0.33
Manufacturing	C		-5.00	-1.12	2 months lost ; 100% for rest	-8.11	-1.82

3. IMPACT OF COVID-19 ON TAMIL NADU ECONOMY AND POLICY RESPONSES OF STATE GOVERNMENT

Sectors	Group	Scenario 1			Scenario2		
		Growth Realization	Projected Growth (2020-21)	Contribution to Growth	Growth Realization	Projected Growth (2020-21)	Contribution to Growth
Trade, repair, hotels and restaurants	C		-5.00	-0.52	2 months lost + 100% for rest	-12.92	-1.35
Transport, storage, communication & services related to broadcasting	C		-5.00	-0.26	2 months lost + 100% for rest	-12.59	-0.66
Others	D	60%	5.96	0.63	0.6	5.96	0.63
GSDP (real)			1.31	1.31		-0.61	-0.61

In an alternative scenario, for three sub-sectors in Group C, it is assumed the output lost for initial two months and full realization in the remaining months (while the assumptions of Groups A, B and D are kept as such). Under this scenario 2, the overall GSDP real growth for 2020-21 is estimated at -0.61%. Therefore, expected overall GSDP real growth for 2020-21 is to be in the range of -0.61% and 1.31%. As the lock-down is continuing, the probability of obtaining a negative growth is high.

3.2. Growth Prospects of Agricultural Sector in 2020-21

In Tamil Nadu the growth rate in GSDP was 8.03% in 2019-20 in

real terms and the value of the real GSDP was Rs.13.13 lakh crore. In scenario 1, the target growth rate of the Tamil Nadu economy is 1.31% in 2020-21. At this growth rate the GSDP contribution would be Rs.13.30 lakh crore in 2020-21. Out of the 11 sub-sectors, a 100% growth realisation is assumed for 3 sub-sectors including Agricultural sector (including forestry and fishing). The agricultural sector registered a growth of 6.54% in 2019-20 and the same growth target is projected for 2020-21, assuming minimum damages to the sector. At this rate, the Agricultural GSDP (real) would be about Rs.1.37 lakh crore in 2020-21.

It is significant to note that the agriculture sector propels the

targeted growth of 1.31% for the Tamil Nadu Economy in 2020-21 by contributing nearly 48.86% of the growth in the economy. It is the highest contributor to the growth followed by the construction, which contributes nearly 41% of the overall growth. Thus, the development of an efficient and vibrant agriculture is a prerequisite for building up a resilient economy at times of economic distresses.

3.3. Growth Prospects of Industry

Different sectors under manufacturing have been impacted differently. Industries linked to essential services such as medical supplies, pharmaceuticals, food processing were allowed to operate during the lock-down. Industries with continuous processes such as refineries, large cement plants, sugar mills, fertilizers, float glass plants, large foundries with continuous process, tyre manufacturing plants and large paper mills were allowed to operate during the lock-down and hence are expected to have a relatively lesser decline in output.

In sectors such as electronics and electrical equipment, volatility in output may arise due to higher global inter linkages and exchange rate fluctuations. The output trend for sectors such as metals and furniture

could be impacted due to fluctuation in raw material prices. Employment intensive industries which were dependent on migrant labour will face a potential shortage in labour in addition to a decline in demand. The impact of two months lock-down on the manufacturing sectors due to loss in value-added is estimated to be approximately Rs.35,860 crores and 53.2 lakh man-months. Out of this, the impact on critical sectors determining the functioning of the economy such as Textiles, Leather, Automotive, Chemicals and Non-metallic mineral products like Cement, due to the lock-down, in terms of GVA loss and man-days loss for the top 5 sectors is estimated to be Rs.18,931 crore and 35.3 lakh man-months respectively.

The automobile sector was already affected due to muted demand even before the advent of COVID-19 and the current crisis has exacerbated the production and performance of the sector. The sector suffered massive losses as automotive based demand is a part of the non-discretionary spending of people. The value added loss is estimated to be Rs.6,683 crore and nearly 6 lakh man-months for two months of lock-down. Leather industry is a massive employment generator and is one of mainstays of Tamil Nadu's economy,

with Ambur, Ranipet, Vaniyambadi being a cluster. The projected loss to this sector due to lock-down is Rs.2,800 crore of output and over 3.6 lakh man-months due to cancellation of export orders. Subdued domestic and international demand along with a freeze on production led to this situation. Further, the demand for leather is seasonal and due to the lock-down this sector has missed out on production for festival season.

The loss of demand and output in chemicals industry is also an indicator of the situation in downstream sectors like Construction. This sector suffered a value-added loss of Rs.1,409 crore and over 80,000 man-months. Textile industry suffered losses to the tune of Rs.5,761 crore and nearly a two million man-months were lost in the process. This sector also employs a large number of women and depends significantly on exports. Tiruppur Exporters' Association highlighted that as lock-down was imposed earlier in the West, dead inventory of Rs.9,000 crore exists and this is expected to move and cleared by January 2021. The electronics industry of Tamil Nadu has the 2nd largest share of manufacturing output in India and ranks 3rd in electronics exports in the country. This sector also has a large women workforce.

The sector is touted as one of the core sectors to focus for growth in the future. The value-added loss to the electronics industry (including computer and optical products) is about Rs.1,981 crore. The man-month losses in this sector are nearly 2 lakh man-months. However, the scenario 1 assumes that in the coming months industrial output may increase so that the overall manufacturing growth is expected to be -5%.

3.4. Growth Prospects of Services

Regarding real estate and construction, the month of March witnessed fewer new launches, lesser walk-ins and postponement of home buying decisions due to the impact of the pandemic and subsequent measures to control the spread. However, sales registered 8% dip in Q1 2020 on a y-o-y basis. Walk-ins reduced by 30%-50% in the initial weeks of March 2020 and had come to a standstill during the lock-down. Most developers have postponed the launch of new residential projects, except for those, which were soft launched. In the Commercial Office Sector, most businesses are deferring their real estate decisions with an enhanced emphasis on managing costs and business continuity plans (BCP). However, it is expected that real estate will register 3.64%

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growth and the construction will register 5.24% growth in 2020-21 (in both Scenarios 1 and 2). They are expected to contribute jointly 81.8% of overall GSDP growth (scenario 1) in 2020-21.

The most visible and immediate impact of COVID-19 is seen in the hotel and tourism sector in all its geographical segments - inbound, outbound and domestic and almost all verticals-leisure, adventure, heritage, MICE (Meetings, Incentives, Conferences & Exhibitions), cruise and corporate. The impact on the inbound and outbound passengers is expected to be most severely affected in the next couple of quarters. Transport is another sector which is severely affected. These two sectors along with manufacturing are kept in Group C with an estimated growth target of -5% in each in 2020-21 in scenario 1. However due to the continuation of lock-down and in the likelihood of scenario 2 happening, these two sectors are projected to register -12.9% and -12.6% growth respectively in 2020-21.

3.5. Policy Responses of State Government

Government of Tamil Nadu was swift to respond to the adversities caused by COVID-19. A slew of measures, both emergency as well as medium-

term in nature with special focus on the poor and the vulnerable have been implemented. From March to 28th August, 2020, an amount of Rs.7,161.97 crore has been spent towards these efforts as depicted below:

S. No.	Head of Expenditure	Amount (Rs. in Crores)
1	Livelihood support:	4,896.05
	i) Cash Assistance	3,168.64
	ii) Free Ration & Food Kits	1,727.41
2	Health related expenditure	1,483.45
3	Migrant Workers	143.62
4	Other COVID Management expenditure	638.85
	TOTAL	7,161.97

As seen in the above table, cash assistance which constitutes 44 percent of the total expenditure was extended to various sections of the society who were burdened by reduced incomes in the wake of COVID. This includes cash assistance of Rs.1,000/- to 2.015 crore Ration card holders, 12.97 lakh registered construction workers and unorganized drivers and 13.35 lakh National Identity and Disability Certificate holders. A cash assistance of Rs.2,000/- was provided to 8.61 lakh members of various Unorganised Workers Welfare Boards as well as monthly assistance of Rs.1,500/- extended to the Differently abled persons. Moreover,

ex-gratia of Rs.2,000/- was provided to vulnerable persons such as the street vendors, barbers, etc. and also to 13.013 lakh members of other various Welfare Boards such as the Tamil Nadu Manual Workers Welfare Board and Street Vending shops & Establishment Workers Welfare Board. Apart from these initiatives, two days wages was given as special allowance to all MGNREGS workers which entailed an expenditure of Rs.123.10 crore for the Government.

Similarly, as part of the critical livelihood support, free ration and food kits were distributed to the poor and vulnerable. This includes distribution of free ration comprising rice, dal, sugar and cooking oil to all 2.015 crore Ration card holders and to other needy groups such as Transgenders. Food at subsidised rates was provided to the poor through Amma Unavagams throughout Tamil Nadu. Thus, livelihood support to the tune of Rs.4,896.05 crore, both in the form of cash and kind, constituting 68 percent of the total expenditure was extended by the Government of Tamil Nadu.

The migrant workers have been adversely affected by COVID which has resulted in loss of livelihood as well as hampering their ability to afford the basic necessities. The Government of Tamil Nadu has

taken several important measures in protecting the migrant workers during these trying times and aid them to overcome the hardships caused by COVID. Free ration was extended to the migrant population apart from arranging transport facilities for their movement within and outside Tamil Nadu. These programmes catering to the migrant workers has resulted in an expenditure of Rs.143.62 crore.

The augmentation of health infrastructure is critical to the management of pandemic. In this regard, the Government of Tamil Nadu has taken timely measures to augment its health infrastructure capacity by significantly increasing the mobilisation of necessary human resources as well as medical infrastructure including physical infrastructure and critical medical equipment. Towards these efforts, the Government of Tamil Nadu has spent Rs.1,483.45 crore. Apart from these, for encouraging and honouring the service of the frontline health workers, initiatives such as Rs.2 lakh assistance towards treatment costs and in the event of unfortunate demise of the health worker, Rs.50 lakh grant to the family and Government job offer to the kin in certain cases were also announced.

Apart from these initiatives, an amount of Rs.638.85 crore was

spent on other COVID management activities.

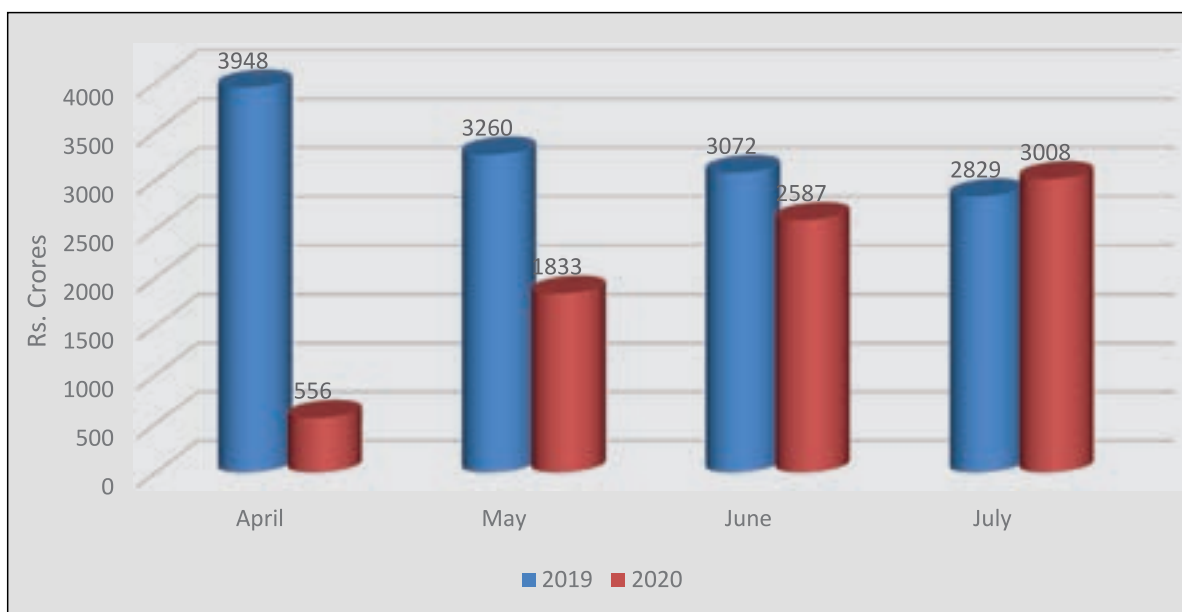
To co-ordinate the multiple efforts of the Government, eleven State Level Committees and District Level Committees were constituted to effectively monitor and implement the schemes.

These efforts have borne fruit as shown by the results of the Tamil Nadu COVID-19 Pulse Survey conducted by the Madras Institute of Development Studies in the month of June 2020 to assess the impact of the Government initiatives. The study reveals that a whopping 82 percent of the households in Tamil Nadu has availed the benefits rolled out by the State Government.

3.6. Signs of Recovery

Subsequent to the lock-down and its removal in phases in various parts of the State there has been some visible signs of recovery in economic activities. To illustrate, three indicators are considered, which point to the signs of revival of activities in the economy. Chart 3.1 portrays the GST receipts of the State excluding compensation. As is evident from the figure, even though the GST receipts declined drastically in April, an upward trend can be seen since May. In June it has almost reached the figures recorded for 2019 and in July it is marginally higher. The increase in GST revenues points to a revival in demand in the economy.

CHART 3.1: GST RECEIPTS (EXCLUDING COMPENSATION) (RS. IN CRORE)

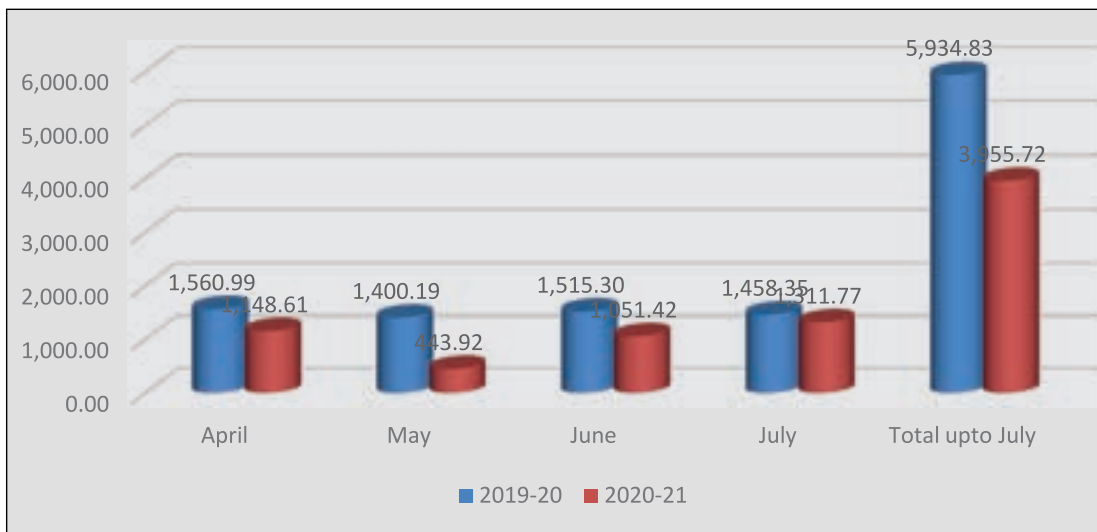


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In line with the GST collection, it can also be observed that VAT (sales tax) collection from petroleum products too registered an increase in July, compared to May (Chart 3.2). VAT collection in May 2020 was only

31.74% of what was collected in May 2019. However, by July it recorded an increase and reached 89.95% of 2019. This again points to increase in economic activity.

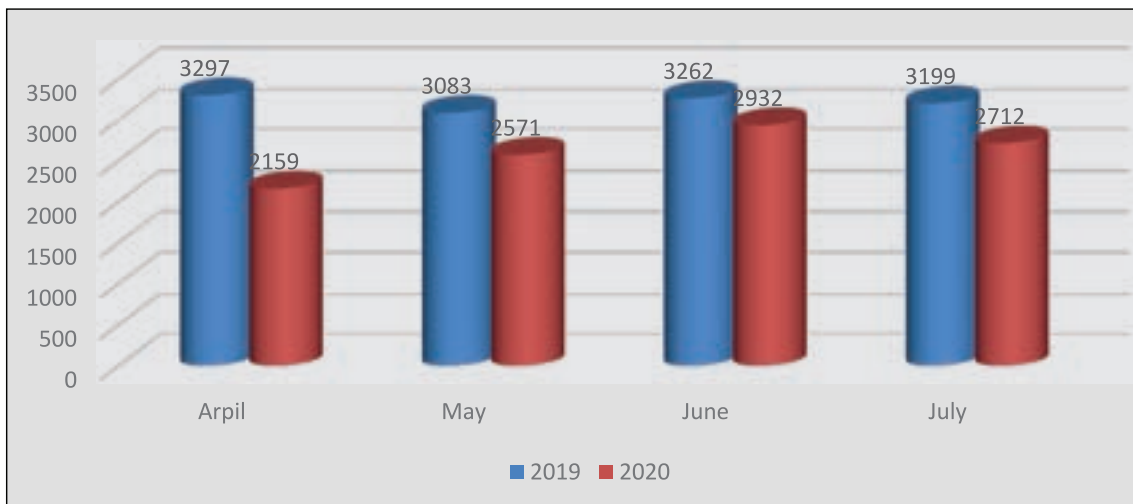
CHART 3.2: VAT COLLECTION FROM PETROLEUM PRODUCTS (RS. IN CRORE)



Electricity consumption has also recorded recovery in June, reaching almost the levels of 2019 (Chart 3.3).

This is an indication that production activities are resuming operations.

CHART 3.3: TANGEDCO SALES (ASSESSMENT RS. IN CRORE)

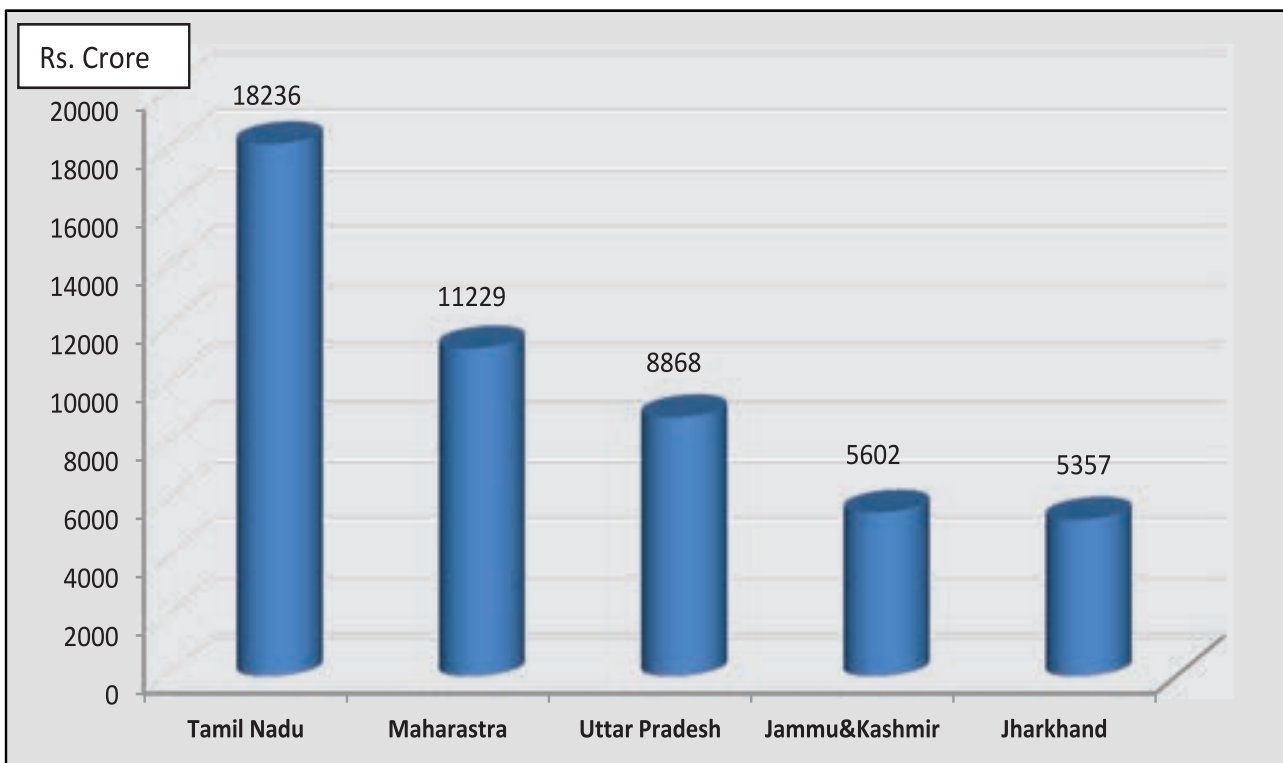


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Tamil Nadu has been a leading destination for investments in the country. The share of Tamil Nadu in total projects sanctioned by banks and financial institutions was 5.5% in 2009-10, which increased to 11.5% in 2018-19. The State has been able to increase its share in investments over the years even though the total investments have been falling both at the all-India and at the State level (RBI Bulletin, February 2020). The State Government on

27th May 2020, signed 17 MoUs and the State cornered around 18.63% of the total fresh investment emanated in Q1/FY21 and topped the State wise investment table (see Chart 3.4), according to the 79th Survey of Projects Investment in India, by Projects Today. The second-ranked Maharashtra too gained by the 12 MoUs it signed. The inflow of investments is expected to stimulate activities and aid in the growth recovery process.

CHART 3.4: TOP STATES IN FRESH INVESTMENTS



Source: 79th Survey of Projects Investment in India, Projects Today.

3. IMPACT OF COVID-19 ON TAMIL NADU ECONOMY AND POLICY RESPONSES OF STATE GOVERNMENT

To sum up, the impact of COVID-19 on Tamil Nadu economy is a reflection of the global scene. It is essential to understand the growth dampeners at the micro level in order to assess sectoral impacts. State's economy witnessed a down turn as major sectors contracted in terms of output

and employment. However, there are some visible signs of recovery as is evident in consumption, production and investments. Hastening the 'drivers' in this process of recovery would put the economy on its earlier high growth path.

In light of the assessment of decline in output and employment in the economy, we propose a set of policies to revive State's growth in the medium term and sustaining it in the long term. The Committee adopted the following methods and approaches for collecting information from different stakeholders at the sector level to arrive at a set of recommendations. First, to have a broader understanding of the nature of impacts of COVID-19 at the sectoral level, a thorough literature survey was done. The literature survey also helped in understanding the casual links between and within sectors of the State's economy. Second, the HLC collected information through key informants by organizing expert consultation meetings. Third, the Committee drew upon available secondary data and supplemented it with credible field surveys conducted by various institutions available in the public domain. All these information were analysed for the purpose of suggesting recommendations.

We recommend a three tier approach. First, a set of policies to revive the economy, which needs immediate attention and implementation. Second, policies to regain growth

and sustain it in the medium term. These might take longer time horizon for implementation, but are intended to put the economy on a high growth path. Third, sectoral policies to address structural issues of the economy. Listed below are the key recommendations. Sector specific detailed policy recommendations are in the subsequent sections. Several recommendations, related to sectors such as Tourism, Real Estate and Animal Husbandry require immediate financial assistance by way of deferment or reduction of taxes, licence fees, etc. Their implementation will depend on the availability of adequate resources.

4.1. Relief and Revival Measures

In view of the continuing lock-down the following relief measures need to be continued,

1. Given the drop in revenues, it is unavoidable that an enhanced fiscal deficit will be incurred. The State Government has already effected expenditure cuts equivalent to about 0.7 % of GSDP. Further expenditure cuts are not warranted. The Government of Tamil Nadu should ensure that the reform measures

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indicated by the Government of India are implemented to enable the State to borrow at least 1.75% to 1.85% of GSDP as additional borrowings under the special scheme announced by the Government of India.

2. Expenditures to provide medical equipment, supplies and services and to upgrade medical and health infrastructure to meet urgent COVID-19 pandemic response, are undoubtedly the highest priority and must be met. It is expected that this expenditure would be of the order of at least Rs.5,000 crore through the rest of the current financial year.
3. Government of Tamil Nadu has committed to supply additional rice to all households in State until November, 2020. This means an additional expenditure of Rs.1,331.18 crore in the current financial year. Based on the impact of COVID-19 pandemic, the continuance of supply of additional rice would become necessary.
4. Cash payments were provided to all ration card holders on one occasion in April and to ration card holders in Greater Chennai area and Madurai area on one more occasion. If public transportation does not resume and many unorganized sector workers are unable to return to their jobs, a further round of cash assistance for unorganised sector workers may become necessary.
5. Scheme related expenditure for various social security and welfare schemes of the Government of Tamil Nadu should be continued and front loaded to ensure flow of welfare benefits to the vulnerable sections of the population.
6. Given that Tamil Nadu is a highly urbanized State and thus far in the wake of the COVID-19 pandemic, the loss of incomes has been more pronounced in urban areas with stricter lock-downs, there is a dire need to create a short term programme for providing alternate employment to urban poor, preferably in-situ jobs, so that apart from employment, the programme will ensure minimum wage guarantee and social safety to this vulnerable group and enable them to tide over the crisis caused by the pandemic. The aim of the programme is to create employment opportunity to improve livelihoods of urban poor through provision of daily wages for construction of socially

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and economically useful public assets. Special emphasis will be on construction of community assets in low-income neighborhoods with strong involvement and participation of local communities. The programme may be designed to provide minimum 75 to 100 man-days of work per year to the beneficiaries. Applicable minimum wages will be provided to the beneficiaries. It is assessed that the programme will require about Rs.500 crore for its effective implementation.

7. As the public transport system resumes operations with social distancing, the transport corporations would be forced to incur additional costs which cannot all be passed on to the passengers and would have to be borne by the State Government.
8. The State has to ensure that responses are sequenced in a manner that help bring the economy back on track, enhance fiscal resources for the Government for public investment in social and economic sector and create a framework for sector specific differentiated response for full recovery. This may be achieved through a five step

intervention namely enhancing fiscal space for Government, expanding the social safety net, re-prioritisation of expenditure, use of Local Self-Government Institutions as the first responder to economic vulnerability at the household level and seeking for a COVID response fund from Government of India.

9. There is a balance of Rs.3,200 crore in the Construction Workers Welfare Fund. It is currently inadequately utilized. It is imperative that rules are finalized at the earliest so that the large sums available under the Construction Workers Welfare Fund can be utilized effectively for the benefit of the construction workers.
10. A key element of growth reviving expenditure is capital expenditure. Such expenditure not only generates employment, but also revives demand, thereby giving an impetus to the broader economy. Hence in the current financial year, every effort should be made to ensure that not only the capital expenditure on works as budgeted is incurred in full, but also an additional expenditure of Rs.10,000 crores is undertaken.

4.2. Sector Specific Structural Measures

4.2.1 Agriculture

1. There exists a need for a shift in cropping pattern from highly water intensive crops towards less water intensive crops.
2. Efforts should be taken to shift towards the cultivation of highly remunerative and less water intensive crops to increase the farmers' income. The area under millets can be increased by identifying fallow lands at village level and adopting site specific interventions.
3. Eligible Farmers Groups and FPOs should be identified and provided with sufficient funds for pooling of agricultural produce and marketing. FPO/FPCs are to be encouraged to be the aggregators of farm produce. Exclusive electronic trading platforms are to be developed to integrate regulated markets, private markets, private market sub-yards and direct marketing collection centres for better price realisation by farmers.
4. Procurement mechanism for crops other than paddy needs to be streamlined to make the minimum support price effective.
5. Integrated Market Complexes, the "One Stop Solution", where in the farmers can get agricultural inputs, farm machineries sales and service, banking facilities and market for sale of produce may be expanded across the State. Establish more Agricultural machinery Custom Hiring Centres (CHCs); at least one in every village. Modern Seed Storage godowns, Seed Processing Units and Government sale outlets at vantage points may be established.
6. Support to purchasers and producers to enter into the legal contract farming is needed.
7. Food Parks could be established in all districts as per the production catchments available.
8. Government should bring suitable amendments to the Tamil Nadu Land Reforms Act, to include more crops like cashew, cocoa, pepper, vanilla, medicinal plants, fruit crops, etc., within the purview of 'plantation crops', which are suitable to specific agro-climatic conditions so that, the industry would be free to venture into cultivation of such crops on a scale which is economical.
9. Community Ground Water Irrigation Scheme combined

with Micro Irrigation should be encouraged.

10. The Government of Tamil Nadu should take steps to implement solar energy pumping system under the KUSUM-B and KUSUM-C schemes intensively at the earliest for the benefit of the farm sector.
11. As notified in the Tamil Nadu Protected Agricultural Zone Development Act, 2020, the Tamil Nadu Protected Agricultural Zone Development Authority under the chairmanship of the Chief Minister may convene meetings regularly to discuss and evolve various ways and schemes to improve agricultural production in the Delta region.

4.2.2 Animal Husbandry, Dairy and Fisheries

1. Regulating the marketing of eggs - through an appropriate agency so as to give advantage of prices to the producer and consumers should be considered.
2. Government can encourage contract farming for Maize and Soya. Dedicated storage facilities may be established in such places in consultation with the poultry farmers on PPP mode.
3. Eggs and Meat Processing units can be started in PPP mode. Incentives can be offered in the form of concessional land, provision of water, electricity and other clearances under single window system.
4. *Dairy processing and milk value chain:* Primary Processing- Grading and Refrigeration; Infrastructure for preservation of raw milk in local areas and avoid transportation of milk over a long distance for processing need to be established. Secondary Processing - processes for diversification and preparation of products like packaged milk, flavored milk, cream, milk powder at the production centers itself to be established. Tertiary Processing facilitation for a Yoghurt, Cheese, Ice cream, Curd, Baby food and other value added products need to be established.
5. The lock-down and restrictions severely affected the financial status of traditional marine and inland fishermen and fish workers. Institutional credit inflow is essential for revival of this sector.
6. Land allocation policies for allotment of housing sites integrated with financial

assistance for building resilient houses for fisherfolk should be expanded.

7. Government should identify potential sites suitable for coastal aquaculture by remote sensing and GIS mapping and frame policies for sustainable use of common property resources.

4.2.3 Manufacturing

1. TIIC can be restructured and strengthened to expand lending to industries by infusing capital of Rs.1,000 crores over three years.
2. Developing integrated townships with social infrastructure facilities in the 'growth centres' would provide a big advantage for the State in attracting investments. This could be integrated with the Smart City Mission.
3. There is a need to develop industrial parks of about 2,000 to 2,500 acres with a single window clearance system. SIPCOT could also develop mechanisms for better utilization of land in existing industrial parks with higher plot coverage and FSI now permissible and through voluntary land surrender in cases where industrial activity has not commenced for a period of 3-5 years.
4. A standard capital subsidy and location-based subsidy can be provided to incentivize industries in backward districts by promoting private industrial parks with plug and play facilities.
5. Implementation of laws for assuring proper working conditions, adequate shelter, hygiene and transport facilities along with creation of a registry of migrant labour would help curb reverse migration.
6. A comprehensive plan to provide industrial housing facilities in all industrial clusters need to be developed through the Tamil Nadu Shelter Fund and taking advantage of the recently announced Government of India scheme to develop Affordable Rental Housing.
7. Constitute an 'Empowered Committee' to review the investment proposals and take decision of granting 'in principle' approval within 15 days for 7 basic clearances to setup a manufacturing unit on a 'trust and verify' basis while other clearances could be provided through Single Window Facility in parallel. The Committee can be given statutory backing by amending the Tamil Nadu Business Facilitation Act, 2018.

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8. Increase land ceiling exemption and include land ceiling exemption under Section 37A in the single window platform with deemed approval.
 9. The process of land regularization may be simplified by bringing the process online.
 10. Develop online e-permit system for permissions for mining and include licenses related to mining on single window platform.
 11. Develop sectoral policies to reduce regulatory procedures for automobile, pharmaceuticals, textiles, leather, electronics and mining industries to attract new investments along with providing subsidies for R&D training, patenting and capital and machinery needed for R&D.
 12. The validity of clearances with short term validity/renewal period (1-5 years) such as those related to Boilers registration (renewal), license as manufacturer of weights (renewal), CTO (renewal) and trade license can be extended to 5 years.
 13. Model Standing Orders of the Labour Department are out of date and require revision to enhance productivity.
 14. The National Manufacturing Competitiveness Council had suggested establishing common facilities such as common tool rooms and cluster based facilities especially for the MSME sector. These need to be followed up for implementation.
 15. The State needs to explore possibilities of encouraging defence production.
 16. A special group should be constituted to actively pursue and facilitate establishment of a semi-conductor fabrication unit with assembly testing manufacturing facility in the State.
- 4.2.4 Micro Small and Medium Enterprises**
1. A State Level Credit Guarantee Scheme (CGS) and an MSME Fund could be established to take advantage of the Government of India's MSME 'fund of funds' to increase credit flows for MSMEs particularly for new entrepreneurs and units which currently do not have access to formal finance.

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2. An appropriate area based insurance scheme for the sector needs to be devised.
3. A data-bank that would house a wide-ranging set of data points, acting as a custodian of data for customers, MSMEs and corporates and thereby facilitate order flow should be set up.
4. There is a need to have a unified Department at the State level for Industries, including MSMEs as the definition of MSMEs has been expanded and policy clearance is needed.
5. At the State level, annual targets can be established in terms of percentage value of total contracts to be awarded to MSMEs and the implementation can be undertaken through State procuring agencies.
6. The concept of 'land banks' should be implemented with clearly demarcated space for MSMEs and effective allocation of land must be made within SIPCOT estates, in addition to SIDCO estates.
7. Private industrial parks, exclusively for MSMEs along the industrial corridors and development of MSME value chains around these corridors should be taken up.
8. TReDS system will be helpful for MSMEs in accessing credit. A concerted effort to increase the use of TReDS system need to be implemented.
9. NBFCs could become significant credit providers to MSMEs especially at the lower end. They should partner with well-established regional players with in-depth knowledge of micro markets and low-cost distribution. This would provide access to credit to MSMEs beyond the bigger cities and bring more units into the formal financial system.

4.2.5 Emerging Sectors

1. *Medical Devices manufacturing:* Immediate start to Medipark near Chengalpet near Chennai, with focus on diagnostic imaging and IV Diagnostics. Incentives, better than the general package need to be given. An angel fund is needed and the Tamil Nadu Biotech Fund can be expanded. Built to suit model will be welcomed.
2. *Pharmaceuticals:* Besides setting out a Pharma policy, as in the case of Electric Vehicles, Tamil Nadu should make haste in

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collaboration with Government of India to establish a Bulk Drug Pharma Park on the coast near Chennai. The State should have smaller parks in Tier-2 cities. Incentives for Pharma need to be more than general incentives. Land to be made available in Pharma parks, at prices competitive with other States.

3. *Biotechnology Sector:* Constitute and activate the Bio Technology Board to facilitate academia-industry partnerships and to promote growth in this sector supporting start-ups. Establish a new 100 acre Bio Tech Park, with pilot GMP manufacturing facility and high end analytical facilities, near Chennai with focus on bio similar, diagnostics, etc., with another smaller park at Coimbatore; upgrade Stanley Medical College Stem Cell Research Centre as an Institute of Regenerative Medicine; promote Contract Analytical Services; move Government of India/DBT to establish an anchor Central Institution as in Hyderabad and Bengaluru.

4. *Logistics Sector:* A comprehensive mapping of existing and projected freight flows across main Origin-Destination stretches in

Tamil Nadu needs to be carried out to identify the scope for potential multimodal logistics parks. Explore the possibilities of coastal shipping along the coast of Tamil Nadu. Special focus on effective agri-logistics involving access to cold chain, packaging and other post-harvest management techniques. Focused efforts to be taken to ensure the turnaround time at ports be brought to less than 36 hours from the current rate of over 72 hours.

5. *IT/ITES Industry:* (a) Establish the Tamil Nadu IT Advisory Council chaired by the Chief Minister. The Council should be mandated to brand the State and bring in more Businesses (b) Develop a strategy for facilitating the creation of 'Small Office Spaces' across Tier 2 & 3 cities which can be used by the employees of the IT companies based in major towns to make use as their meeting points. (c) Tamil Nadu has the potential to emerge as the Data hub of India. Already some marquee names like National Payments Corporation of India (NPCI) are locating their Data Centres in Chennai region with 8 layer security protection. TNSDC can be a flag bearer for this

positioning of Tamil Nadu as the Data Hub. (d) In order to equip the teachers and students of Higher Educational Institutions, training programmes/courses on Emerging Technologies need to be imparted by the ICT Academy.

4.2.6 Construction and Real Estate

1. Reduce stamp duty and registration charges at least for a one year period.
2. The property taxes and other associated levies could be relaxed for a period of 1 year to support the real estate and construction industry.
3. Single window system for plan approvals and plan modifications should be implemented. Single window system will create avenue for the builders for timely delivery.
4. Affordable housing scheme (Deduction at Source for Employees) – Affordable housing scheme by State Government can be initiated to promote affordable housing in the State where the Government or private employees can purchase directly and EMIs will be deducted at source. The scheme would provide incentives either in price or interest rates.
5. The State Government should promote more rental housing particularly for migrants and also take full advantage of the recent Government of India policy on Affordable Rental Housing.
6. An appropriate land pooling policy should be implemented so that developers are not compelled to develop projects in non-planned areas, which lack basic infrastructure.
7. The minimum wages security, accommodation and incentives are to be provided by the Government to win back the confidence of migrant labours. State Government may consider utilising Labour Cess Fund collected from the developers to pay construction workers during crisis periods.
8. The State Government should focus on providing financial support for building more skill development centres related to real estate and construction sector in the State.
9. The Supreme Court has already issued directions that the State Government should establish a Welfare Fund for the benefit of Construction Workers with appropriate rules for utilization of the funds. It is understood that such rules for the utilization of the fund are yet to be drafted

in accordance with the Supreme Court judgement. It is imperative that these rules are finalized at the earliest so that the large sums available under the Construction Workers Welfare Fund can be utilized effectively for the benefit of the construction workers.

4.2.7 Banking and Finance

1. For units not covered by the Guaranteed Emergency Credit Line Scheme (GECLS) a backstop on similar lines, as suggested for MSMEs, even to the extent of 20% (against 100% given under GECLS) from the State Government would help the Banks extend loans on the basis of risk sharing.
2. Banks should work with State Government to onboard all MSMEs on a portal. The KYC check that registration on Government portal requires would help in due diligence for both procurement and providing subsidies. Government functionaries and banks on the same portal would instill financial discipline.
3. Cluster lending is better than individual SME lending – more clusters both industry-wise and geography-wise need to be

formed. The success of SHGs/ JLGs formats needs to be extended to SMEs - the JLG format to joint responsibility would ensure some peer discipline.

4. TN Stamp Act requires that all mortgages of properties for loans need to be registered with the Stamp and Registration Office (SRO). Given the disruption in Government services, the Committee recommends a one time amendment to make mortgages valid so long as they are registered with the SRO on or before 31st March, 2021. This is to speed up the process of disbursing bank loans across the board. In the meantime, the permission accorded by the Government of Tamil Nadu for dematerialised e-stamping for certain categories of lending documents should be popularised and availed of to avoid needless visits to the registrar offices.
5. To ensure that the stimulus package reaches the needy quickly under the GECLS scheme, bank records should be updated. Banks should use MSME associations and connect with the beneficiaries and organise camps for disbursement.

6. Banks could conduct workshops on various inputs required for a Promoter, basic knowledge on financials, cash flow, liquidity, profit and loss, tax, etc. Handholding for registration with GST, Udyog Aadhaar, PAN No., etc. through specialised branches of banks for MSME could be facilitated.
4. The State should develop an innovative branding strategy. The branding and promotion strategy will have to be built around two factors. First, how travel could be made “seamless and health-risk free” and second, how ‘health-safe’ is the destination.
5. Encourage and cooperate with regional destination database systems and expand regional cooperation in product development, long haul marketing and advocacy.
6. Encourage tourism development programmes that include benefits for and utilizations by community residents.

4.2.8 Tourism

1. Existing overdraft limits of banks and financial institutions can be increased to 50% for Tourism sector. This may be considered for 20% increase without collateral as applicable to MSME under the Emergency Credit linked Guarantee Scheme (ECLG).
2. Interest reduction or subvention on term loans and working capital loan should be provided, which can be addressed by dovetailing the interest subvention schemes availed by MSME under TIIC and NEEDS schemes.
3. Subsidized / low-interest term loans for re-building the business should be provided, which should be extended to all industry segments viz., Hotels, Travel agents (online and offline), tour operators and any other ancillary entity that is supporting the industry.

4.2.9 Social Sector

Health

1. A decentralized health care delivery system has become necessary in the context of the pandemic. Health and Wellness Centres (HWCs) scheme needs to be revived and implemented with a much higher level of financial investment. A major system of social care for the elderly and disabled along with palliative care is necessary.
2. Urban Primary Health Centres should also be complemented by Mobile Units to deliver basic

4. KEY POLICY RECOMMENDATIONS

services to the more inaccessible settlements. In the context of urban primary care, the need to decongest the tertiary health care facilities is very critical.

3. Point of care diagnostics plus “hub and spoke” arrangements should be established so that the patients can access quality diagnostic services at an affordable cost. All primary care facilities (including HWCs) should have basic diagnostic facilities, which are identified for that level.
4. It is important to enlarge the cadre/number of public health professionals substantially. Efforts must be made to fill the vacancies at the earliest and guidelines for deputation and deployment of staff need to be tightened so that staff are available at the stations where they are needed most.
5. Develop and strengthen Disease Surveillance and Health Information Systems.

Education

1. All teachers may be trained in Computer-Aided teaching and content creation.
2. The focus also should be on active applied learning (with focus on core functional skills, life skills and employability skills) from 9th standard and upwards in line with the pilot project AALAI (Active Applied Learning And Innovation). Hubs being implemented as a SBGF (State Balanced Growth Fund) project by the Department. These Hubs should be expanded.
3. The Government may consider adding computers as a subject and Tamil and English typing as part of curriculum in an age-appropriate manner.
4. When situation normalises, Universities and Colleges can consider the possibility of introducing blended learning with face-to-face and on-line methods. Teachers may need to be trained for combining face-to-face teaching with on-line teaching. Higher education institutions may organise training programmes through the Human Resource Development Centres of the Universities.
5. An Expert Committee may be constituted to estimate the additional financial allocation required to strengthen infrastructure facilities such as on-line teaching and learning, classrooms with social distancing, hand sanitizers, water facilities, etc. and preventive measure to

mitigate the impact of COVID-19 on the higher education sector.

4.2.10 Inter-State Migrant Labour

1. Implementation of the Inter-State Migrant Workmen (ISMW) Act is key to improving the situation of migrant workers. Fuller enforcement of the provisions of the ISMW Act will improve the overall wellbeing of the migrant workers. The enforcement of the legal provisions has been rather half hearted all over the country. Enforcement will go a long way in improving their wage and health security, besides improving the quality of accommodation. Field officials have to be made accountable for any omission.
2. 100% Registration of Migrant workmen under ISMW Act needs to be ensured. ISMW Act is a Central legislation and amendment of definition of Inter-State migrant workman has to be taken up with Government of India. Each migrant worker may be given a unique ID number which should be portable.
3. Migration support centre as provided under Deen Dayal Upadhyaya Grameen Kaushalya Yojana (DDU-GKY), along with a dedicated helpline with multi lingual volunteers may be set up at the district level, in districts having large number of migrant workers like Chennai, Chengalpattu, Thiruvallur, Kancheepuram, Coimbatore, Tiruppur, etc.
4. In order to have a focused approach towards the overall wellbeing of the migrant workers, it is desirable to establish a separate Welfare Board for the migrant workers. The Board could be made self sustaining, by collecting a small cess / fees from the employers of the migrant workers. The migrant workers also need to be gradually integrated into the local society.
5. Though the responsibility of providing decent accommodation to migrant workers lies with the Contractor / Principal employer, it is most unlikely to happen. Hence, the State needs to intervene and provide affordable rental accommodation in the form of small apartments / dormitories in various parts of the State having good concentration of migrant workers.
6. Skilling and upscaling the skills of migrant workers can also be an instrument to retain them as

this adds to their income levels as well as their position in the hierarchy at the work site. State Government can provide the same through TNSDC.

4.2.11 State Finances

COVID crisis and the consequent lock-down has put the finances of the Centre and States under a strain. Revenues in 2020-21 will be significantly lower than the budget expectations. On the other hand expenditures will be higher. This will be true of Tamil Nadu as well. Under the circumstances, there will be a need to prioritize expenditures and the Centre must also come forward to allocate more resources to Tamil Nadu. In the medium term to improve the fiscal situation, following recommendations are made:-

1. Revision of the Motor Vehicle Taxes is long overdue and would help raise additional revenue of about Rs.1,000 crore per year. This revision should be implemented early by the State Government.
2. Rationalization of Electricity tax rates should be done by the State Government.
3. The Indian Tolls Act of 1851 empowers State Governments to levy tolls on roads and bridges and its securitization. Government of Tamil Nadu can look into tolling the four and six lane roads developed by it and securitize those tolls to generate additional revenues. The proceeds of securitization can be utilized for investment in future road projects.
4. Measures to increase water charges on irrigation projects to cover higher proportion of the working expenses could bring in much needed additional revenues.
5. The low returns received from large investments in public enterprises in the State need to be corrected.
6. The recommendations of the Staff Rationalisation Committee and the Committee to study the issues regarding the New Pension Scheme for Government servants should be evaluated and implemented at the earliest by the State Government.
7. The financial restructuring of the electricity utilities, TANGEDCO and TANTRANSCO needs to be taken up on an urgent basis to prevent their large liabilities becoming a burden on the State's finances. Reduction in subsidy to domestic consumers will obviate the need for cross subsidization

4. KEY POLICY RECOMMENDATIONS

by higher charging for power consumed by commercial and industrial consumers.

8. Reduction in subsidy by levying higher charges on water supplied by TWAD and Chennai Metropolitan Water Supply and Sewerage Board will help in more careful utilization of water.
9. Streamlining welfare payments could improve the efficiency of utilisation of Government resources without reducing the coverage of the scheme.
10. Strengthen Local Government Finance for COVID Response through enhancing existing agency functions like increased allocation for MGNREGS with all the norms of social distance in place. Government of Tamil Nadu should effectively use the additional grants provided by the Government of India under the stimulus package by making the resources available for the poor through effective implementation of MGNREGS.
11. State Government should undertake a detailed review of the pending projects and complete them sequentially by making adequate allocation of funds to avoid further cost and time over-runs.
12. Government of Tamil Nadu may merge TNPFC, TDFC and TUFIDCO to create a robust institution to spearhead financing of infrastructure projects in the State. This will lead to institutional strengthening, diversification of sectoral exposure and give fillip to infrastructure financing while ensuring continued adherence to evolving prudential norms.

1. Introduction

The performance of the agricultural sector is a vital contributor for the State's Economy. Agriculture in the State is the biggest segment of the economy in terms of the number of people who depend on it for livelihood. It is dominated by small and marginal farmers and landless and agricultural labourers, who are the most vulnerable in the COVID-19 episode. Small and marginal farmers constitute more than 90 % of farm households and are critical to the food security of the State. Performance of Tamil Nadu's agricultural sector had been impressive since the 1960s when improved crop varieties were introduced. After the introduction of improved varieties, a phenomenal breakthrough in productivity of crops was achieved resulting in higher production of most crops. Tamil Nadu has done extremely well in irrigated agriculture, particularly in rice, sugarcane and groundnut, the major crops of the State. Technology, expansion in irrigation and market development paved the way for perceptible growth in yields of rice, sugarcane and groundnut.

Tamil Nadu agriculture has undergone significant changes. Over a period of time, the average size of

holdings across size groups shows significant changes. The number of marginal and small farmers have increased over the years. However, the other categories of farmers viz., semi medium, medium and large holdings declined significantly over the years and clearly there is a shift from larger holdings to marginal and small holdings. The average size of holding is 0.75 ha. This lucidly shows that continued marginalization of holdings and increasing number of marginal and small holdings would only make farming increasingly uncompetitive. Farming in the State also experiences cyclical crop losses due to weather risks, market risks and production risks.

2. Approach and Methods

The COVID-19 incidence has resulted in a wide spectrum of negative impact on agriculture. Studies across different parts of the country and elsewhere revealed that COVID-19 incidence and consequent lock-down in different periods have caused several problems. They include (i) problems faced by farmers in harvesting and marketing of farm produce at farm level, (ii) huge losses due to reduction in prices of different farm produce such as fruits and vegetables like grapes,

tomato and flowers, etc., (iii) reduction in labour supply to agriculture for agricultural crop production, shortage of labourers for operating machinery, machinery repairs, (iv) disruption of supply chains for most of the agricultural commodities and (v) closure or limited functioning of many agro and agri based industries such as rice mills, oil mills, flour mills, etc.

To understand the impact of COVID-19 on agricultural sector of Tamil Nadu economy and to provide advice on the medium term policy response for reviving the State's economy, the Committee adopted the following methods and approaches for collecting information from different stakeholders of the sector.

Literature Survey and Systematic review: To have a broader understanding of the type and nature of impacts of COVID-19, the present HLC relied on a thorough literature survey. This includes, review of Newspapers, magazines, Webinars organized by different Policy Think Tanks, TV channels, Blogs of different organizations like FAO, IMF, ICRISAT, IFPRI, etc. The literature survey also helped to assess the extent of damages caused by the COVID-19 across the State.

Stakeholders' Consultation/Key informants Survey: The HLC also relied on information collected through key informants, including the Presidents of the different Farmers' Organisations, Associations, Corporates like Rasi Seeds, Salem, agro-based industries, Plantation industries, etc.

Expert Consultation Meetings at State level: Detailed expert consultation meetings have been organized at State level inviting the Heads of the different line Departments such as Tamil Nadu Agricultural University, Department of Agriculture, Department of Horticulture, Department of Agricultural Marketing and Agribusiness, Animal Husbandry, Fisheries, Agricultural Engineering, etc.

Expert Consultation Meetings at University level: As a stakeholder of interest, at the Tamil Nadu Agricultural University level, the Vice Chancellor of TNAU has convened a meeting of all the University officers and discussed thoroughly on the terms of reference of the High Level Committee. Further, Director, Centre for Agriculture and Rural Development Studies (CARDS) has constituted a Sub-Committee comprising of the scientists of CARDS to provide

inputs to the HLC. The Committee organized a series of brainstorming, discussions and presentations to collect and synthesize information from different sources.

Farm Survey: The HLC also relied on primary data collected from farmers across the State. A quick study of 1,200 farmers has been conducted across 27 districts of Tamil Nadu. The information such as socio-economic profile, impact of COVID-19 on harvest of crops, marketing of farm produce, availability of inputs, issues on labour supply including migrant labourers, overall perceptions and farmers expectations from the State was gathered. All this information was processed and analysed for the purpose of report preparation.

3. Present Cropping Pattern of Tamil Nadu

Tamil Nadu is one of the progressive States in Agriculture. The State with a total geographical area of 1,30,058 sq.Km is the tenth largest State in

India, occupying 4% of total area. There are seven agro-climatic zones in Tamil Nadu which is conducive for cultivation of various agricultural and horticultural crops. Total cropped area which was more than 72 lakh Ha in 1960s is hovering around 57 lakh Ha in the past 20 years. During 2018-19, total cropped area was 56.72 lakh Ha and the net cropped area 45.82 lakh Ha. Major crops grown in Tamil Nadu are Paddy, Coarse Cereals, Pulses, Oilseeds, Sugarcane, Vegetables, Fruits and Cotton. Due to varied reasons including rainfall, scarcity of farm labour and crop demand, the cropped area has changed over years. Paddy being a staple food crop and water intensive crop, area under paddy has slightly reduced. Coverage under millets mainly maize and sorghum and pulses has seen significant fluctuation. Drastic reduction is observed in sugarcane and oil seeds due to delay in cane payment and incidence of pests. The trend in cultivation of crops over the last 20 years is given in Table :

5. AGRICULTURE

TABLE : AREA UNDER CULTIVATION - 20 YEARS COMPARISON

Sl. No	Crop	Area under Cultivation in 2018-19 (Lakh Hectares)				
		2000-01	2005-06	2010-11	2015-16	2018-19
1	Paddy	20.80	20.50	19.06	20.00	17.21
2	Millets	7.33	7.41	6.31	8.67	9.24
3	Pulses	6.88	5.25	6.37	8.88	8.51
4	Coconut	3.23	3.71	4.10	4.35	4.40
5	Oilseeds	8.39	7.10	4.49	4.07	3.90
6	Fruits	3.16	3.68	3.90	3.70	3.73
7	Vegetables	2.17	2.30	2.27	2.20	2.25
8	Sugarcane	3.15	3.35	3.16	2.52	1.66
9	Cotton	1.70	1.10	1.21	1.48	1.35
10	Spices & Condiments	1.72	1.35	1.52	1.23	1.15
11	Other Miscellaneous & Non-food Crops	4.85	4.58	5.14	3.64	3.33
Total Cropped area		63.38	60.33	57.53	60.74	56.72

Source: Department of Economics & Statistics

Due to suitability to canal irrigated regions and effective procurement mechanism through DPCs with additional State incentives over and above MSP announced by Government of India, paddy cultivation has become very popular. Increasing demand on consumption

of millets and good market rate have encouraged the cultivation of millets and pulses.

4. Loss in GSDP from Agriculture

The lock-down period though coincided with the lean season for paddy. For many other crops

especially fruits and vegetables, plantation crops, flowers, etc., harvest, transport and marketing were affected. Even for paddy, TNAU estimates through remote sensing have shown nearly 2 lakh ha of paddy grown in 'Navarai Season' (January to April) being affected by the lock-down. Some of the crops with strong industry linkages like cotton, groundnut, maize, tapioca and mango, the demand will be subdued in the medium term with consequent income loss. An analysis done by CARDS, TNAU shows that out of the total value of the major crops (accounting 88 per cent of the GCA), more than 80 per cent have industry / export linkages.

In the above context, the loss in aggregate income would certainly impact income, employment and food and nutritional security of the vast majority of the people dependent on agriculture, majority of whom are in the lowest strata of the society and hence vulnerable to this kind of pandemic. In the agricultural sector, Rabi harvests were almost over and the new Kharif was about to begin in the State when the State was shut down. However, crop losses and consequent income and employment losses were reported in different regions and for different crops. This has affected the means for carrying on with the ensuing Kharif crops.

Some of these impacts are likely to persist in the immediate to medium term.

Income Loss to the Farmers: Farmers have suffered income loss from crop losses in the field and post-harvest operations due to non-availability of labour, lack of transport facilities, dysfunctional markets and low prices in distress sales. Standing crops at various stages of harvest, nearly 2 lakh ha of rice in the eastern part of the State, groundnut in Villupuram and Pudukottai districts were affected. Also, harvest of maize, sugarcane and fruits & vegetables coincided with lock-down.

Supply Chain Disruptions and Marketing: The entire output supply chain, that link farmers to markets, is disrupted due to non-availability of transport facilities, restrictions in free movement of farmers, labourers, traders, etc. and shutdown/partial functioning of both input and output markets during the initial period of lock-down. The inter-State trade of agricultural commodities also got affected. Subsequently, it was eased by the Government. Though the Government has exempted transport of these commodities, labour shortages and controls in the functioning of markets, restricted the supply chain activities in these commodities.

Labour Supply in Agriculture: Traditionally, agricultural operations like planting and harvesting are carried out in many parts of the State by the seasonal migrant labourers from within the State. With the decline in internal labour in recent times, external migration from other States is also witnessed in a limited extent. The reduction in agricultural labour supply has been observed in districts like Tiruppur, Thanjavur and Nagapattinam.

Impact on Input Markets: The study by CARDS confirmed minimum disruption in input markets except for issues related to machinery repair and farm credit. Farmers experienced problems in purchasing inputs like fertilizers (16%), plant protection chemicals (13%), machinery (23%), human labour (18%), farm credit (49%) and machinery repairs (55%).

Volatility in Agricultural Prices: Prices remained volatile due to both supply constraints and lack of demand for many types of produce. Price fall and Income Loss are reported in a number of commodities. The average prices of fruits and vegetables in uzhavar sandhais has shown a mixed trend. The farm gate price of grapes reduced from Rs.45 to 25 per kg. The impact will continue in the immediate term.

Agri-Food Enterprises and Agribusiness Sector: An analysis done by CARDS, TNAU shows that out of the total value of the major crops, more than 80 per cent have industry/export linkages. These crops include paddy, cotton, groundnut, sugarcane, mango, tapioca, coconut, etc. The impact will continue from immediate to medium term.

International Trade in Agricultural Commodities: Tamil Nadu is exporting agricultural commodities like non-basmati rice, fruits and vegetables and export of these commodities is affected. The lock-down has impacted the existing agri-export supply chains severely in the State. The impact will continue from immediate to medium term.

Food and Nutritional Security: Food demand is more income elastic among the poor and lower income groups and loss of income-earning opportunities could cause consumption to contract. Households are reducing food expenditures by substituting with cheaper, nutrient-poor foods. Some estimates put decline in fruits consumption from 81% to 60% and meat consumption from 65% to 54% and dairy from 56% to 45%. There has also been a reduction in the demand for fruits, horticultural and other perishable products, leading to a fall in prices.

5. Policy Recommendations

Immediate steps are required to protect the vulnerable sections from disease, hunger and malnutrition and livelihoods of the farming community. In this context, the recommendations are based on four broad principles, viz., (1) steps to be taken in the immediate term, (2) steps to be taken in the medium term, (3) measures and policies required at the State level and (4) steps required to make effective use of the various measures announced by the Central Government which are combined as the strategies to be followed in focus areas are given below:

5.1. Need for Strategic shift in the Cropping Pattern

Due to varied reasons including rainfall, scarcity of farm labour and crop demand, the cropped area has changed over years. Paddy being a staple food crop and water intensive crop, area under paddy has slightly reduced. Coverage under Millets mainly, Maize and Sorghum and Pulses has seen significant change. Drastic reduction is observed in Sugarcane and Cotton due to delay in cane payment and incidence of pests. There is no perennial river in Tamil Nadu. The release of water in

major reservoirs is purely dependent on release from nearby States. Hence, efforts should be taken to make use of the initiatives very effectively and shift towards cultivation of highly remunerative crops like vegetables in order to increase the farmers' income, nutritional status of human consumption and reaching towards self-sufficiency. In this scenario, the focus on the following crops is recommended.

To balance the availability and to augment the income of farmers, vegetable cultivation should be actively promoted in all districts particularly in Peri-metro districts.

The State Government could take the following measures:

1. *Augmentation of Vegetables and Fruits in villages:* Out of the 17,006 revenue villages in the State, there are around 2,000 villages where vegetables are grown in less than 2 hectares. Hence, efforts should be made to promote vegetables in at least 5 hectares and fruits in at least 2 Ha in each revenue village. This will make the districts self sufficient.
2. *Quantum Jump:* It is suggested that in addition to the present area of 2.25 lakh ha of vegetables, another 50% area be added in the period between 2020-21

and 2022-23. In vegetables, focus should be given to Onion, Moringa and Greens and in fruits, Jamun, Guava and Papaya can be focused considering the health benefits they offer and favourable growing conditions in Tamil Nadu. Dependency on other States for Onion can be reduced to the maximum possible extent.

3. *Focus Districts:* As vegetable cultivation is prevalent in rest of the districts, the districts like Kancheepuram, Chengalpet, Ranipet, Tirupattur, Tiruvallur, Vellore, Villupuram, Kallakurichi, Cuddalore, Ariyalur, Perambalur, Pudukkottai, Thanjavur, Nagapattinam, Tiruvarur, Erode, Tiruppur, Madurai, Theni, Dindigul, Virudhunagar, Sivagangai and Tenkasi should be given focus.
4. *Vegetable Seed Production:* Fillip to be given to increase the vegetable seed production in State Horticulture Farms. Vegetable seed production to the tune of 325 MT proposed to be taken up in 2020-21 be gradually increased in coming years to satisfy the need for vegetable seeds. For facilitating vegetable seed production in State Horticulture Farms, the infrastructure required for seed production be strengthened.

5.2. Need for strategic shift to coarse grains

In Tamil Nadu, Coarse grains are largely grown in rainfed conditions. Among these Coarse grains, Maize is mostly being consumed for livestock feed, which is helpful to meet human protein requirement indirectly. Because of heavy demand in livestock feed industries and assured market with stable price, area under Maize has increased from 80,000 Ha to 3.25 lakh Ha in the last 20 years. However, area under other millets like Ragi, Bajra, Samai, Varagu and Kudhiraivali has come down drastically. Proper Crop planning and adoption of suitable strategy will enhance the productivity leading to increase in production in a sustainable way, besides giving emphasis for increasing demand for consumption of all millets across the State. The following policies are recommended towards this:

1. Increasing the area under millets by identifying fallow lands at village level and adopting site specific interventions and introduction of millets in non-traditional areas in Ramanathapuram, Sivagangai, Villupuram including hilly areas like Kolli hills in Namakkal district, Javadhu hills in Tiruvannamalai and hilly tracts of Salem district. Replace traditional varieties

- with high yielding and drought tolerant varieties and hybrids by organizing field demonstrations on production technologies.
2. Region specific Crop Clusters – The Government of Tamil Nadu may focus on cultivation of Sorghum in Namakkal, Dindigul and Salem, Cumbu in Villupuram, Kallakurichi and Thoothukudi district, Ragi in Krishnagiri, Dharmapuri and Salem and Maize in Perambalur, Salem and Thoothukudi with support for location specific package of practices and development of appropriate cropping systems through farmers participatory approach.
 3. Support for selective mechanization - Promotion of dryland machinery for soil and moisture conservation besides providing implements for weeding, harvesting, threshing and de-hulling at subsidized cost.
 4. Modernization of Millet processing Units and Value Addition- Establishment of modern millet-based processing units and modernization of existing millet processing units may be focussed on to increase the recovery percentage and to increase the availability of millets in the ready-to-use form.
 5. *Declaration of certain districts for Millet procurement:* The State Government may declare Ramanathapuram, Sivagangai, Villupuram, Kallakurichi, Dindigul, Namakkal, Salem, Dharmapuri, Krishnagiri, Thoothukudi districts for Millets procurement at Minimum Support Price through opening of Direct Procurement Centres exclusively for millets. This initiative will give a boost to the farmers which in turn will bring additional area under Coarse grains. In general, procurement mechanism for crops other than paddy needs to be streamlined to make the minimum support price effective.
 6. Focus towards Change of Consumption pattern: At present, 20 kg of Rice is being distributed to all consumers through PDS. This allocation of grains may be revised as 18 kg of Rice and 2 kg of Coarse grains, which will pave way for introducing these Coarse grains in the food chain which will slowly lead to reduction of rice consumption and increase in demand for Coarse grains. The State Government may also think of including the Coarse grains in Noon meal schemes and ICDS to enhance the nutritional intake of children in rural areas.

5.3. More emphasis for cultivation of Pulses

In Tamil Nadu, the major Pulses viz., Blackgram, Greengram, Redgram, Horsegram and Cowpea are grown in an area of 8.5 lakh Ha, with total pulses production of 5.5 lakh MT every year. Tamil Nadu has not become self sufficient in Pulses especially Redgram and Blackgram. Hence, the Government of Tamil Nadu may take up the following activities vigorously and sustain this pace of progress in area and production of pulses:

1. *Focus to Redgram cultivation on project mode:* As area under redgram is gradually declining, efforts may be taken to identify potential pockets in the western part of the State and provide critical inputs like seeds, DAP, bio-fertilizers to farmers to cover 1,000 Hectares afresh on cluster basis. Cultivation of perennial redgram should also be encouraged in Tamil Nadu with adequate seed availability of perennial Redgram variety. Primary processing in red gram needs to be promoted among the farmers for better marketability of redgram which will incentivize the cultivation of redgram. 'TNAU Pulse Wonder' has been specifically formulated to enhance the yield and to overcome the physiological and nutritional disorders especially in blackgram and greengram. This may be promoted through various Government funded schemes among the farmers to achieve self-sufficiency in pulse production.
2. *Assured Purchase Scheme:* In the last two years, pulses are being procured directly from farmers under Price Support Scheme to assure MSP to farmers. Because of this initiative, market procurement rate of pulses has gone beyond MSP. As this initiative is welcome by farmers, this should be continued in all Pulses growing districts.
3. *Procurement of Tur dhal for Public Distribution System:-* Presently, 20,000 MT of tur dhal is being procured by Cooperation Department for distribution through Public Distribution System. To meet this requirement, the Government of Tamil Nadu, through Cooperation Department, may take efforts for procurement of pulses directly from farmers at price fixed by the Government but above MSP. The procured pulses should be used for distribution under PDS as well as under Noon Meal scheme.

5.4. Encourage Micro Irrigation

1. Tamil Nadu being water starved and monsoons playing havoc every now and then in the State, the focus needs to be to bring more area under Micro Irrigation methods like Drip and Sprinkler depending on the crop. Government should incentivize Micro Irrigation through enhanced State subsidy. Post installation service is to be strengthened and farmers are to be continuously trained for maintaining the MI system in proper working condition. Community Ground Water Irrigation Schemes combined with Micro Irrigation, under PMKSY is taken up on a pilot basis in the State during the year 2020-21 at an outlay of Rs.10.19 crore. Under this scheme, community borewells will be created in safe firkas by registered societies and Micro Irrigation is dovetailed compulsorily with the scheme to realize maximum water productivity for the ground water drawn. This will enable bringing more rainfed area under irrigation. Based on the success of this pilot, the scheme can be extended to feasible rainfed areas in safe firkas in the ensuing years.
2. Improving energy efficiency and use of renewable energy is a critical element for sustainable agriculture. In this regard, Tamil Nadu has already announced a Solar Energy policy to improve the renewable energy base in the State and has announced policies to carry the economic benefits of renewable energy generation to farmers in Tamil Nadu to enhance their incomes along with promoting energy efficiency. The PM-KUSUM scheme of the Government of India has also been envisaged towards achieving the same goals. The scheme envisages installation of stand-alone or grid connected solar energy pumping system in farm lands to generate solar energy which will be used by farmers for self consumption as well as generate farm income through sale of solar energy on commercial basis. It is understood that the Government of Tamil Nadu has already issued Government orders for implementing both the KUSUM-B and KUSUM-C schemes. Efforts may be taken by the State Government to effectively and intensively implement these schemes at the earliest for the benefit of the farm sector.

5.5. Strategies to increase financial flows to farm sector

1. The State Government has identified nearly 15 lakh farmers, obtained applications from them and handed over to banks, which need to be processed immediately for lending loans. Banks should monitor the effective use of loans obtained under Agriculture Jewel Loans for agricultural activities and ensure that availing crop loan for uses other than agriculture is not permitted. Overtime, the very wide prevalence of agriculture jewel loans in Tamil Nadu needs to be reduced by increasing direct crop loans based on land holding and cultivation records.
2. The share of agricultural term loan for investment purpose for capital formations like irrigation sources, solar pump sets, protected cultivation structures, value addition units, etc., needs to be enhanced from the present level of 21% to 30%.
3. Efforts should be taken to include tenant and lease farmers under financial inclusion. Eligible Farmers Groups and FPOs should be identified and provided with sufficient funds for collectivization of agricultural produce and marketing.

4. The quantum of Pledge loans given in Regulated Markets should be enhanced to discourage distress sale by the farmers by storing the produce in godowns and selling it when better prices are discovered. Awareness should be created among farmers about the Negotiable Warehouse Receipt (NWR) System. In this system, the farmers can store their produce at the warehouses accredited with the Warehousing Development & Regulatory Authority and are issued with NWR on the produce stored. The benefits of interest subvention are available against the NWR for period of 6 months to small & marginal farmers who have Kisan Credit Cards (KCC).
5. Financial Institutions may be instructed to give emphasis to disburse more investment credit for the capital formation in the areas of irrigation, mechanization, protected cultivation structures, storage godowns, post harvest infrastructures, etc.

5.6. Strategies for farm mechanization

To attain the required farm power of 2.5 KW/ha, the density of Tractor per 1000 ha needs to be increased from 46 to 89 nos. Hence, to bridge the gap of 43 Tractors per 1,000 ha, totally 1,99,477 Tractors (43 x 46.39

lakh ha/1000) would be required. To achieve this vision and make all farm machinery easily available to farmers, the following strategies are recommended to State Government:

1. Establishing more agricultural machinery Custom Hiring Centres (CHCs) with at least one in every village of Tamil Nadu. Location specific Agricultural Machinery and Implements may be purchased and provided to Agricultural Engineering Department (AED) in Tamil Nadu to hire out to the needy farmers at subsidized nominal hire charges.
2. Innovative and farmer friendly agricultural machinery and implements need to be promoted among the farming community in close coordination with TNAU. Specific schemes may be devised by the Government to promote farm mechanization among farmers and rural youth utilizing the facilities created for training and capacity building through NADP. To start with, two youths in each of the 17,006 revenue villages need to be trained in machinery maintenance and operations utilizing the facilities available with TNAU. Credit facility may be arranged to those farmers to purchase farm machinery. Agricultural Machinery

Service Centres at block level can be introduced.

3. Farmers and rural youth may be trained on operation and maintenance of Agricultural Implements / Equipment and Machinery.

5.7. Focus on Contract Farming

1. Contract farming is the system for the production and supply of agricultural/horticultural produce under forward contracts between producers/suppliers and buyers. The essence of such an arrangement is the commitment of the producer/ seller to provide an agricultural commodity of a certain type, at a time and a price and in the quantity required by a known and committed buyer. Supporting the purchasers and producers to enter into the legal contract farming is the need of the hour. The pre agreed price guaranteed under the contract and the assured market will be useful in reducing most of the risks associated with small land holdings. Economies of scale can be realized by small holding farmers only by way of collectivization of cultivation within the Contract Farming ambit. Many corporates are forging 'win-win' relationship with small farmers in a way that supports

sustainable sourcing which benefits growers also.

2. The existing unorganized Contract Farming happening in the State in crops like Cocoa, Medicinal Plants and Poultry should be brought under the ambit of the Contract Farming Act besides bringing in other produce amenable for processing and export. Food processing industries largely enter into contract farming agreement for timely supply of raw materials and sustainable sourcing. The Department of Agricultural Marketing and Agri Business should assess the requirement of the processing industries so that Agriculture and Horticulture Departments can tie-up the farmers for producing the raw materials. Agri Export Promotion Cell (APEEDA) with the facilitation of TNSAMB should identify potential exporters. Food processing industries to be established in the mega food park / agro processing clusters can be tied-up with the farmers for assured purchase and better price.
3. The guidelines provided under the "The Farmers (Empowerment and Protection) Agreement on Price Assurance and Farm Services Ordinance, 2020" may

be adopted to empower farmers to engage with agri-business firms, processors, wholesalers, exporters or large retailers for farm services and sale of farm produces through contract farming at a mutually agreed remunerative price framework in a fair and transparent manner.

5.8. Implementation of APMC Ordinance

1. The APMC Ordinance of Government of India should be publicized among farmers so that they know clearly about there being more choice to sell their produce. Further, the State Government should encourage registration of more traders with Market Committees so that the number of bids will increase and the farmers will get better and competitive prices. The Regulated Markets should act as a mechanism for balancing the prices of commodities. More collection/aggregation centres need to be opened by the Regulated Markets in the vicinity of production area, which will minimize the incidental charges to the farmers by way of transport, loading and unloading. Farmer Producer Organisations / Farmer Producer Companies should be encouraged to be aggregators of farm produce

since volume determines the price. This may curb the low price farm gate sale by the farmers.

2. FPOs need to be provided with the infrastructure available in the Regulated Markets on a lease/rental basis so that the aggregated produce can be sold in the Regulated Markets. Exclusive electronic trade platforms need to be developed by the State to integrate regulated markets, private markets, private market sub-yards and direct marketing collection centres for better price discovery to farmers. The FPOs need to be trained in assaying and grading methods for a large scale trade. Assaying and Grading in Regulated Markets should be strengthened by providing equipments like Near Infra Red Analyzer, UV Double Beam spectrophotometer, Grader, Sorter and Destoner for millets and pulses, etc. Community Storage Godowns at village level can be scaled up through NABARD funding as the State Act notified the warehouses as private market sub-yard. Further, pledge financing may also be provided.

3. State Government has conceptualized "Integrated Market Complexes" where the farmers can get agricultural inputs, farm

machineries sales and service, banking facilities and markets for sale of produce as "One Stop Solution", which may be expanded across the State. Such Integrated Market Complexes can be planned in each district for the benefit of farmers.

5.9. Focus on Agricultural Processing

Tamil Nadu is a leading player in India's food processing sector. Many large Indian business houses and MNCs in food processing are already operating in Tamil Nadu. Food Parks should be established in all the districts as per the production catchments available and one Primary Processing Centre each should be established for a cluster of every 10 to 20 Villages. Further, the Scheme for Formalization of Micro Food Processing Enterprises announced by GOI under Atmanirbhar Bharat Abhiyan should be implemented vigorously in Tamil Nadu. The subsidy assistance of upto Rs.10 lakh per unit is to be provided to FPOs involved in Food Enterprises like supply of value added Millets, Cereals, Pulses and other essential commodities. There is good scope for attracting youth to Agriculture as there is every chance of increasing joblessness due to economic recession. Hence, the benefits may be extended to rural

youth/agriculture graduates. As projected by GoI, 10,975 MFPEs are to be promoted in a span of 5 years. The value addition units established under MSDA should also be included under this scheme for upgradation. For marketing of MFPE products, they should be linked to bulk buyers/bulk processors through network. Contract farming arrangements should also be encouraged between farmers and MFPE with a price stabilisation fund to support both of them.

5.10. Collective Agriculture

With the introduction of scheme called "Collective Farming" in the year 2017-18, the Farmers Collective movement has gained momentum in the State. Under Collective Farming, so far, 6 lakh Small and Marginal Farmers have been integrated into 6,000 Farmer Producer Groups at an outlay of Rs.300 crore. These FPGs finally culminate into FPOs/FPCs through the TNSFAC. Many FPOs have developed clear business plans and are going in the business mode and realizing sizeable turn over. The State is extending all possible efforts to the FPOs to make them self supporting. The Tamil Nadu Policy for Promotion of FPOs has been unveiled on 09.02.2020. Under this, a slew of provisions have been made in the Policy for the benefit of FPOs.

The Department-wise assistance proposed are as below:

1. *Department of Agricultural Marketing and Agri Business:* FPOs may be given representation in the Market Committees. FPOs will be accorded preference in allocation/ leasing /hiring of marketing facilities like Godown, Transaction shed, Drying yard, Cold storage, Uzhavar Santhais, Specialized Market Complexes, Machineries/Equipments, etc., under the control of Department of Agricultural Marketing and Agri Business at concessional rates as may be determined. For storage and trading of seeds in Regulated Markets, the rent and market fee may be reduced or waived. FPOs are eligible for issue of Unified Single licenses for taking up trading in Regulated Markets.
2. *Tamil Nadu State Agricultural Marketing Board:* The Board will support FPOs in conducting regular training programmes to create awareness on post harvest technology, scientific storage, importance of value addition, market intelligence and ongoing Agricultural Marketing schemes among the farmers, officials, BoDs and CEOs of FPOs.
3. *Tamil Nadu Small Farmers' Agri Business Consortium (TNSFAC):*

TNSFAC may be established as the nodal agency for implementation of schemes for promotion and handholding of FPOs in the State under the aegis of Department of Agricultural Marketing and Agri Business. TNSFAC shall create an Agri Business Promotion Facility (ABPF) to train, guide and facilitate the FPOs in their business ventures. TNSFAC shall assist FPOs in promoting and marketing their produce for which it may set up facilities such as retail outlets and trade centres. TNSFAC shall maintain a database related to FPOs in the State for which it may develop appropriate data management tools.

4. *Support for FPOs in the Department of Agriculture:* FPOs will be encouraged to participate in Seed Multiplication Programme for Paddy, Millets, Pulses, Oilseeds and Cotton through Tamil Nadu State Seed Development Agency (TANSEDA) as done in the farmers' field and preference will be given to FPOs towards seed procurement. Department of Agriculture will issue sale permission for various agricultural inputs like seeds, fertilizers and pesticides for interested FPOs subject to meeting relevant norms. Department will facilitate

training of FPOs in bio agent production through NIPHM/CIPM/ Department of Agriculture. FPOs will be given priority for imparting training on various high yielding practices in their villages as per existing norms. Department of Agriculture will promote Organic Farming through FPOs. Members of such FPOs can avail incentive for organic conversion, inputs, on-farm input infrastructure on priority basis. Further assistance will be provided to FPOs and its members for marketing, common packaging, branding, space rent, transport, value addition, infrastructure creation, brand building, trade fairs, exhibitions, local publicity, organic fairs/melas, local marketing initiatives, participation in national trade fairs under National Mission for Sustainable Agriculture (NMSA)-Paramparagat Krishi Vikas Yojana (PKVY), etc. Preference will be extended to FPOs in the Mission on Sustainable Dryland Agriculture (MSDA) cluster areas for availing subsidy of Rs.10 Lakhs / 75% per cluster in the establishment of value addition machinery. TNAU is implementing farmers' participatory seed production through seven seed hubs for pulses and two seed hubs for oil seeds. For further scaling up of

quality seed production, TNAU may be involved in supply of breeder seeds and also in capacity building/ skill development in seed production.

5. *Support for FPOs in the Department of Horticulture:*

FPOs will be given priority/preference in Vegetable Seed Production in portions of unutilized lands in State Horticulture Farms on temporary lease basis and preference will also be given to procurement of seeds from FPOs. FPOs can develop their own Nurseries and preference will be given for purchase of planting material from FPOs. Agricultural inputs can be procured from the manufacturing FPOs. All Horticulture Scheme benefits will be extended to FPO member farmers and efforts will be taken for assistance to FPOs by bringing suitable modification in scheme guidelines.

6. *Support for FPOs in the Department of Agricultural Engineering:*

FPOs will be encouraged to establish farm machinery banks with subsidy as per the extant norms. Department will extend assistance to FPOs for purchase of Post-Harvest Technology and Management Machinery as per extant norms.

Efforts will be made to seek tax exemption including machinery insurance tax from Government of India on purchase and erection of machinery and equipments for the purpose of agri related activities from both domestic and international suppliers. FPOs will be encouraged to take up construction of community water harvesting structures and community borewell. Solar pumpsets may be installed in the common land area of FPOs on priority.

The State Government should support the above vision envisaged in FPO Policy and give all support in this regard to the respective Departments.

5.11. Focus on Agricultural Development of Delta region

Cauvery Delta Region comprises predominantly of the districts of Thanjavur, Tiruvarur, Nagapattinam and parts of Trichy, Ariyalur, Karur, Cuddalore and Pudukkottai. Rice is the principal crop in the Cauvery Delta zone, grown either as a single or double crop with the normal area of more than 14.5 lakh acres and rice production of 22.4 lakh Metric tonne, which is over 34 % of State rice production. Hence, this Cauvery

Delta zone is considered as the **“Rice Bowl of the State”**. Apart from paddy, pulses, groundnut, gingelly, coconut, banana and sugarcane are also grown in this region.

Strategies for agricultural development in Delta region

- a) As notified in the Tamil Nadu Protected Agricultural Zone Development Act, 2020, the Tamil Nadu Protected Agricultural Zone Development Authority under the Chairmanship of the Chief Minister may convene meetings regularly to discuss and evolve various ways and schemes to improve agricultural production in this region.
- b) Specific schemes may be conceptualized for irrigation and flood management in the agricultural zone.
- c) Special measures may be taken up for preserving agricultural lands for farming and providing stability to the farming economy.
- d) Immediate steps may be taken up for direct marketing of farm products, such as in farmers’ markets, outlets for Farmer Producer Organizations, etc., to increase the farm income.
- e) Various ways may be explored to allow businesses through establishment of Food Parks and Agro Processing Clusters which generate additional income to farmers of the Cauvery delta region.
- f) Modern Seed Storage godowns, Seed Processing Units and Government sale outlets at vantage points may be established.
- g) Crop specific initiatives like rice based food cluster, model integrated agri business hubs with modern marketing facilities, special centre for betel vine may be taken up.
- h) Region specific machinery suitable for cultivation of paddy and sugarcane and value addition units for pulses may be set up in all needy villages dovetailing scheme funds.
- i) Agriculture research activities specific to Delta region may be strengthened by creating exclusive research stations and evolving new varieties, machinery and technologies suitable for agricultural and horticultural crops from sowing till post harvest management.
- j) More innovative agro based industries which are beneficial to this region may be taken up in large numbers to create more employment in rural areas in this Delta region.

k) The existing research station of TNAU at Thanjavur may be reoriented for undertaking research in summer crops in delta like black gram and alternative crops like maize.

5.12. Knowledge / Skill upgradation of Extension Functionaries

For effective lab to land transfer of these technologies and productivity improvement of the Government machinery in the original sense, knowledge base and skill sets of the extension functionaries needs to be upgraded at regular intervals to make them keep pace with the technological revolution and policy changes happening around. Hence, the Extension Functionaries from the level of Assistant Agricultural Officer/ Assistant Horticultural Officer to Additional Director should be given periodic refresher training once in two years. The Agricultural Universities, Krishi Vigyan Kendras and Private Agricultural Colleges should be made the knowledge partners to train the extension functionaries. The funds available under SSEPERS-ATMA can be effectively used for the same. Customized Workshops/Webinars on specific topics should be held in respect of new technologies/ new schemes/programmes/guidelines to

make them understand the basics and keep them abreast of the subject.

5.13 Focus on Organic Farming

Tamil Nadu is slowly increasing its area under organic Farming. The area under both cultivated and wild harvested which was 12,537 ha in 2014-15 has increased to 26,547 ha in 2018-19.

1. The Tamil Nadu Organic Certification Department (TNOCD) is engaged in Third Party Certification of Organic Cultivation. To give a major push to Organic Farming, the TNOCD has been restructured in the year 2019-20 to create 29 Organic Certification Centres with one Assistant Director of Seed Certification and Organic Certification for each centre. These Certification Agencies should be further activated.
2. PGS Certification is being promoted through the Paramparagat Krishi Vikas Yojana (PKVY). The PGS certified products obtained from these clusters are sold in the brand name "TOP" i.e., Tamil Nadu Organic Produce. Through the Organic Certification Centres and PGS Regional Councils, organic certification should be taken up in

a large scale with an objective to cover 5 lakh ha by 2024-25.

3. Organic farming should be promoted in Greens including Coriander, Tomato, Bhendi, Brinjal, Gourds, Beans, Lablab, Capsicum, Cabbage and Cauliflower by incentivizing the farmers. During the year 2020-21, it is programmed to cover an area of 30,850 ha and 60,000 farmers at an outlay of Rs.15 crore. The present incentives for covering the loss due to organic conversion (Rs.2,500/ha to Rs.5,000/ha depending on the vegetable crop) and for incurring certification charges (Rs.500 per farmer), need to be increased in order to give push to Organic Cultivation.
4. There is a huge demand for organic produce in the export market particularly for cashew, tea, vegetables, fruits and spices. The export market should be targeted by improving the quality of the produce and by achieving the certification standards required for exports.
5. The FPOs/FPGs will be assisted in the marketing of organic produce and in the preparation of business plans with regard to processing and marketing of organic produce.

In the proposed Integrated Farmers Market Complexes and Integrated Agri Business Model Complexes, exclusive shops should be allocated for selling organic produce.

6. A Centre of Excellence in Organic Farming may be created in TNAU for promoting science based organic agriculture by intensifying research on organic inputs, certification, etc.

5.14. Other Strategies

1. The farmers and farm workers need to be constantly educated and reminded of the need for complying with the safety measures prescribed by the Health Department. This can be achieved by making such awareness creation as part of the regular extension work of the Departments of Agriculture and Horticulture. Safety instructions can be affixed in posters, gunny bags, labels, etc.
2. More number of workers may be allotted for agriculture activities under MGNREGS. A new operational framework for utilizing rural labour in private lands of non SC/ST Small and Marginal farmers needs to be developed. Creating a well-functioning Labour Market through

- e-platform by creating a registry using digital platforms to enable labour market functioning needs to be encouraged. An unintended positive outcome of digitizing aspects of the agricultural sector could be the formalization of informal economies, thereby providing Governments with better data and the means to roll out targeted social interventions to protect farm labourers.
3. Under PM-KISAN, similar to that of advance disbursement of the fifth instalment during 1st week of April, 2020, the sixth instalment may also be given upfront as support to procure the critical inputs to carry out agricultural operations without any impediment.
 4. Modern Cold Storage Hubs shall be established in Tiruvallur, Salem, Coimbatore, Madurai and Thoothukudi districts. The modern cold storage hubs will cater to the needs of big markets while 5 MT Solar Micro Cold Storage structures will cater to farm level storage requirements.
 5. More decentralized agricultural markets should be opened up, especially in urban areas, so that agricultural products are directly sold to the consumers.
 6. Establishment of a Primary Processing Centre for flowers cum International Flower Auction Centre at Hosur, Krishnagiri District for the benefit of flower growers and exporters in the State. Such centres should be encouraged by the Government.
 7. Online sale of Perishables - Innovative ideas such as sale of perishable produces like Vegetables and fruits through online delivery system and start-up need to be encouraged.
 8. Direct Procurement of agricultural produce from farmers/FPOs rather than from private agencies by Government Organizations for various scheme activities like Noon meal programme, SC/ ST Hostels, Amma Unavagam and Government Hospitals, etc.
 9. Youth as the torch bearers of Technology may be encouraged to come up with innovative ideas and converting the ideas to start-ups to provide end to end farming solutions. Assistance for developing APP based solutions and digital platforms for post harvest management and marketing may be provided to youth. Youth may be encouraged to consolidate farms and take up collective cultivation of raw

materials for industries through Contract Farming as they will have a better understanding of the nuances of Contract Farming and can leverage latest technologies and mechanization in large scale crop production for better profits.

10. PMFBY should be expanded to cover a greater number of farmers in the immediate and medium term. Some of the reforms in crop insurance like bringing the loanee farmers out of the compulsory coverage are bound to enhance the cost of premiums. Bringing more numbers under the ambit of insurance will transform crop insurance into a self-sustaining programme. The modern technologies and social media can be effectively leveraged to create awareness about crop insurance among farmers.
11. The digital technology tools, mobile phones, social media, etc., need to be effectively and increasingly leveraged to continue the extension activities. The Uzhavan App developed by the Government of Tamil Nadu is the right step in this direction. While e-Extension has been happening in India for some time, this has to be strengthened for unfettered

transfer of technologies and advisories.

12. Rural youth may be encouraged to establish Agro based MSMEs with an investment of Rs.5 lakh to Rs.1 crore related to Agriculture for which special incentive package on Capital, Low Tension Power Tariff, Loans at lesser rates, market development assistance, etc. may be provided.
13. Investment on agricultural research should be increased. Agricultural research enabled the State to release new crop varieties in all crops which is instrumental in increasing productivity and farmers' income. The State has produced more than 100 lakh tons of food grains six times. The State need to provide high priority to sustain the momentum and resilience of agricultural research. The current investment in agricultural research is less than one percent of the value of total agricultural output. This needs to be enhanced to minimum of two percent in the immediate term.
14. Crop Colonies may be encouraged on pilot basis in a village or a cluster of villages.

The Crop Colonies have to be connected to best infrastructure corridors such as roads, power supply, irrigation projects, storage, food processing units, cold storage units, special market zones.

5.15. Relief measures for plantation industry

The plantation industry would require the following short-term relief measures to tide over the unexpected effects of the COVID-19 pandemic:

1. The wage and wage related welfare cost of plantations amount to more than 60% of the cost of production of plantation commodities. Unless this major cost element is addressed, there will be no respite from the crisis. Therefore, in order to tide over this crisis situation and to contain the cost of production, the escalation of wage costs can be managed if the suggestions below are accepted by the Government:

i) The Variable Dearness Allowance for plantation workers, based on the progression of the Consumer Price Index should be frozen, atleast for the next three quarterly periods, commencing

from July/Sept 2020. Such a measure has already been resorted to by the Central and State Governments for their employees, spanning over a larger time period.

ii) The practice of effecting an automatic increase of the minimum wage by the State Government at the rate of 8% per year, at an interval of every three years casts an unbearable financial burden on the plantation industry, which is faced with a 24% increase in wages all of a sudden on a tri-yearly basis. As would be evident, the prices fetched by plantation commodities do not reach anywhere near this figure during this period. It is therefore required that, the minimum wage revision should be effected by the State Government only once in 5 years, as permitted under The Minimum Wages Act, 1948.

iii) The Variable Dearness Allowance system based on the Consumer Price Index for industrial workers should be dispensed with and should be replaced by a Fixed Dearness Allowance increase on a yearly basis, as being done by the States of Assam and West

Bengal for their plantation workers.

2. The Central Government has announced a scheme for bearing the Employees Provident Fund contribution (both employer's and employees') for the months of April, May and June, 2020. But this is applicable only to establishments which employ less than 100 workers and 90% of whom receive a monthly wage below Rs.15,000/-. For an industry like plantations which employ workers in thousands, this scheme has been of no avail. Thus, a reduction in the monthly wage payable by way of arresting the Dearness Allowance escalation for the short term (July 2020 to March 2021) is the only workable solution, so that existing wage levels can be maintained and costs controlled. This will enable the industry to plan their revised expenditure with certainty, for the remaining portion of the financial year 2020-2021.
3. Compliance of labour welfare legislations by plantation employers in Tamil Nadu in the organized sector is by far the best in the country, amongst the plantation States. However, despite such prompt compliance, plantation employers in the State

are often being subjected to prosecutions, mainly for statistical purposes and largely based on administrative reasons like not sending the annual returns within the prescribed time limit or the returns not being in proper form, etc. These are curable defects and do not warrant prosecution, which should be resorted to only in extreme cases where workers' statutory rights and entitlements are wantonly denied by their employers. Providing continued and assured employment to the workers during a pandemic situation is itself a herculean task for the employers and prosecution by the Labour Department machinery for flimsy reasons is the last thing that they would like to contend with.

4. The State Government should prevail over the Central Government to release all pending and already committed subsidy amounts due to the plantation industry, normally disbursed through the various Commodity Boards relating to Tea, Coffee, Rubber and Spices. Several crores of rupees are due from the Central Government on account of developmental scheme activities undertaken by the industry in Tamil Nadu. There have been massive cuts to the yearly financial allotments made

to these Statutory Boards. Such cuts in grants should only be prospective in effect and should not affect the past entitlements of the plantation industry in any way, since they had acted upon the promises of the Central Government in incurring expenditure on such schemes, in anticipation of the developmental subsidies to be received from the Government.

5. The State Government may recommend to the Central Government sanction of a special financial package for the plantation industry, comprising a rebate on interest payable on working capital availed, a one-time restructuring of loans with a principal repayment date starting from March 2021, NPA recognition period extended from 90 days to atleast 360 days and deferment of GST payments by six months without penalty.

Summary of Recommendations

1. There is a need for a shift in cropping pattern from highly water intensive crops towards less water intensive crops.
2. Efforts should be taken to make use of the existing initiatives very effectively and shift towards cultivation of highly remunerative

crops like vegetables in order to increase the farmers' income, nutritional status of human consumption and reaching towards self sufficiency.

3. Increasing the area under millets by identifying fallow lands at village level and adopting site specific interventions.
4. The State Government should consider including the Coarse grains in the Noon meal scheme and in ICDS to enhance the nutritional intake of children.
5. Focus on Redgram cultivation on a project mode.
6. Community Ground Water Irrigation Scheme combined with Micro Irrigation should be encouraged.
7. The Government of Tamil Nadu should take steps to implement the KUSUM-B and KUSUM-C schemes intensively at the earliest for the benefit of the farm sector.
8. Eligible Farmers Groups and FPOs should be identified and provided with sufficient funds for collectivization of agricultural produce and marketing.
9. Establishing more agricultural machinery Custom Hiring Centres (CHCs); at least one in every village of Tamil Nadu. Food Parks

- should be established in all the districts as per the production catchments available.
10. Support the purchasers and producers to enter into contract farming through legal binding agreements.
 11. The APMC Ordinance of Government of India should be publicized among farmers so that they know clearly about there being more choice to sell their produce.
 12. Farmer Producer Organisations / Farmer Producer Companies should be encouraged to be the aggregators of farm produce since volume determines the price. This may curb low priced farm gate sale by the farmers.
 13. Exclusive electronic trade platforms should be developed to integrate regulated markets, private markets, private market sub-yards and direct marketing collection centres for better price discovery by farmers.
 14. State Government has conceptualized "Integrated Market Complexes" where in the farmers can get agricultural inputs, farm machineries sales and service, banking facilities and market for sale of produce as "One Stop Solution", which may be expanded across. Such Integrated Market Complexes will be planned in each district for the benefit of farmers.
 15. As notified in the Tamil Nadu Protected Agricultural Zone Development Act, 2020, the Tamil Nadu Protected Agricultural Zone Development Authority under the chairmanship of the Chief Minister may convene meetings regularly to discuss and evolve various ways and schemes to improve agricultural production in the Delta region.
 16. Modern Seed Storage Godowns, Seed Processing Units and Government sale outlets at vantage points may be established.

I. ANIMAL HUSBANDRY**1. INTRODUCTION**

Tamil Nadu has vast resources of livestock and poultry, which play a vital role in improving the socio economic conditions of rural people. The small, marginal farmers and landless labourers mainly depend on livestock and poultry for sustenance as it provides sustainable livelihood opportunities. Livestock production has been growing faster than crop production and the momentum is likely to continue. The demand-driven growth in livestock production has enabled millions of poor to escape the poverty trap. Market opportunities due to the anticipated rise in demand for livestock products will provide an avenue for resource-poor farmers to increase production, improve their livelihoods and thereby, contribute to the goal of overall poverty alleviation.

In the livestock sector, approximately only 5% of the farm households engaged in animal husbandry access information on livestock technology. This indicates a sub-optimal outreach of the financial and information delivery systems. Livestock derives a major part of its energy requirement from agricultural by-

products and residues. Hardly 5 per cent of the cropped area is utilized to grow fodder. The common grazing lands have been deteriorating quantitatively and qualitatively. Despite these shortcomings, the growth shown by this sector has been impressive. The contribution of livestock sector to the Gross State Value Added (GSVA) is Rs.87,538.79 crore in 2019-20 at current prices, which is 5.21% of Gross State Value Added. The sector provides sustainable economic activities to approximately 2 to 2.5 crore rural farmers who are small and marginal farmers and landless agricultural labourers.

The crisis due to COVID-19 and the lock-down has impacted all the commercial activities associated with the sector covering the entire value chain including production, processing and marketing of livestock and livestock products including milk, meat, eggs and feed. Meat and egg production was challenged by COVID-19, both from a logistical and demand perspective. The losses incurred by the commercial poultry sector were approximately 40% due to culling of birds, forced moulting, absence of transport and marketing, lack of availability of labour, etc. Labour shortages were felt by the

many arms of the livestock and poultry sector which operated with half of the labour force.

The report of M.K.Jain Committee of Reserve Bank of India in September 2019 has mentioned that crop loan accounts for more than 90% of the total agricultural credit while the allied sectors like animal husbandry, fisheries and dairying getting only 10 % of the total credit. The report has also remarked that the allied sector has contributed significantly to the agricultural output and has been neglected by banks.

2. IMMEDIATE MEASURES TO REVIVE THE SECTOR

A. Commercial Livestock Farming Activities

Commercial farming activities were reduced due to lock-down restrictions, with the result that the entire milk, meat and egg value chain was sluggish and the incomes earned had proportionately reduced. Commercial livestock farms are very limited in Tamil Nadu and hence dairy, sheep and goat farmers remained insulated. Commercial poultry industry and feed industry suffered the most due to COVID-19.

B. Commercial Poultry Activities

1. To re-establish the collapsed poultry value chain, financial

interventions like infusion of cash through provision of short term soft loans for immediate working capital with low interest rates can be the first step.

2. New loans may be sanctioned for existing borrowers having good credit rating, without seeking additional collateral since collateral has already been provided for the earlier loans.
3. Moratorium can be provided for the existing term loans availed by the farmers and entrepreneurs involved in dairy, egg and meat production atleast for 6 months.
4. Other financial incentives like interest subventions, spreading the EMIs of existing loan repayment (preferably for 3 years), additional limit for Cash-credit loans with interest subsidy for one year may be provided.

C. Commercial Livestock and Poultry Feed Production

The demand for poultry feed in the State had fallen over 30% due to the lock-down and the continuous lock-down may decrease the demand further.

1. Maize and soya are the major feed ingredients of livestock and poultry feed. Tamil Nadu is dependent on other States for

these crucial feed inputs which have to be transported through rail rakes. Concessional freight charges may be levied for one year whenever livestock and poultry feed ingredients are transported by rail wagons. Priority in transportation is also required to avoid spoilage.

2. Railways may also be asked to add refrigerated wagons to ensure safe and hygienic transport of hatching eggs and meat without spoilage.
3. Whenever there is a shortage of cereals, the stock from Food Corporation of India like rice, wheat and maize that are stored for a long time and considered unfit for human consumption due to aesthetic reasons should be immediately released for use in livestock and poultry feed manufacture.

D. Boosting Export of Livestock Products

1. The incentive for export provided by the Director General of Foreign Trade may be increased to 10% to encourage exports.
2. Transport subsidy that was provided by Agriculture Product Export Development Authority (APEDA) may be continued. The duty drawback offered for export

which was 1% has now been reduced to 0.1%. The previous level of 1% may be restored.

3. In order to avoid time delays for documentation, digital submission of all the documents for export purposes may be adopted.
4. Namakkal may be declared as "egg export zone" which will insulate egg export from Namakkal zone even when disease outbreaks occur elsewhere in India.
5. Present GST tariff of 5% for frozen chicken products and 12% for ready to cook (Marinated/prepared chicken meats) may be lowered to liquidate stocks and for customer affordability.

E. Miscellaneous

1. Eggs were a part of the Nutritious Noon Meal Scheme of school children. In order to boost the immunity of children, till the re-opening of schools and Anganwadis, free distribution of eggs to the children directly to poor households through the PDS or through schools may be undertaken.
2. Vaccines, medicines and vitamins for livestock and poultry may be permitted to be imported directly by the farmers and the customs

duty for the same may be waived. The import duty which is being levied for imported vaccines and vitamins for the poultry industry may be waived.

3. MEDIUM TERM POLICIES TO ACCELERATE GROWTH

A. Encouraging commercial livestock farming

The major limiting factor for starting commercial livestock and poultry farms is the requirement of huge capital since commercial livestock and poultry farming is capital intensive. The major input cost is for construction of animal houses for which subsidies may be provided.

B. Invigorating Feed and Fodder Sector

1. In order to tide over the shortage of feed raw materials like maize and soya, Government should encourage contract farming. Dedicated storage facilities may be established in consultation with farmers involved in commercial activities through the PPP mode with appropriate viability gap funding.
2. Tamil Nadu is a fodder deficient State with a gap of almost 30% between supply and demand for green fodder. The Government

may establish fodder banks in each Village Panchayat in the available grazing lands to bridge the gap and thus increase productivity of the available livestock population.

C. Fillip to Food Processing

1. Food processing is a priority sector for the Government. Synergy between the animal husbandry and food processing sectors can provide immense opportunities in processing, food retail, transport, logistics and related infrastructure sectors to players in the food processing value chain. Eggs and Meat Processing units can be started in PPP mode. Incentives can be offered in the form of concessional land, provision of water, electricity and other clearances under single window system. The Departments of MSME and Food Processing should in collaboration with the Department of Animal Husbandry Department facilitate the establishment of processing facilities for milk, meat and eggs.
2. Manufacturing of Processing Equipment, Food Packaging Equipment including manufacturing both machinery

and packaging materials, shall be encouraged.

3. Processing Infrastructure in Feed and Fodder Production including establishing mini and major cattle feed plants, Urea-molasses brick manufacturing units, compound feed manufacturing units, complete feed block making units in rural areas by private players or through the PPP mode.

D. Investments in Market Infrastructure

1. Financing the establishment of Suitable cost effective *satellite slaughter houses with facilities for waste management* at the village level, *establishment of cold storage facilities to store eggs and meat* in rural areas, establishing cost effective processing plants and rendering plant, *Carcass utilization plants can be taken up.*
2. Markets for live animals and their products are under-developed and dominated by informal traders who often exploit producers. The strengthening of linkages between production and markets through institutions

such as co-operatives, producers' associations and contract farming should be promoted.

3. An e-Market platform which will provide market intelligence on the prices of various livestock besides opportunities to exploit favourable rates elsewhere should be developed.
4. Livestock markets need to be professionally managed. Except for poultry products and to some extent for milk, markets for livestock and livestock products are underdeveloped, irregular, uncertain and lack transparency. Further, these are often dominated by informal market intermediaries who exploit the producers. Access to markets is critical to speed up the commercialization of livestock production. For this, the framework to be announced by the Government of India for barrier free E-trading of agricultural produce shall be extended to cover livestock and poultry products also.
5. Addressing Infrastructure Gap in Market Infrastructure
6. A policy to address the infrastructure requirements

in livestock markets may be evolved in collaboration with the local bodies keeping the animal welfare regulations in mind.

7. A policy for establishing rural slaughter houses needs to be evolved in coordination with the local bodies. Slaughtering facilities are available only in urban areas. More than half of the total meat production comes from un-registered, make-shift slaughterhouses. Rural slaughter houses may be established with all facilities.
8. Presently, there is high wastage levels of 2.7% in meat and 6.7% in poultry due to lack of cold storages and preservation techniques. Storage facilities may be created for storage of eggs and meat in the high production districts with industry participation for which 25% subsidy on capital cost may be given. A Market Intervention Scheme that would enable fixing a Minimum Support Price may be undertaken once storage facilities are established for eggs and meat.

E. Import Substitution

1. Focussed attention shall be given towards development

of technology intensive inputs like vaccines, commercial vaccine production, establishing accredited laboratories for feed analysis, disease diagnosis, food residue analysis, etc.

2. Import duty on Food processing and cold storage equipment should be reduced which will facilitate Make in India initiatives.

F. Miscellaneous

1. Labour laws should be streamlined to facilitate easy compliance.
2. Ways and means shall be worked out to bring back migrant workers as the livestock and poultry industry depends 60% on migrant work force.
3. A data bank on the State livestock farmers, species and numbers raised, technologies adopted, health cover, etc. should be established.

4. RECOMMENDED POLICIES

A. *Increasing the Ground Level Credit for Animal Husbandry Sector*

The Department of Animal Husbandry, Dairying and Fisheries, Government of India, has indicated

that a minimum of 33.33% of target for crop loan (short term loans) and term loans needs to be earmarked for livestock sector by all the banks. The ground level credit for the animal husbandry sector in the State needs to be ramped up on par with agriculture/crop loans atleast to the levels contemplated by the Government of India.

B. *Animal Husbandry Infrastructure Development Fund*

The Central Government has announced setting up of Animal Husbandry Infrastructure Development Fund worth Rs.15,000 crore with the aim to support private investment in dairy processing, value addition and cattle feed infrastructure. Government has invited private investments in dairy processing, value addition and cattle feed. The funds can be used for improving the processing infrastructure, more so in meat industry including poultry meat processing as the common practice of wet slaughter of livestock and poultry is to be discouraged in the light of the COVID-19 experience.

II. DAIRY SECTOR

1. INTRODUCTION

Tamil Nadu is one of the leading milk producers in India with a milk production of 223 lakh litres per day. Out of this, around 17% of milk i.e., 38 lakh litres per day (LLPD) is retained for household consumption and nearly 32 % i.e. around 71 LLPD is being procured by the organized sectors such as co-operatives and private dairies.

Dairying has been assuring better livelihood options to rural poor, by providing gainful employment and income to them. COVID-19 appears to have affected almost all economic activities and dairy farming cannot be an exception.

Although there is little restriction on the transport of farm inputs and output during the lock-down, the unfortunate spread of unscientific and unauthorized rumours about the role of livestock products on the spread of virus at least initially had resulted in dramatic decreases in the demand for milk, which had affected rural dairy industry. Besides this, the input prices soared and retail consumer prices of milk increased to certain extent. Although the consumer price of milk did not rise much, the cost of production of milk at farm level increased substantially

due to rise in feed cost resulting from transport issues.

2. IMPACT OF COVID-19 ON DAIRY SECTOR

Despite Governments' efforts to protect the rural vulnerable sections from the adverse impacts of the pandemic, continuing restrictions on movements of people and vehicles might have led to concerns on dairy farm economy. The labour force in dairy sector might have been hit heavily during the period. The disruptions on the supply of perishable milk to meet the urban demand appeared to have created apparent damages in the supply chain from the farm gate to the consumer's plate. The reverse migration of workers from urban centres to their rural native places has also triggered panic buttons in rural employment.

The sale of dairy products has been severely hit during the lock-down period, as the uptake by the organized processors / industries has been affected due to shortage of workforce and transport issues. Prices for dairy products at the farm gates have not increased, yet the consumers have been paying more. Closure of hotels, restaurants and sweet and tea shops was depressing

milk sales. Eventually, the entire dairy farm economy might have experienced a setback, the reversal of which is absolutely essential to ensure sustainable rural livelihoods.

3. ISSUES SPECIFIC TO PRIVATE DAIRY SECTOR

The feedback obtained about the problems and difficulties encountered by the private dairy operators, who were also catering to the needs of neighboring States like Kerala, Pondicherry, Telengana and Andhra Pradesh revealed reduced procurement during COVID-19 lock-down period. In addition, there was a substantial reduction in the sale of milk to the consumers by about 40% to 50%. This has resulted in the accumulation of Skimmed Milk Powder, ranging from 200 MT to 1000 MT during the COVID-19 period. Further, the existing electricity tariff structure was said to affect the current business, due to reduced sale volume.

Most of the private operators were reported to have ended up in loss to the tune of Rs.50/- per kg of SMP due to reduction in market price. Some of the dairies had availed overdraft credit from banks to pay the milk producers, an added burden to their businesses.

4. ISSUES SPECIFIC TO CO-OPERATIVE DAIRY SECTOR

The issues faced by the private dairy industries have resulted in more challenges to the co-operative dairy sector. Since the private dairy sector reduced their procurement quantity of milk and paid only lesser amounts to their producers, they resorted to enroll themselves in milk co-operative societies, which resulted in sudden surge in milk procurement at the co-operatives. However, like private dairies, the State dairy co-operatives could not revise the procurement price downward.

5. RECOMMENDATIONS: IMMEDIATE MEASURES

CO-OPERATIVE DAIRY SECTOR

A. *Minimum support price for milk*

The procurement price for milk is to be relooked in the context of the reported rise in input (especially feed and fodder) prices, so that an appropriate policy measures may be chalked out and implemented to assure the rural poor dairy farmers a remunerative price on the basis of cost of production.

B. *Supply of Milk / SMP in Social Security Schemes*

Milk / Skimmed Milk Powder (SMP) may be supplied as part of Social Security Schemes may be made mandatory to absorb the excess milk available.

C. *Support to Farmers*

To mitigate the COVID-19 impact, an additional interest subvention of 2% may be provided by the Government for the loans availed for procurement of more milch cows through financial institutions and Kisan Credit Cards.

D. *Support to Dairy Industry*

1. During COVID-19 period, the dairy co-operatives incur heavy loss towards accumulation of excess inventory of SMP due to reduced market price combined with lesser demand. To compensate the loss, differential milk procurement price of Rs.8/- per litre of milk procured may be provided as incentive for at least a period of one year.
2. Due to COVID-19, the excess milk procured is being converted into Skimmed Milk Powder (SMP) for which export subsidy to the tune of Rs.50,000/MT (Rs.50/Kg) may be considered.

3. The import duties for cleaning equipment, dairy machineries, accessories, raw materials, cattle feed ingredients and value added products may be waived.

PRIVATE DAIRY SECTOR

1. The procurement price for milk is to be fixed considering the reported rise in input (especially feed and fodder) prices, to assure the rural poor dairy farmers a remunerative price on the basis of cost of production.
2. There is a need to ensure that private dairy operators pay the minimum support price for milk to the producers. This can be done under "The Tamil Nadu Agricultural Produce and Livestock contract Farming and Services (Promotion and Facilitation) Act, 2019, Section 2(zd) and Schedule X(7).
3. The incentive for export of SMP and waiver of import duties for cleaning equipment, dairy machineries, accessories, raw materials, cattle feed ingredients and value added products would be applicable to this sector as well.
4. The working capital loan disbursement should be based on the total value of milk daily procured from farmers and not

against stock basis and repayment period may be extended to 36 months instead of 12 months, to sustain the business.

6. MEDIUM TERM MEASURES

CO-OPERATIVE DAIRY SECTOR

A. *Increasing the Export Subsidy*

Grant of incentives and increase of export subsidy to 10% under Merchandise Exports from India schemes (MEIS) may be considered.

B. *Funding assistance structure for Dairy Infrastructure*

1. The rate of interest levied for DIDF loan may be reduced from 6.5% to 5% and the funding pattern may be revised for loan with margin money from 80:20 to 90:10.
2. NABARD Infrastructure Development Assistance (NIDA) may be provided for the dairy projects with cost of less than Rs.100 crore also.
3. The Government may consider 25% capital subsidy for dairy plant equipment and marketing equipment.

PRIVATE DAIRY SECTOR

1. Increase of export subsidy to 10% under Merchandise Exports from

India schemes (MEIS) and Grant of incentives may be considered.

2. The Government may consider 25% capital subsidy for dairy plant equipment and marketing equipment.

III. FISHERIES

1. INTRODUCTION

Tamil Nadu has 1,076 km long coast line and 41,412 sq.km of continental shelf area with an Exclusive Economic Zone (EEZ) of 1.9 lakh sq.km, contributing to 6.88 lakh MT of marine fish production. Tamil Nadu has inland fisher population of 2.36 lakh. Tamil Nadu possess 3.83 lakh ha. Effective inland water resources comprising reservoirs, major irrigation tanks, minor irrigation tanks, short seasonal tanks, ponds, rivers, backwaters and other water bodies. Brackish water area of 56,000 ha is under capture fisheries and an area of 6,236 ha is under coastal aquaculture production, mainly shrimp aquaculture.

This sector supports the livelihood of 10.48 lakh marine fishers and 2.36 lakh inland fishermen/fish farmers. Tamil Nadu has 13 Coastal Districts, 608 Fishing Villages, 9 Major Fishing Harbours, 3 Medium Fishing Harbours, 43 Fish landing

centres / Jetties and 243 Fish Landing Points. There are 5,806 mechanized and 41,652 traditional fishing crafts which are actively engaged in fishing. The average monthly fish landing from the State is about 50,000 MT. The State exported 1.29 lakh tons of marine products and earned a foreign exchange of Rs.5,591.49 crore during 2018-19.

The impact of the lock-down imposed to contain the spread of the COVID-19 directly and indirectly affected supply and demand side of fisheries sector resulting in loss of productivity and loss of wages in the capture and culture fisheries. It hit the domestic market as well as the exports. The total estimated loss in fisheries sector of Tamil Nadu during the entire 98 days lock-down period till June 2020 is Rs.2,462 crore.

2. RECOMMENDATIONS FOR FISHERIES SECTOR

A. Immediate measures

i. *Marine and inland fisheries sector*

1. *Immediate Credit support/ Institutional Financing*

COVID-19 lock-down and restrictions severely affected the financial status of traditional marine and inland fishermen and fish workers.

The present scenario has even complicated the availability of the informal credit. Institutional credit inflow is essential for revival of this sector to overcome the stalemate situation.

Kisan Credit Card (KCC) and Mudra Loans are suitable products to infuse credit into this sector. Credit infusion through KCC at 7% Rate of Interest (ROI) and with additional interest subvention will boost this sector.

2. *Facilitating Inter-State movement of Labour*

Fisheries sector is a labour intensive sector. In all sections including capture fisheries, harvest and post-harvest, pre-processing, processing, transport and marketing, a significant number of migrant labours are involved and most of them have returned to their native States during lock-down.

3. *Direct Cash Assistance*

Traditional fisheries sector is vulnerable to disasters of various nature. In order to mitigate the suffering of the fisher folk, Government disbursed Rs.2,000 as a onetime ex-gratia totaling Rs.93.21 crore to 4.66 lakh fishers, besides advancing the ban period relief of Rs.87.86 crore to 1.75 lakh fishermen families.

As most of the fishermen/fish workers are losing wages during the lock-down, providing exgratia/cash assistance to most vulnerable groups as a social security measure may be considered.

ii. **Aquaculture and Fish Processing sector**

1. *Import facilitation for Coastal Aquaculture inputs*

Tamil Nadu hosts 63 Shrimp hatcheries which acts as the backbone of Aquaculture industry and export market in the country. Due to suspension of International flights including cargo flights due to COVID spread, *P.vannamei*, a predominantly cultured White shrimp Specific Pathogen Free (SPF) brood stock could not be imported which leads to post-larvae production loss and has further cascading effect on price rise in seed, farming and production of raw material for export.

Therefore, Government of India should arrange for operation of more cargo flights from United States for facilitating import of SPF brooders to shrimp hatcheries.

2. *EPF and ESI concessions*

The pre-processing and processing sector employs good number of semi-skilled to skilled labourers. EPF and ESI concessions announced

by Government of India for the employees who draw salary less than Rs.15,000 may be increased to Rs.25,000.

iii. **Fish marketing sector**

1. *Creating safe marketing avenues*

In view of the recent COVID-19 outbreaks, standard operating protocols for social distancing need to be followed in fishing harbours, fish landing centres and fish markets.

Central and State Governments need to create common facilities for safe landing, hygienic handling and marketing by practicing social distancing at Fishing Harbours and Fish Landing Centres. Online marketing platforms also can be created for fisheries sector.

B. **Medium Term Measures**

1. *Insurance coverage for Aquaculture*

Coastal aquaculture and mariculture involves high levels of operational risk. However there is no tailor-made insurance product available for this sector.

Government should instruct the insurance companies to device a comprehensive insurance product for this sector.

2. *Creation of Cold Chain and Processing Facilities*

The Fishing industry utilizes only one percent of the cold storage capacity available in the country. While three-fourth of the fish harvest is marketed in fresh form, there is a strong need for creating the cold chain industry to come up with innovative, affordable and cost effective transportation and storage facilities to ensure supply of superior product to the consumer.

Government incentives for the creation of cold chain and processing facilities such as establishment of ice factories in major Fish Landing centres, supply of insulated trucks, cold storages, pre-processing and processing facilities at landing centres for realization of maximum price and also to boost the export.

3. *Encouraging Public Private Partnership*

Maintenance of such facilities will be managed by the private. Suitable revenue generation model will be worked out. Cold chain facilities in the fishing harbours and fish landing centres will be jointly managed by Fishing Harbour Management committees, Fisheries Department and private operators.

4. *Marketing for Fish*

Farmers and fishers with perishable products like fish need continued markets. The Government should strengthen marketing facilities for fish and fishery products which will be helpful to the fishers as well as the consumer point of view.

5. *Mechanization of the fishing operations*

For revival of traditional vulnerable fishing sector fishing efficiency need to improved through mechanisation of traditional fishing crafts, by providing OBM/IBM, insulated ice boxes, replacement of nets for traditional fishermen, refrigerated fish hold and slurry ice machine.

6. *Thrust to Deep Sea fishing*

Coastal traditional fishing communities are vulnerable to any pandemic or disaster and their livelihood needs to be protected during adverse situations. The conventional trawling methods of fishing have to be phased out in order to protect the marine fishery wealth. *Leaving the near shore territorial waters for the traditional sector will ensure this to some extent.* For this, the mechanised sector should be diversified to undertake sustainable deep sea

fishing through Gil net and Long line methods. More thrust has to be given under PMMSY to promote eco-friendly fishing practices.

7. *Affordable and Resilient Housing*

As a measure of social security and improvement in socio economic status of fisher community, affordable housing need to be provided.

Land allocation policies for allotment of housing sites integrated with financial assistance for building resilient houses should be evolved.

8. *Investment in value addition*

Presently only 5% of the total marine fish production of the State is consumed in value added form. This segment of market has a vast scope for development to enhance the value of the produce.

Comprehensive proposal covering all the sectors of fisheries with special emphasise on value addition has been submitted to Government of India under 'Pradhan Mantri Matsya Sampada Yojana (PMMSY)'.

C. Long term Policy interventions

1. *Resource mapping and Policy framework for brackish water aquaculture*

Tamil Nadu has brackish water area of 56,000 ha and a presently 6,236 ha is under coastal aquaculture production, mainly shrimp aquaculture. Government should identify potential sites suitable for coastal aquaculture by remote sensing and GIS mapping and frame policies for sustainable use of common property resources.

2. Cage culture and Seaweed Farming

State has vast potential for cage culture in sea and seaweed farming. However well defined mariculture policy is yet to be evolved. The proposed mariculture policy should have well defined clauses for leasing out the open sea area for traditional fisherfolk, Public Private Partnership projects and for private in order to invite investment which will offer sizeable employment to coastal fisherfolk.

3. Promotion of land leasing for aquaculture

Suitable land parcels should be identified for coastal aquaculture and such land should be leased out either on long term or short term to the aquaculturist to create bigger aquaculture estates.

The aquaculture leasing policy should be guided by a set of rules and principles relevant to public trust responsibilities such as common property use, conservation and environmental protection and should specify the size of farm, duration of farming and other terms of lease. Rent thus collected should be used for development of coastal areas.

4. Stock Enhancement and Conservation of resources

In order to ensure livelihood of traditional fishermen through installation of artificial reefs, policy initiatives should be taken for stock enhancement in near shore waters.

**SUMMARY OF RECOMMENDATIONS
FOR ANIMAL HUSBANDRY, DAIRY AND FISHERIES**

1. Concessions in electricity tariff can be provided to all poultry farms and related activities.
2. Regulating marketing of eggs - through an appropriate agency so as to give advantage of prices to the producer and consumers. A minimum support price on the lines of cereals and pulses may be fixed for eggs.
3. Establishing new farms - the Government may provide capital subsidy for construction of poultry houses for new large scale commercial poultry farms as the input cost keeps escalating. Subsidies can also be provided for establishment of commercial Dairy farms. Government can encourage contract farming for maize and soya for feed and fodder. Dedicated storage facilities may be established in such places in consultation with the poultry farmers on either PPP mode or subsidies can be provided for this initiative.
4. Eggs and Meat Processing units can be started in PPP mode. Incentives can be offered in the form of concessional land, provision of water, electricity and other clearances under single window system
5. Dairy processing and milk value chain can be established as follows:
Primary Processing:
Grading and Refrigeration, Establishing infrastructure for preservation of raw milk in local areas and avoid transportation of milk over a long distance for processing.
Secondary Processing:
Establishing processes for diversification and preparation of products like Packaged Milk, Flavored Milk, Cream, Milk powder at the production centres itself.
Tertiary Processing:
Yoghurt, Cheese, Ice cream, Curd, Baby food and other value added products.
6. Investment in different dairy cultures, including dairy biologics, enzymes, probiotics and other coloring materials for food processing.
7. Retailing of dairy products for standardization and upgrading the products in the main metropolitan cities can be undertaken.

Improving Infrastructure facilities in the Livestock Markets / Sandies and a e-Market platform may be established.

8. The lock-down and restrictions severely affected the financial status of traditional marine and inland fishermen and fish workers. The present scenario has even complicated the availability of the informal credit. Institutional credit inflow is essential for revival of this sector to overcome the stalemate situation.

9. As most of the fishermen / fish workers are losing wages during the lock-down, providing

exgratia / cash assistance to most vulnerable groups as a social security measure may be considered.

10. Land allocation policies for allotment of housing sites integrated with financial assistance for building resilient houses should be evolved.

11. Government should identify potential sites suitable for coastal aquaculture by Remote Sensing and GIS mapping and frame policies for sustainable use of common property resources.

1. Introduction

COVID-19 introduced a twin shock on the industrial economy – demand and supply shock. The supply side shocks come from both capital and labour.

Reduction in Labour: There is a direct impact on industries due to workers being affected by the virus. Further, there is a reduction in available workforce due to travel restrictions, quarantine efforts and workers staying home to take care of sick family members or children. Lastly, there is a trend of reverse migration of labour from Tamil Nadu to other States which would cause shortages in availability of skilled labour in the short to medium term.

Reduction in Capital & Inputs: The global supply chain getting disrupted due to trade, transport and logistics has resulted in constraints in certain raw materials for production. Workplace closures disrupt supply chains and lower productivity.

On the demand side, the negative demand shock is both global and regional. Abrupt reduction in industrial activity and restriction on movement of goods & services across international and sub-national borders are affecting

demand for the State's goods & services. Domestically, health care expenditures will rise sharply, thereby reducing disposable income for consumption of goods and public consumption. Private consumption will decline due to layoffs, income declines, fear of contagion and heightened uncertainty, making people spend less, triggering further business closures and job losses.

Delayed consumption: Consumers would prefer to 'Wait-and-see' before making purchases, thereby delaying consumption and reducing demand for industrial products in the short term. Financial market volatility could further disrupt aggregate demand.

2. Impact on Key Sectors

Different sectors within manufacturing have been impacted differently. Industries linked to essential services such as medical supplies, pharmaceuticals, food processing were allowed to operate during the lock-down. Industries with continuous processes such as refineries, large cement plants, sugar mills, fertilizers, float glass plants, large foundries with continuous process, tyre manufacturing plants and large paper mills were allowed to operate

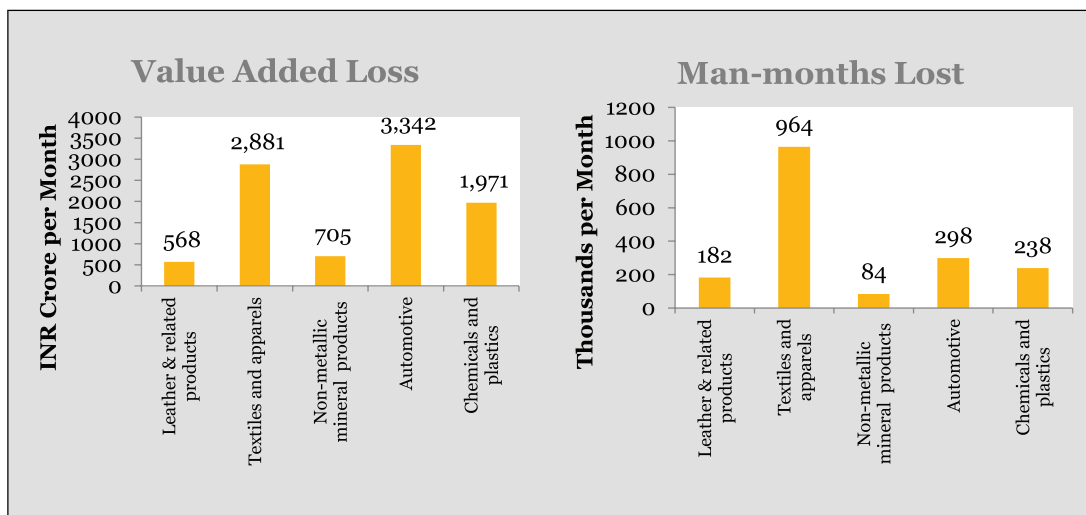
7. MANUFACTURING

during the lock-down and hence are expected to have a relatively lesser decline in output.

In sectors such as electronics and electrical equipment, volatility in output may arise due to higher global interlinkages and exchange rate fluctuations. The output trend for sectors such as metals and furniture could be impacted due to fluctuation in raw material prices. Employment intensive industries, which were dependent on migrant labour, will face a potential shortage in labour

in addition to a decline in demand. The impact of two months lock-down on the manufacturing sectors due to loss in value-added is estimated to be Rs.35,860 crore and 53.2 lakh man-months. Out of this, the impact on critical sectors determining the functioning of the economy such as Textiles, Leather, Automotive, Chemicals and Non-metallic mineral products like Cement, due to the lock-down, in terms of GVA loss and man-days loss for the top 5 sectors is estimated to be Rs.18,931 crores and 35.3 lakh man-months respectively.

FIGURE 2-3 VALUE-ADDED & MAN-MONTHS LOSS FOR KEY SECTORS DURING LOCKDOWN



Tamil Nadu is known for its automotive industry all around the world. There is also the presence of a large number of component manufacturers in the

State, predominantly in the MSME segment. The sector not only caters to the domestic demand but also caters to the world market. The automobile sector was already

affected due to muted demand even before the advent of COVID-19 and the current crisis has exacerbated the production and performance of the sector. The sector suffered massive losses as automotive based demand is a part of the non-discretionary spending of people. The value-added loss is estimated to be Rs.6,683 crore and nearly 6 lakh man-months for two months of lock-down. Leather industry is a massive employment generator and is one of the mainstays of Tamil Nadu's economy, with Ambur, Ranipet, Vaniyambadi being a cluster. The projected loss to this sector due to lock-down is Rs.2,800 crore of output and over 3.6 lakh man-months due to cancellation of export orders. Subdued domestic and international demand along with a freeze on production led to this situation. Further, the demand for leather is seasonal and due to the lock-down this sector has missed out on production for the festive season.

The chemical industry in India is one of the largest in the world. The industry in Tamil Nadu has suffered losses to the tune of Rs.3,942 crore and employment losses to the tune of 4.8 lakh man-months. General Manufacturing is one of the biggest demand indicators in the Business to Business (B2B) channel and includes sectors like Cement. The

loss of demand and output in this sector is also an indicator of the situation in downstream sectors like Construction. This sector suffered a value-added loss of Rs.1,409 crore and over 80,000 man-months. The textile industry, like leather, is also a mainstay of Tamil Nadu's economy. The two sectors put together employ over a million people. The plot above indicates that textile industry suffered losses to the tune of Rs.5,761 crore and nearly a two million man-months were lost in the process. This sector also employs a large number of women and depends significantly on exports. Tiruppur Exporters Association highlighted that as lock-down was imposed earlier in West, dead inventory of Rs.9,000 crore exists and this is expected to move and clear only by January 2021. The electronics industry of Tamil Nadu has the 2nd largest share of manufacturing output in India and ranks 3rd in electronics exports in the country. This sector also has a large women workforce. The sector is touted as one of the core sectors to focus for growth in the future. The value-added loss to the electronics industry (including computers and optical products) is about Rs.1,981 crore. The man-month losses in this sector are nearly 2 lakh man-months.

3. Policies for Resilience

Tamil Nadu's industries have shown a tremendous spirit of resilience that is required to weather the challenges raised by an unprecedented event like COVID-19. Based on consultations with captains of industry and industry associations, there are measures that the Government can adopt to mitigate the impact of the shock caused by COVID-19 and ensure that that the industry is able to recover in the medium term. The issues and suggestions provided by the industries are summarized below.

3.1. Extension for Renewals

Certain clearances such as CTO have been extended from 31.03.2020 by 3 months till 30.06.2020. However, considering the immense losses suffered by the industry on account of COVID-19 and the need for giving adequate time for revival, it is requested that the validity of consent to operate for all units which expired on 31.03.2020 or after may be extended till 31.12.2020.

3.2. Transport & Logistics

Industries are facing an issue in transporting its workforce due to social distancing norms, which lead to sub-optimal use of transport capacity. State Government buses, which are idle, could be used to transport the remaining 40% people.

3.3. Financial Support

- Industries require support on operational expenses for the next year to manage supply chain issues.
- As some sectors such as electronics operate on small margins, waiver of any kind of service charges, energy charges and SIPCOT charges would support the industry during the crisis period.
- There have been disputes between agencies and companies regarding electricity charges payable during lock-down. Companies have been asked to pay for April and May and are requesting waiver/reimbursement of the Minimum Demand charges.
- GST could be reduced in the short term for a period of 3 months and vehicle registration fee can be waived for 3-6 months to kick start purchasing

3.4. Industrial & Social Infrastructure

3.4.1. Industrial Townships

In the past, the State has seen companies such as India Cements, SPIC, DCW, Ramco besides PSUs like BHEL and NLC while setting up their plants, have promoted self-contained

residential colonies with housing, play grounds, healthcare, shopping and recreational facilities. These integrated industrial cum townships with safe and regulated working and living environment, are better placed to face threat from the spread of virus like COVID-19. In the future, based on this model, the State Government and its promotional agencies can think of developing such integrated townships with social infra facilities in the new and existing growth centres and industrial complexes near Chennai and in other districts. This will be a big advantage for the State in attracting domestic and foreign investments, post COVID-19.

Specifically, 15% of the industrial park could be kept aside for social infrastructure including educational institutions, multi-speciality hospital, retail and entertainment centre, golf course, five star hotels, multi cuisine restaurant, good club for recreation and power generation through solid power disposal. While the establishments is primarily for the use of the residents, these would also be open to non-residents, which will in turn develop the ecosystem, especially in non-urban centres. This could also be integrated with the Smart City Mission from Government of India.

3.4.2. Industrial Parks

There is a need to develop industrial parks of about 2000 - 2500 acres to service the revival and growth of industry. The Government could conduct Techno Economic Feasibility for Development of Industrial Parks around some of the possible cities and acquire land for development of Industrial Townships in any of the industrial corridors. Further, the Government could appoint a nodal office for the proposed industrial park, who will have authority to grant approvals and permissions to the occupiers of Park and be the single point of contact for the occupiers of Industrial Park, paving way for Single Window clearance. If the approvals are required from other agencies, the nodal officer would obtain the same from the agencies. Further, fiscal incentives can be provided based on investment made in the industrial park and fiscal incentives on GST reduction both on goods supplied to industrial park and goods manufactured can be provided to the industries.

3.4.3. Trunk Infrastructure

There is a need to improve the Chennai – Bengaluru highway as many overseas buyers frequently visit clusters along this stretch. The highway is currently heavily

congested with traffic and is also in a poor condition. Conversion of Chennai – Bengaluru highway into a World Class Highway will give a major thrust to the exports from the sector located in the Vellore – Tirupattur – Kancheepuram districts and will also help in promoting the image of Tamil Nadu as a State with world class road connectivity.

3.5. Labour

3.5.1 Migrant Labour

One of the major impact of COVID-19 on the labour force is the 'reverse migration' of migrant workers from Tamil Nadu to their home States attributed to the loss of daily wages, uncertainty of the extent of the lock-down and inadequate housing and transport facilities. The State has arranged for return of at least 2.47 lakh migrants to the home States. It is unclear how many of them will return. Due to the reverse migration, the State is expected to have shortage of labour in the short run. Some skilled migrant workers are very difficult to replace. The State has to implement laws for assuring the workers proper working conditions with adequate shelter, hygiene and transport facilities so that they are discouraged from reverse migration. GoTN may take up an exercise to create a registry of migrant labour.

Further, the Government may look at this exodus as an opportunity to create jobs locally. This will require identification of skillset and skill gap of the existing labour force and willingness of manufacturing units to pay more and reskill the workers.

3.5.2 Labour Reforms

Labour & Employment subjects are in the concurrent list of the Constitution. Several States have brought a series of Ordinances / Notifications exempting or extending compliance formalities. The manufacturing sector in Tamil Nadu has also requested for exemptions for augmenting additional investments and mitigating the present scenario. The reform measures that may be considered for immediate action are:

- a. Considering the cash flow crunch – Extension of time for payment of wages from 07th of every subsequent month to 15th of every subsequent month.
- b. Exemption on shift rotations – by permitting overlapping shifts for at least six months.
- c. Extension of weekly time limits on work.
- d. Exemption on permission for working on Sundays.
- e. Permission for upgradation or change of machinery and submission of revised factory

plan within one month of such machinery upgradation or change without having to do so after permission.

- f. Exemption from enforcing Minimum Wages, Dearness Allowance enhancement notification issued during March, 2020, for six months.
- g. Exemption from application in respect of change in conditions of work (Sec. 9 A of Industrial Disputes Act).
- h. Due to the lack of migrant workforce, permission to engage temporary and daily wage workers without application of Standing Orders for a period of six months.
- i. Application of Chapter V-B of the Industrial Disputes Act for industries with less than 500 workers from present 100 workers.
- j. Engage contract labour permitting Registration and License formalities to be done within six months.
- k. Ease of recruitment including contract labourer, layoffs, reduction of head counts
- l. Model Standing Orders of the Labour Department are out of

date and require revision to enhance productivity

3.5.3 Payroll Support

The wage bill during the lock-down is high with no corresponding revenue. State Government's intervention is requested to support labour intensive sectors. Other countries have introduced the concept of furloughs for 20% of the workforce. The Government could support the retention of the furloughed labour by supporting these costs for a temporary period.

3.6. Faster Clearances

The industries require faster clearances to be provided for operations to help them get started/restarted quickly and contribute to the economy. It is in the State's interest to provide 30 days blanket approval process or deemed approval to commission the project. The online portal for single window approval could be based on self-certification process for compliance under various regulations. Although there are multiple clearances that are being facilitated through the single window, quite a few are not under deemed approval. These approvals can be simplified with deemed approval to be provided automatically on expiry of 30 days.

3.7. Sector Specific Issues

Tamil Nadu has additional procedures for launching new models in the State. Being an automobile hub, the Government should do away with the requirement of registration for each model to boost supply of new models which will in turn boost the demand for the automobile sector.

As per regulations of Tamil Nadu Pollution Control Board (TNPCB), the consent to operate certificate for tanneries can be provided for a period of five years. However, in practice, the consent to operate is provided only for one year, after which it has to be renewed every year. This is a major hurdle as the units have to get renewals every year which is long and time taking process. To achieve ease of doing business, the regulation concerning renewal of consent to operate for tanneries can be changed to once in every five years as given in West Bengal. Footwear and leather products industry (excluding tanning and hide processing) are classified under "Green" category as per TNPCB norms. These are non-polluting industries and can be classified as "White" category, as has been done in Uttar Pradesh.

4. Short & Medium Term Recommendations

Making administrative procedures transparent, swift, simple and efficient is an essential part of an enabling environment for private sector development and good governance. The Committee emphasizes on the importance of ease of doing reforms to simplify and fast track clearances as it reduces the transaction and regulatory costs for investors. Considering the varied impact of COVID, issues and suggestions provided by the industry representatives, the Committee recommends the following reforms in the short and medium term and steps required to make effective use of the various measures relating to the manufacturing sector relating to the sector announced by the Central Government.

4.1. Short Term Reforms

4.1.1 *Empowered Committee for In-principle Approval*

Fast-tracking clearances is particularly important in the current context as the destination of the relocation investments and the home countries have significantly shorter clearance timelines. For instance, it takes about 60 days to get land allotted for a manufacturing unit in Tamil Nadu as compared to

14 days in Singapore and Telangana. Tamil Nadu has enacted the Tamil Nadu Business Facilitation Act 2018 and developed a Single Window Portal for Investment Facilitation with a view to achieve greater transparency and efficiency in service to investors. Currently, Tamil Nadu is competitive in very few clearances. There is a huge scope to improve the service delivery in terms of timelines for basic clearances for setting up units such as Land Allotment, Electricity Connection, Consent to Establish, Consent to Operate, NOC from Fire Department and Incentive Disbursal. Based on a review of the best practices in place for single window clearance and models for business facilitation including amendments to Industrial Township Act, other States' models for single window facilitation, the process recommended is the establishment of an Empowered Committee for In-principle Approval. To fast-track the grounding of investments, the Government can grant in-principle approval for (mega) investment proposals pertaining to manufacturing projects larger than Rs.300 crores and provide 300 or more jobs. It is proposed to constitute an Empowered Committee under the Chairmanship of Chief Secretary to review the investment proposals for setting up such manufacturing units and take decision for granting

in-principle approval within 15 days for the 7 basic clearances to set up a manufacturing unit on a 'trust and verify' basis and in parallel, the clearances will be provided through the Single Window facility before the commencement of production as per the applicable timelines or 3 months from obtaining in-principle approval, whichever is earlier.

The Empowered Committee and the process of granting in-principle approval may be given statutory backing by amending the Tamil Nadu Business Facilitation Act 2018 (TNBFA). As of now, the TNBFA treats all business enterprises on a par. With the proposed amendment, an additional enabling process flow and institutional structure can be created for large manufacturing projects, while retaining the single window system. Further, as per Section 4 (iii) of Tamil Nadu Business Facilitation Act, 2018, one of the functions of the Nodal Agency is to arrange for pre-scrutiny of applications with the nodal officers of the competent authorities. However, it does not mandate the need for pre-scrutiny of all clearance applications but gives powers to Nodal Agency to conduct the same based on the request of the applicant to assess the correctness and completeness of the filled-in application.

It has been observed that competent authorities ask multiple queries on applications received, thereby delaying the approval procedure. In view of the above, it is suggested to formalise the pre-scrutiny process:

- i. Nodal Agency to organize pre-scrutiny of all the applications twice a week by inviting the representatives of competent authorities.
- ii. Pre-scrutiny of the application to be completed in a maximum of 7 days.

4.1.2 Extending Deadline for Renewal of Clearances

Clearances required for operations of a manufacturing unit like CTO have been extended from 31.03.2020 by 3 months till 30.06.2020. In order to provide businesses adequate time to focus on recovery, the Government may provide a few relaxations to reduce the compliance and regulatory burden on industries. In addition to the renewals related to labour, renewals pertaining to clearances required for the operation of a manufacturing unit may be extended till 31.12.2020.

4.1.3 Extending Validity of Clearances

The Committee noted that permissions once given should not

be withdrawn and that the validity of the licenses can be extended to reduce the regulatory cost for the company. The requisite fees may be collected upfront for the 5 year period. Moreover, all the renewal processes for industrial licenses should be made online and with adhering to specified timelines with a provision for deemed approval.

4.1.4 Simplifying Registration Procedures

Industries are required to register various instruments with the Registration Department at multiple stages of the investment lifecycle. The processes related to these instruments can be simplified.

Several instruments like Affidavits, Agreements to Mortgage, Hypothecation Deeds, etc., are at present executed in Non-Judicial Stamp Papers and stored by the Financial Institutions. As these instruments do not fall under the purview of compulsory registration, they are in the custody of the Financial Institutions in physical form. With a view to simplify the procedures, it has been proposed to collect the Stamp Duty in respect of these instruments by e-Stamping and to store them in Demat form. This will not only help the State get more revenue without any pilferage, it would also aid the

Financial Institutions to store these instruments in a safer way.

While furnishing the Memoranda of Deposit (MOD) of Title Deeds to the bank as collateral security, enterprises have to pay a stamp duty @ 0.5% of the loan amount subject to a maximum of Rs.30,000/- plus registration fees @ 1% of the loan amount subject to a maximum of Rs.6,000/- per document. There has been a demand from the Associations and the bankers to ease this process by waiver/ reduction as in the case of micro units that are already exempted. This is expected to give additional relief to the MSMEs and improve their access to formal credit. It has been proposed to amend the Registration Act, 1908, in so far as it is concerned with Tamil Nadu, to provide for online registration of Agreements relating to Deposit of Title Deeds on the lines of the State of Maharashtra. Alternatively, the Act could be amended to make the registration optional at the behest of banks which is the position in other States like Karnataka, Andhra Pradesh and Telangana, etc. This would enable the Banks and the industries to register such documents without any human interface and would also ease the procedures. Further, the Government may explore the option of making the e-stamping process

online to make the process seamless and faster.

4.1.5 Exemption from Land Ceiling

Due to land ceiling limit, large industries are forced to form multiple entities for holding land. The Committee noted that exemption from the Land Ceiling Act needs to be expedited as it currently needs 2-3 years for the process to be completed. There is a need to fast track permissions for industrial lands under Section 37-A. Industry stakeholders have requested for automation of the procedures to seek exemption under Section 37-A of the said act and bring the permissions for Industries under Section 37-A under Single Window. In the prevailing regime, Industrial or commercial undertaking to apply for grant of permission to hold land in excess of ceiling area of 15 standard acres under Section 37-A before the Government. This was increased to 30 standard acres for industrial or commercial undertaking which invests more than Rs.20 crores. The Committee recommends automation of the process for Permission under Section 37-A, Tamil Nadu Land Reforms (Fixation of Ceiling on Land) Act, 1961 and also bring the Section 37-A clearances under single window system with deemed approval.

4.1.6 Single Window Clearances for Mining

Currently, licenses for mining are processed manually. These can be brought onto the single window digital platform.

4.1.7 Improving Labour Participation & Simplifying Procedures

In manufacturing and other allied sectors work from home is not a viable option and people are reporting to work slowly as production is picking-up. However, there has been a mass exodus of skilled migrant labour due to COVID-19. In the longer term, the State could look at implementing laws for assuring the migrant workforce with stable working conditions with proximal shelter and transport facilities to discourage reverse migration. In the immediate term, the Government could look at simplifying registration and renewal processes and operational constraints under various labour laws.

Recommendation to Improve Labour Participation

1. Create registry of migrant labour.
2. Reskill local workers with required skillset.
3. Increase overtime per worker from 50 hours to 72 hours in a quarter.

4. Permit overlapping shifts for six months.

Recommendation for simplifying labour compliances for ease of doing business

1. Increase validity of license for Contract Labour for the entire period of the contract instead of the calendar year.
2. On the spot approval for renewal for the following services:
 - a. Registration under Shops and Establishments Act
 - b. License for Contractors under Provision of the Contract Labour (Regulation and Abolition) Act, 1990
 - c. Registration of Establishment under the Inter State Migrant Workmen (RE & CS) Act, 1979
 - d. Registration under Legal Metrology Act
 - e. License under The Factories Act, 1948
3. Extend timeline for compliances/ returns under Labour Laws till 31.12.2020 such as
 - a. Employment Exchanges Act, 1959 (Quarterly return)
 - b. Factories Act, 1948 (Half yearly returns)

- c. Contract Labour Act, 1970 (Half yearly returns)
 - d. Inter State Migrant Workers Act, 1979 (Half yearly returns)
 - e. Subsistence Allowance Act, 1981 (Half yearly returns)
4. Ensure information on fees, procedures and a comprehensive list of all documents that need to be provided for spot approval for renewal.
 5. Publish an online dashboard updated regularly (weekly/ fortnightly/monthly) for registrations and renewals granted. The dashboard should clearly highlight the registrations done and the time taken (Mean/Median).
 6. Allow self-certification/ third party certification instead of Departmental inspections under all the labour laws and the Factories Act, 1948 and define the criteria for recognition of third-party agencies/individuals and publish a list on the Department portal.
 7. Publish an online dashboard updated regularly (weekly / fortnightly / monthly) for inspections including inspections conducted by third party / self-certificates.

8. Contributions under Labour welfare act should be made through an online system.
9. Certificate for Verification of Weights & Measures and its Renewal to be made online.

4.1.8 Promote Industrial Housing Projects

To retain labour including migrant labour and to improve their working conditions, it is necessary to have housing projects for employees, close to their work places. Government needs to invest in industrial housing projects in all industrial estates and industrial clusters. This will improve labour participation and also their productivity. SIPCOT has already created accommodation facilities for 2330 persons. Further, it is in the process of implementing two Industrial Housing / Dormitory projects in Vallam Vadugal to cater to the industrial clusters of Irungattukottai, Sriperumbudur, Oragadam, Pillaipakkam & Vallam Vadagal for 26,500 persons. It is also proposing working women's hostels in Cheyyar, Bargur & Ranipet Industrial Parks. Besides expediting these projects, the State Government should evolve a comprehensive plan to provide industrial housing facilities in all industrial clusters for around 1 lakh workers in the medium term. In

particular, industrial housing projects must be taken up in Irungattukottai, Sriperumbudur, Pillaipakkam, Oragadam, Gummidipoondi, Cheyyar, Perundurai and Siruseri. The Tamil Nadu Shelter Fund may be utilised to finance these projects.

4.1.9 Easing Market Entry for Automobile Sector

The automobile sector has already been facing declining demand. OEMs are trying to launch new models to capture more market share. Tamil Nadu has introduced a rule that requires the State Government's approval for new models manufactured in the State even though the new model's prototype is already certified by the Central Government. No other major auto clusters like Maharashtra, Gujarat and Delhi in India have such a restriction in the State's Motor Vehicles Rules. Specifically, as a result of this rule in Tamil Nadu, in the context of transitioning from BS IV to BS VI emission norms, all vehicles that adhere to BS VI norms will be considered a new model and will require the State Government's approval (in addition to Central Government's approval) before it can be sold in the State. Combined with the delayed purchases and declining demand for automobiles

from consumers, this additional compliance burden will adversely affect automobile manufacturers.

4.1.10 Time bound Clearances for Pharmaceuticals Sector

Pharmaceutical companies have represented on the issues on procurement of DL-2 License, for industrial use issued by the Department of Home, Prohibition and Excise and that there is lack of clarity in obtaining the licenses. Alcohol is an essential chemical used by the Pharmaceutical companies and procurement of the license is an important step affecting operation of these companies in Tamil Nadu. This has been included under the single window rules in June 2019. However, the Commissionerate of Prohibition & Excise is yet to implement rules and the timelines stated.

4.1.11 Focused Approach to promote Textiles Sector

Tamil Nadu has a strong presence in textiles and the second largest contributor to the Indian Textiles Industry and is predominantly cotton based. The State marks its overwhelming presence in all the sub-sectors of the industry viz., Spinning, Handloom weaving, Power loom weaving, Processing, Knitwear, Apparel and Garmenting. There

has been an increased demand for industrial textiles and medical textiles recently, to take advantage of these opportunities the sector needs dedicated focus. Further, a number of handloom cooperative societies are facing crisis due to the disruptions in markets. State Government support through interest subsidized loans for these cooperative societies is needed to tide over the crisis.

4.1.12 Incentives for R&D

R&D and continuous innovation are necessary for the long-term growth and sustainability of any enterprise. However, in most cases, investments in R&D are capital intensive. Government incentives for R&D promotion are therefore necessary.

The National Manufacturing Competitiveness Council had suggested establishing common facilities such as common tool rooms and cluster based facilities especially for the MSME sector. These need to be followed up for implementation.

4.1.13 Promoting Private Industrial Parks

Industrial Parks are centres of economic activity and contribute heavily towards GSDP and employment creation in the State.

The Government of Tamil Nadu is actively promoting the use of private land for industrial use through development of integrated Industrial Parks in the State. Recommendation for incentivizing private industrial parks are:

1. A standard capital subsidy and location based subsidy can be provided to incentivize industries in backward districts
2. Industrial Housing incentive to promote creation of housing for workers in the vicinity of the industrial park, by including housing under EFA
3. A capital subsidy on green solutions including ETPs, better pollution control facilities, energy efficient solutions, etc., can be provided.
4. Private industrial parks can be given greater flexibility with planning rules and higher autonomy from local bodies by declaring them as industrial townships under the Tamil Nadu Industrial Township Area Development Authority Act, 1997
5. Private industrial parks can be provided a deemed exemption under Sec 37-A, Tamil Nadu Land Reforms (Fixation of Ceiling on Land) Act, 1961

4.1.14 Infrastructure Development Fund/Road Access Fund

Many standalone industries and industrial clusters are located in areas that have little to no connectivity to the State and national highways. As a result, the logistics cost becomes extremely high thereby making the product uncompetitive. Last mile connectivity is extremely important to make industries and industrial clusters sustainable and competitive. However, the local bodies are not in a position to take up many of these projects either due to unviability or lack of funds. The Committee recommends creation of a fund to support the infrastructure needs of standalone industries or industrial clusters. If the connectivity projects can partly generate a revenue stream on its own in the form of user fees, then such projects may be funded through Tamil Nadu Infrastructure Fund (TNIF) with necessary viability gap funding from TNIDB. These funds would be utilized by SIPCOT/ SIDCO/ TIDCO to create the infrastructure to support industries that lack last mile connectivity. Recommendation for setting up an Infrastructure Development Fund are:

1. Creation of an infrastructure fund by the Government of Tamil Nadu to support road access/last-mile

connectivity and infrastructure development projects for standalone or cluster of industries

2. If the connectivity projects can partly generate a revenue stream on its own in the form of user fees, then such projects may be funded through Tamil Nadu Infrastructure Fund (TNIF) with necessary viability gap funding from TNIDB.

4.2. Medium Term Measures

The Committee noted that there is a need to focus on infrastructure development and create modern urban infrastructure to support industries. This must go hand in hand with developing social infrastructure and creating a cosmopolitan environment for the MNC workforce.

4.2.1 Increasing Availability of Industrial Land

The demand for industrial land has grown more than the supply. Industries have indicated the Government would need to acquire and develop more industrial land and lease it to units. SIPCOT is pursuing land acquisition from the land owners through private negotiations. The Government and SIPCOT has already taken measures in the recent months to increase the availability of industrial land.

In addition, it is felt that the land surrender policy of SIPCOT may be revised to encourage surrender of unutilized land by earlier allottees. Sourcing suitable land for the new and expansion projects needs effective framework and schemes for land resumption for development of 'plug and play' facilities. There are multiple instances where land has been allotted and leased by SIPCOT but the projects have not materialized. This leads to be sub-optimal utilization of land. As per the current practice of SIPCOT, in the event of surrender by the unit, the plot deposit will be refunded in full after forfeiting the initial deposit and processing fee. The development charges will be refunded after forfeiting an amount of 5% per year or part thereof for the number of years the plot was held by the unit subject to a minimum deduction of 15% and no compensation for improvement of building or other structures erected in the plot shall be made. However, units currently prefer not to surrender the land as it is not financially favourable to the industry. Industries that have unutilized land (fully or partially) can be incentivized to voluntarily surrender the land so that SIPCOT may allot it to another industry. It is recommended that SIPCOT could

develop mechanism for voluntary land surrender by the allottees in case industrial activity has not been commenced for a period of 3 to 5 years in the allotted land. The resumption amount may be worked out as a function of present guideline value to encourage resumption of unutilized lands.

4.2.2 Building Regularization Scheme

Multiple States such as Andhra Pradesh, Telangana, Karnataka and Tamil Nadu have formulated schemes for regularization of unapproved plots and layouts and unauthorized building regularization. These include details on Applicability, Definitions, Cut-off date, Application procedure, Fee, Sites/ buildings not eligible for regularization and Appellate authority and process for appeal. The guidelines under Section 113-C of the Tamil Nadu Town and Country Planning Act, 1971 for the Exemption of Buildings and Assessment and Collection of amount for Exemption, 2017 are still applicable. State Government may look at possibilities at rationalising penalties / charges for regularization based on timeline of application. It was noted that the process needs to be simplified and streamlined to remove multiple touchpoints with the same organization. Making the

process online will also increase the uptake of the scheme.

4.2.3 Plots & Layouts Regularization Scheme

While the regularization scheme for buildings cover Industries, there is no provision to regularize the unapproved industrial plots & layouts. Government of Tamil Nadu had introduced an Amnesty Scheme vide notification dated 4th May, 2017 and had invited applications for the regularization of all the unapproved plots (all plots sold and registered on or before the 20th October, 2016 and all unapproved plots which are sold and registered on or before the 20th October, 2016) in the entire State of Tamil Nadu. However, this was effectively limited to residential layouts. Lack of regularization of industrial layouts can lead to lack of electricity, water supply, drainage and sewerage connections and deregistration of the plot/layout. The industries have also requested for reduction in the charges applicable for the exemption/regularization which is currently based on residential use.

4.2.4 Streamlining Estate Management & Promoting Industrial Townships

There is a large demand for development of self-contained

integrated township projects with better living environment and housing at affordable prices in the outgrowths around urban areas. Based on evidence of pandemic proofing from self-contained manufacturing facilities supported by housing, play grounds, healthcare, shopping and recreational facilities, in addition to, like BHEL and NCL, industrial townships projects can be developed by the Government. Industrial Parks or estates with over 500 acres are suitable for developing industrial townships. Some of the planned projects pertaining to industrial park development such as those in Dharmapuri, Manaparai, Manallur, Tindivanam, Cheyyar, Theni and Virudhunagar can be piloted for industrial township development.

The Committee noted that management of industrial parks needs to be improved to facilitate existing industries to function efficiently. Although Tamil Nadu has enacted the Industrial Township Area Development Authority Act, 1997, the Act has not been implemented fully. The Committee recommends that all SIPCOT Industrial Parks may be declared as Industrial Township under the Tamil Nadu Industrial Township Area Development Authority Act and make these townships efficient autonomous units which is the

objective of the Act. There is a good scope to privatize many of the estate management services and also for PPP projects to provide social and industrial infrastructure. The committee strongly recommends that SIPCOT & SIDCO can actively pursue these options to make the existing industrial parks as vibrant Industrial Townships.

4.2.5 Restructuring TIIC as Industrial Finance Institution

There has been an increasing representation from the industries on the need for affordable and sustainable finance to support industrial development in the State, specifically in sunrise sectors and emerging segments. It may be noted that while the repo rate has decreased over the past 5 years, the weighted average cost of capital for industries in the State has increased through cost of equity and cost of debt at a risk premium.

There is a need to have institutions with a renewed focus on development, particularly with a targeted approach to supporting industrial development in States. Given that the demand for term loans is very robust especially, Tamil Nadu has the need and

opportunity to create an industrial finance institution. Industries Department has various verticals to support industries – equity financing through TIDCO (Tamil Nadu Industrial Development Corporation), industrial land supply and subsidies provided through SIPCOT (State Industries Promotion Corporation of Tamilnadu), investment facilitation, promotion and policy research through Guidance and debt financing through TIIC. However, the product portfolio of TIIC (Tamil Nadu Industrial Investment Corporation) is targeted towards MSMEs and there is a scope for it to grow and support the needs of large industries. TIIC also needs to reach out to the other end of the spectrum, i.e. borrowers who are not eligible for loans from commercial banks due to their low credit worthiness.

If TIIC has to provide long term lending to major industrial projects, then it must be provided with funds at a lower cost. Given the present financial position of the State Government, it will not be able to directly infuse its own funds into TIIC. Therefore, The State Government may create a revolving loan fund (RLF) in TIIC¹ which will be funded by a low cost multilateral or bilateral

1 For further discussions on this see Appendix 1 of the chapter on MSMEs

international funding agency like JICA. TIIC can blend funds from this RLF and its other sources so as to lend at a cheaper rate. In order to enable TIIC to provide credit to business enterprises of lower credit worthiness, the State Government may evolve a credit guarantee scheme to support such lending. Further, the possibility of partnership with or lending through established micro finance institutions must also be explored. MFIs can support TIIC through better information and collection mechanism.

4.2.6 Reorganisation of Industries and MSME Departments

Large industries and MSMEs have a symbiotic relationship. Many major investors have been attracted to the State due to the well-developed MSME eco-system available in the State. MSMEs offer a reliable vendor base to them. On the other hand, large industries help the local MSMEs in aspects like market development and access to technology. The problems faced by both sectors find common ground in areas like connectivity, power supply, water supply, planning regulations and environmental norms. Investment facilitation services of global standards are needed at State and

district level for both sectors. It is also necessary that the MSME sector is involved at every stage of attracting major investments into the State so that they can market their strengths to the potential investors and can bag orders from them. Further, the definition of MSME has been expanded by the Government of India to cover investment upto Rs.50 crores and turnover upto Rs.250 crores making many major industrial units, MSMEs.

There is a perception that this synergy is not felt in Tamil Nadu because both sectors are governed by separate Departments. Also, one of the key issues brought to fore due to COVID-19 is the lack of on-ground capacity for the Government to communicate with the industries that are not located in urban centres and to resolve these issues swiftly. The current structure of District Industries Centres is limited to MSMEs and under the purview of MSME Department. It was noted that there is no mechanism to monitor the health of industries, especially large industries that drive the economy and get high frequency indicators of their performance.

In this context, it would be appropriate to restructure the Industries Department and MSME Department by merging them.

The combined Industries & MSME Department should focus on investment promotion, investor facilitation and investor grievance redressal of both sectors, besides administering subsidy schemes for both sectors. It must withdraw from non-core areas like mining and industrial cooperatives which must be handed over to other appropriate Departments. The Commissioner of Industries (IC&DIC) will exercise administrative control over DICs. He/she will also exercise regulatory functions and implement the subsidy/refund schemes for all industries.

Guidance (for large industries) and MSME Trade and Investment Promotion Bureau should be merged. This merged Investment Promotion Bureau (IPB) will be tasked with investment promotion, investor facilitation and investor grievance redressal of both sectors. DICs should discharge the responsibilities of both IC&DIC and IPB at the district level. The GMs of DICs will also functionally report to the MD of the IPB.

4.2.7 Developing Trunk Infrastructure

In addition to creation of Industrial parks and Industrial townships, Tamil Nadu must also focus on creation of trunk infrastructure. In order to maintain its strength

of providing robust infrastructure, the State must maintain, improve roadways along industrial corridors and also expand the network connectivity. Roadways serve as the backbone of the State's transport and logistics corridors. Developing trunk infrastructure will provide better connectivity around the city and reduce traffic congestion and pollution in the city and also provide efficient commercial transportation by enhancing port connectivity.

Summary of Recommendations

Recommendations with financial implications

1. Create an infrastructure/road access fund by the Government of Tamil Nadu to support road access/last-mile connectivity and infrastructure development projects for standalone or cluster of industries. If the connectivity projects can partly generate a revenue stream on its own in the form of user fees, then such projects may be funded through Tamil Nadu Infrastructure Fund (TNIF) with necessary viability gap funding from TNIDB
2. Restructure TIIC as a State-level development finance institution to extend financial support to micro, small, medium and large industries and create a revolving

loan fund with funding from bilateral or multilateral funding agencies. Incentivize R&D promotion and creation of private industrial parks.

3. Merge MSME Department (Small Industries) with Industries Department for better synergy.

Infrastructure Development Measures

4. Evolve a comprehensive plan to provide industrial housing facilities in all industrial clusters.
5. To promote balanced growth, the proposed SIPCOT Industrial Parks which are more than 500 acres such as Manaparai, Theni, Manallur, Manakudi and Virudhnagar, etc., can be developed as Industrial Townships. All SIPCOT Industrial Parks must be declared as Industrial Township under the Tamil Nadu Industrial Township Area Development Authority Act and make these townships efficient by encouraging private sector participation in some estate management services and pursuing PPP models to build social infrastructure.
6. SIPCOT could develop mechanism for voluntary land surrender by the allottees in case industrial

activity has not commenced for a period of 3 to 5 years in the land.

7. Expedite key infrastructure projects connecting industries and ports.
8. Promote private industrial parks by providing incentives (capital subsidy and location based subsidy in backward districts). Include investment in industrial housing as part of eligible fixed assets for subsidy to promote creation of housing for workers in the vicinity of the industrial park. Private industrial parks can be given better flexibility with planning rules and higher autonomy from local bodies by declaring them as industrial townships under the Tamil Nadu Industrial Township Area Development Authority Act, 1997. Private industrial parks can be provided a deemed exemption under Sec 37-A, Tamil Nadu Land Reforms (Fixation of Ceiling on Land) Act, 1961.

Procedural Reforms

9. An Empowered Committee may be constituted under the Chairmanship of Chief Secretary to review the investment proposals for setting up manufacturing units and take decision for granting in-principle approval within 15 days for the

7. MANUFACTURING

7 basic clearances to set up a manufacturing unit on a 'trust and verify' basis and in parallel, the clearances will be provided through the Single Window facility before the commencement of production as per the applicable timelines or 3 months from obtaining in-principal approval, whichever is earlier. A G.O. to this effect may be issued.

10. Clearances required for operations of a manufacturing unit like CTO have been extended from 31.03.2020 by 3 months till 30.06.2020. Respective Departments may issue G.O's for extending deadline and increase in validity for renewal of licenses until 31.12.2020.
11. The validity of clearances with short term validity/ renewal period (1-5 years) such as those related to Boilers registration (renewal), license as manufacturer of weights (renewal), CTO (renewal) and trade license can be extended to at least 5 years.
12. Commercial Taxes and Registration Department to issue G.O. to collect the Stamp Duty in respect of instruments such as Affidavits, Agreements to Mortgage, Hypothecation Deeds by e-Stamping and store them in Demat form and Online/optional Registration & E-Stamping of agreements.
13. Implementation of Increase in Land Ceiling Exemption from 15 standard acres to 30 standard acres for Dry lands by Revenue and Disaster Management Department. Industries Department may issue an amendment to TNBFR to include Land Ceiling Exemption in the Single Window Portal.
14. Simplification of process under Guidelines under Section 113-C of the Tamil Nadu Town and Country Planning Act, 1971 for the Exemption of Buildings and Assessment and Collection of amount for Exemption, 2017
15. Launch a scheme for Regularization of Unapproved Plots and Layouts for Industrial Land Use
16. Create a registry of migrant labour and identification of skill sets and skill gaps.
17. Labour Department may issue G.Os considering increasing validity of license for Contract Labour for the entire period of the contract instead of the calendar year, on the spot approval for renewal for License for Contractors and Factories License from DISH, increase

overtime per worker from 50 hours to 72 hours in a quarter, permit overlapping shifts for six months and extend timeline for compliances/ returns under labour laws till 31.12.2020

Sectoral Reforms

18. Home Department may issue GOs for time bound issuance of the DL-2 license including shortening the span from 90 to 30 days and inclusion in Single Window to support pharmaceutical industries.
19. Home Department may repeal the Tamil Nadu Motor Vehicles Rules, 1989 [G.O. Ms. No. 311, Home (Transport-V), 9th May 2018.] to remove the requirement for registering new model vehicles in the State.
20. Handlooms and Textiles Department may issue GOs to have a separate Directorate for Textiles headed by a Commissioner and creating an attractive policy for textiles to bring in new investments.
21. Directorate of Geology and Mining Department to develop E-Permit for permissions for online filing of Mineral Concession Application, Mineral Dealer License, Transport Permit, Granting of Lease, Excavation of Minerals and key clearances required. Industries Department may issue an amendment to TNBFR to include Mining related licenses and Guidance to implement through new Single Window Portal to provide for a Single Window Clearance in Mining.

1. MSMEs in Tamil Nadu

The Micro, Small and Medium Enterprise sector is the backbone of an economy, contributing substantially to employment generation and output growth. MSMEs are significant drivers of growth and aid in economic empowerment, social inclusion, balanced regional development and enhancement of global competitiveness. The sector, which is an amalgam of diverse activities, imparts resilience to withstand economic cycles by maintaining a reasonable growth rate. Given its forward and backward linkages with other sectors of the economy, MSMEs play a vital role in ensuring sustainability and self-sufficiency.

The contribution of MSMEs to the overall Gross Domestic Product of India has been substantial. The sector contributes to 30% of the country's total manufacturing gross value of output and close to 50% to exports. Further, it is also the second largest provider of employment next only to activities in the primary sector. Given this important role of MSMEs it is expected that the sector will continue to contribute significantly to the enhancement of entrepreneurial endeavours and

will also help in realizing a quantum jump in the share of manufacturing sector in GDP from the present 16%.

Tamil Nadu has a strong and vibrant MSME sector. The State accounts for 8% of the total number of operational MSMEs in India and 15.24 per cent of India's micro enterprises. MSMEs in Tamil Nadu produce over 6000 varieties of products including engineering and electrical products, electronics, chemicals, plastics, steel, cement, paper, matches, textiles, hosiery, readymade garments, etc. They have significant presence across all the major export oriented industries such as textiles and garments, engineering products, auto-ancillaries, leather products and plastics. The State has around 22.67 lakh registered entrepreneurs providing employment opportunities for nearly 128.91 lakh persons with a total investment of 2,23,783.75 crore as on 31st March 2020. A number of MSME clusters have been formed across the State that supports manufacturing and service sectors. Given the depth and breadth of the sector, MSMEs can serve as a launching pad for accelerated industrialization of the Tamil Nadu economy.

2. Present Trends: Impact of the Pandemic

The outbreak of COVID-19 and subsequent lock-down has led to

considerable loss of output to the MSME sector. Two broad sets of factors, as outlined below (Table 1), resulted in the loss of output.

TABLE 1: FACTORS AFFECTING MSME SECTOR

Pre lock-down factors	Post lock-down factors
<ul style="list-style-type: none"> • General economic slowdown • BS VI transition in auto sector • Closure of Chinese markets for raw materials • Starting from December, the exporting units faced uncertain environment due to changes in global markets 	<ul style="list-style-type: none"> • Various rounds of lock-down during which units had to shut down operations completely or use only a part of their capacity • Exit of migrant labour • Liquidity crunch • Shrinkage in orders • Delayed commitments and default on payments • Disrupted supply chains and raw material shortages • Cost escalation due to social distancing and other precautionary measures • Loss of customer confidence and customer base due to uncertainty of operations resulting from multiple lock-downs

Precise estimation of output loss is hindered by the paucity of data. As there exists both registered and unregistered units, the information available pertains only to the registered units. Hence, an attempt for estimating output loss can only be limited and confined to the 'registered' component of the sector leaving out a large informal segment within the sector. Further, data on enterprises in the services sector is absent hindering calculation of

output loss of the services sector. Our estimates are constrained by these limitations. We therefore, present some indirect estimates based on the following assumptions, which have been arrived on the basis of detailed discussions with various stakeholders in the sector.

(a) *Using the median growth for the last three years we project the output for 2019-20 and 2020-21.*

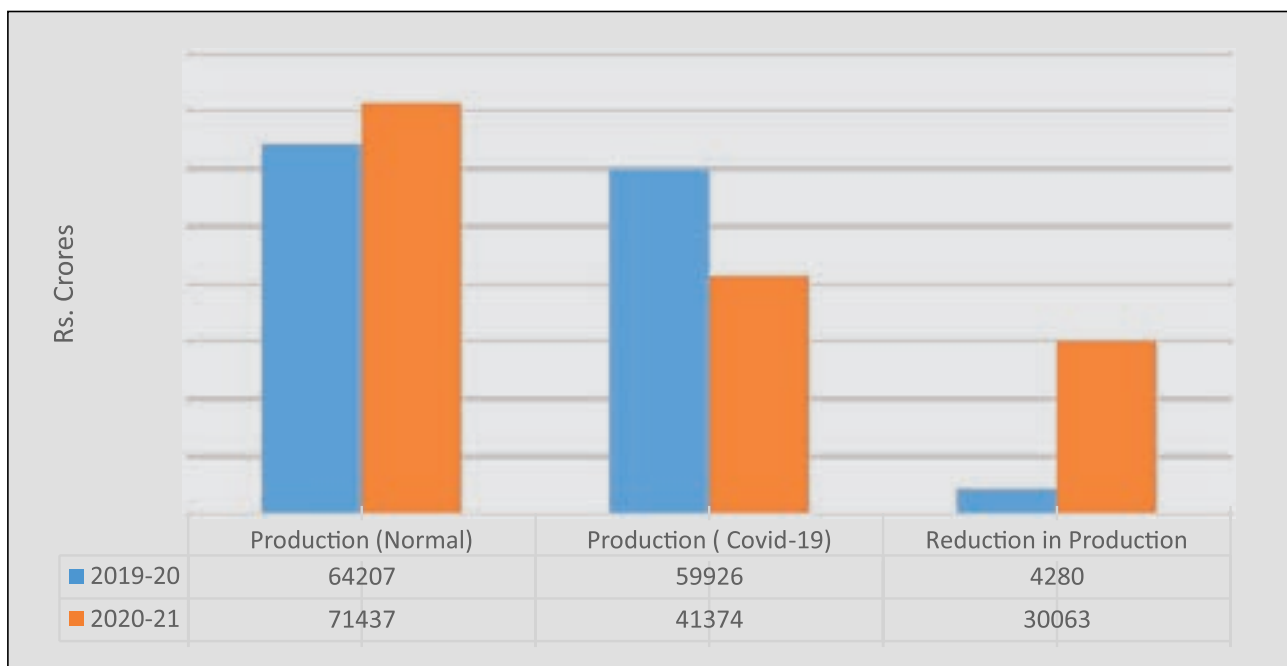
8. MICRO SMALL AND MEDIUM ENTERPRISES

- (b) For 2019-20, we assume that production disturbances resulted in 70% of capacity utilization in February and 50% in March.
- (c) For June 2020 we assume capacity utilization of 30 percent and from there on every month, we expect a 10 percent increase in capacity utilization and return of migrant workers.
- (d) For January 2021 we expect capacity utilization of 90%

and February and March 2021-100%.

Based on the above assumptions two sets of estimates are arrived at. First, using the data on production, employment, investments and number of units fetched from UAM filings and published in the Government of Tamil Nadu - Policy Note for 2019-20. Second, assuming that MSMEs contribute to 30% of Gross Value Added (GVA) of manufacturing sector of the State and using GVA of manufacturing sector from the Gross State Domestic Product (GSDP).

**FIGURE 1: ESTIMATED REDUCTION IN PRODUCTION
(GVA MANUF. GSDP)**



The estimated reduction in production is presented in figure 1. Both the estimates arrive at similar results. The total output reduction for manufacturing MSMEs is between Rs.34,343 crore and Rs.41,051 crores. This accounts for 13-15 percent of manufacturing GSDP of the State for a year.

3. Policy response of Government of India

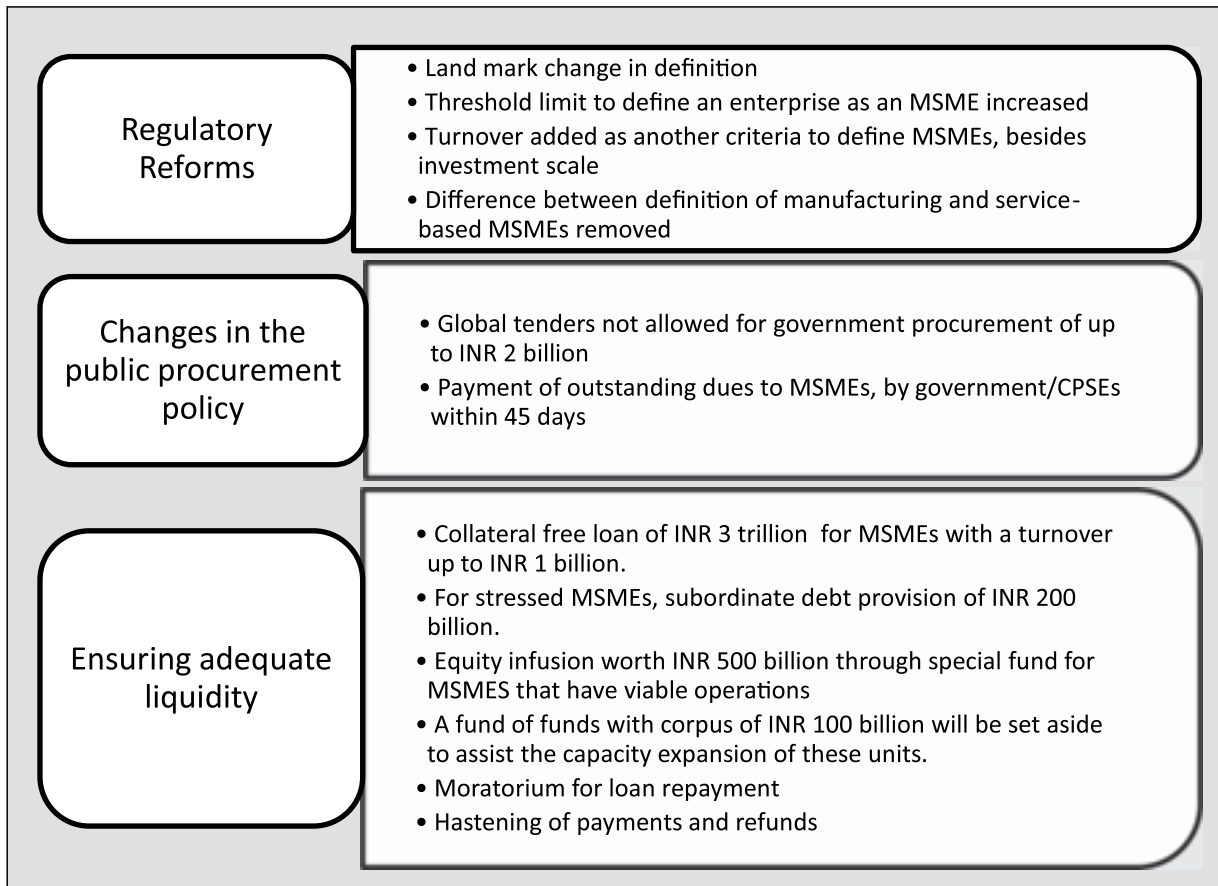
As part of relief and reform measures unveiled by the Government of India, the definition of MSMEs has been revised, with the investment limits being raised and annual turnover being introduced. The package includes numerous benefits for MSMEs of which the changes in definition is likely to benefit several businesses. The existing and revised definition is provided below.

Existing MSME Classification			
Criteria : Investment in Plant & Machinery of Equipment			
Classification	Micro	Small	Medium
Mfg. Enterprises	Investment <Rs.25 lakh	Investment <Rs.5 crore	Investment <Rs.10 crore
Service Enterprise	Investment <Rs.10 lakh	Investment <Rs.2 crore	Investment <Rs.5 crore
Revised MSME Classification			
Composite Criteria : Investment and Annual Turnover			
Classification	Micro	Small	Medium
Manufacturing & Services	Investment <Rs.1 crore and Turnover<Rs.5 crore	Investment <Rs.10 crore and Turnover<Rs.50 crore	Investment <Rs.20 crore and Turnover<Rs.100 crore

It has been argued that the low threshold in MSME definition had “created a fear among MSMEs of graduating out of the benefits and

hence killing the urge to grow”. A summary of the key policy measures are provided below in figure 2:

FIGURE 2: KEY POLICY CHANGES



4. Policy Initiatives of the State Government

In line with the policy measures announced by the Centre, the State Government announced certain measures to ease the impact of the pandemic on the MSME sector. These are a combination of direct and indirect measures, which are outlined below:

- ❖ Facilitating increased credit flows by coordinating with the banks.
- ❖ Sanction of Rs.200 crores under CORUS scheme of TIIC.
- ❖ Immediate release of pending subsidy claims of Rs.56 crores.
- ❖ Extension of time for payment of property tax and EB bills and moratorium for some selected payments towards the State Government.
- ❖ Exemption from TFC and EDP training under NEEDS and UYEGP.
- ❖ SIDCO land allotment on fast track.
- ❖ Support desk for individuals and specific sectors.

- ❖ Special COVID-19 support with regard to (a) Registration of units, (b) List of Manufacturers / Suppliers of essential items, (c) MSME-Information System and (d) Tamil Nadu Innovation Grand Challenge.
- ❖ Labour welfare measures.
- ❖ Sector specific relief measures and facilitation of movement of goods and persons during lock-down.

Further, Tamil Nadu Government announced a special incentive package to industries, including MSMES, manufacturing equipment to combat COVID-19 like invasive ventilators, N-95 masks, PPE, multi-parameter ICU monitors and anti-viral drugs used to treat COVID-19. The State will give 30 per cent capital subsidy, subject to a ceiling of Rs.20 crore on the investment made in eligible fixed assets to eligible manufacturers. The capital subsidy will be disbursed against investments made for making essential equipment, including modifications and upgrades of existing lines. Six per cent interest subvention will also be provided to these manufacturers on working capital loans availed from commercial banks. SIPCOT and

SIDCO will provide necessary land and sheds on short- or long-term leases on priority.

5. Summary of findings

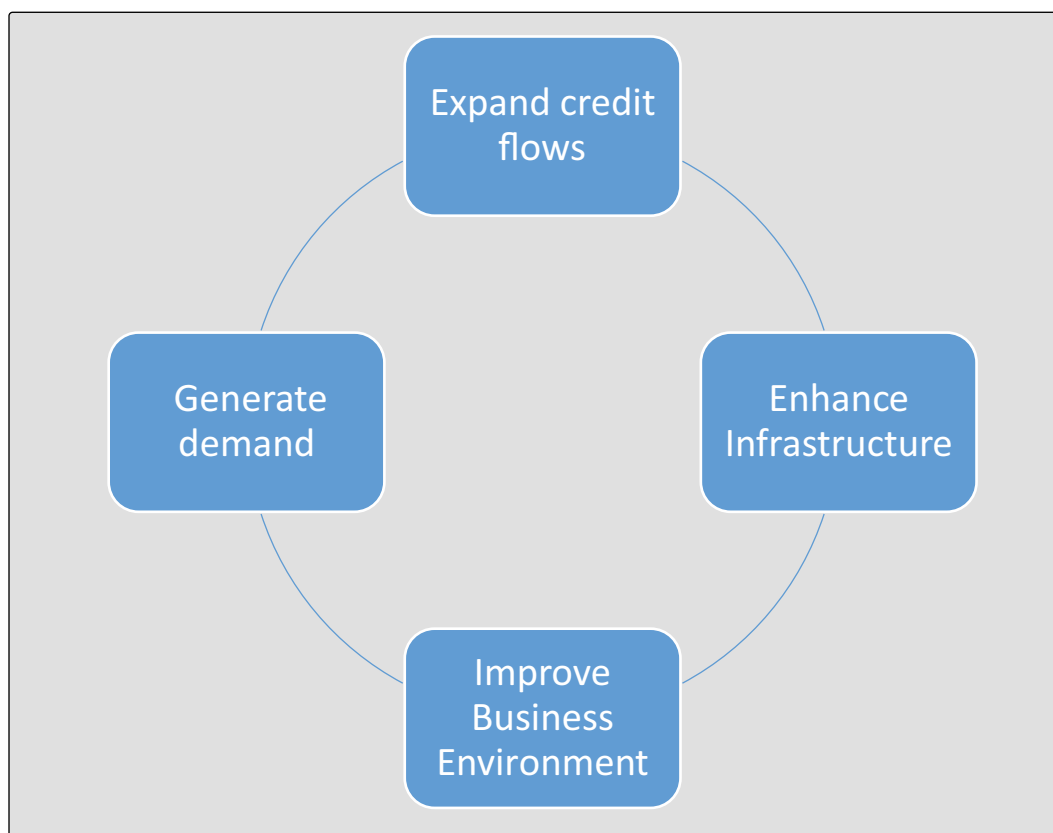
The Committee based on consultations with various stakeholders in the sector, arrived at the following findings:

1. There has been considerable loss of output for manufacturing MSMEs and it is likely to persist for 9 to 12 months, depending upon the intensity and spread of the pandemic. Micro enterprises have suffered maximum output loss. Given this scenario, enterprises in the service sector are also likely to experience the same trend. The reduction in output among enterprises vary between 30 to 70 percent, for the financial year 2020-21.
2. The total contraction of output for manufacturing MSMEs is between Rs.34,343 crores and Rs.41,051 crores, which accounts for 13-15% of manufacturing GSDP of the State for a year.
3. While the changes in definition of MSMEs are welcome, there exists some concerns about the impact on micro units.

4. Bulk of the relief measures announced by Government of India are towards ensuring liquidity and credit flows to the units already catered to by the formal banking channels. The stakeholders felt the need for fiscal incentives and demand stimulation.
5. Even though the State Government has been proactive in enhancing credit flows into the Sector, the response of public sector banks could be even faster. Document registration process has been a hurdle for this.
6. Despite thrust on credit deployment, the off take from financial institutions are not high as enterprises are unsure of the demand and are not keen on further investment.
7. Deferring payments, especially electricity bills, could be an area for intervention for State Government, which would provide relief for many enterprises.
8. There exists lack of awareness about many schemes. In the informal sector this problem is acute.
9. Concerns of labour shortages could surface as there exists uncertainty on the return of migrant workers.
10. Reconfiguration of supply chains and production networks and re-location of industries from other countries could provide opportunities for the sector.

6. Recommendations

Revival and growth of the MSME sector is dependent upon policies affecting 'growth drivers'. A summary of the policy spaces identified for intervention is depicted in figure 3. Two sets of interventions are suggested under each of the policy space. First, a set of immediate policy measures and second, policies that could be implemented in the medium to long run to enhance the growth and competitiveness of the sector.

FIGURE 3: POLICY SPACES FOR INTERVENTIONS

EXPANDING CREDIT FLOWS

It is estimated that there are only around 10 lakh MSMEs with formal bank accounts and that only 16% of the credit is through formal sector. The challenge therefore is not only to cater to the liquidity challenges faced by the enterprises that already have access to cheaper formal credit, but also to improve access to cheaper credit for those outside the formal banking sector. Most of the lending to the MSMEs has been by way of term lending and working capital loans. The MSMEs in the State must therefore be able to leverage the changes ushered in by GST and

changes in the definition of MSMEs to scale up. For this to become a reality, the sources of finance must diversify. Further, though the subsidy schemes have helped the MSMEs in starting and running their businesses, they need more risk capital to expand and diversify.

We discuss these under two heads; policies that needs immediate attention and those, which could be taken up in the medium term.

Immediate policy measures

1. It is proposed that GoTN can harness seed capital from the

proposed MSME Fund of Funds announced by the Government of India by making use of the institutional mechanism which is already in place under TNIFMC. Investment in small and medium Enterprises could be in the form of equity or mezzanine debt giving the entity an opportunity to scale up.

2. Exit from the investment could be through sale of shares in the investee enterprise to the promoter (s) or strategic sale or listing of the shares on alternate trading platform of NSE for SMEs. These linkages can be strengthened and the proposed MoU between MTIPB and NSE is a good starting point.
3. Within the formal financial sector scheduled commercial banks account for nearly 81 percent of debt. Non-Banking Finance Companies (NBFC) and smaller banks such as Regional Rural Banks (RRBs), Urban Cooperative Banks (UCBs) and Government financial institutions constitute the rest of the sector. *Hence NBFCs and State Financial Institutions (SFI) need to focus more on MSME lending at concessional rates. Recapitalizing TIIC for MSME lending could increase their share in this space.*
4. It also need to come out with new loan schemes to help micro, small and medium enterprises (MSMEs) tide over the stress due to the economic fallout from the COVID-19 besides normal lending schemes.
4. Due to the definitional changes there exists a possibility that banks and financial institutions might end up in 'cherry picking' with bigger enterprises getting more credit. To avoid such possibilities, *it is proposed that there should be ear-marked share for micro and small enterprises in the total share of credit for the sector.*
5. MSMEs are more vulnerable to economic down-turns and vagaries caused by natural disasters. There are no specific relief measures available to the sector and very often the measures introduced are not sufficient to get them back to business. Hence an appropriate area based insurance scheme for the sector need to be devised to hedge risks.
6. Tamil Nadu's share in ECLGS is 9.67 % (as on June 26, 2020) and in Credit Guarantee Fund Trust for Micro and Small Enterprises (CGTMSE) approved amount in 2019 is 8.4 %. Steps need to

be taken to increase this share further.

7. A State level Credit Guarantee Scheme (CGS) can be set-up with a 'fund of funds' to increase credit flows for MSMEs particularly new entrepreneurs. *The central idea of the scheme should be to encourage lenders to make loans on project viability rather than collateral guarantee security* and for the borrower to use the primary security of the assets financed. CGSs can play an important role by (a) improving the information available on SME borrowers in coordination with credit registries and (b) building the credit origination and risk management capacity of lenders and (c) can be leveraged to provide countercyclical financing to SMEs during a downward economic cycle when risk aversion may be heightened and a credit crunch is likely to follow. The CGS should be established as an independent legal entity on the basis of a sound and clearly defined legal and regulatory framework. The CGS should have adequate funding to achieve its policy objectives and the sources of funding, including any reliance on explicit and implicit

subsidies, should be transparent and publicly disclosed. The legal and regulatory framework should promote mixed ownership of the CGS, ensuring equitable treatment of minority shareholders. Further, the CGS should be independently and effectively supervised on the basis of risk-proportionate regulation scaled by the products and services offered.

Medium term policies

1. TIIC can be restructured into a major term lending institution in the State². The working capital financing part could be handled by another entity, as it requires more reach and coverage with field staff. In the case of term loans for creation of fixed assets a robust continuous monitoring mechanism need to be setup, partnering with appropriate agencies.
2. As on March 31, 2020 only 4137 enterprises have been the beneficiaries of the six major subsidy schemes for the MSME sector. In terms of the amount disbursed the sector received Rs.221 crores as subsidy. Given the size of the sector and its contribution to economic activity

² Details are provided in Appendix 1.

the total subsidies provided to the sector is small. An important step to boost growth of the sector would be to move away from a subsidy driven environment to provision of facilities and infrastructure which could have a multiplier effect on the sector.

3. As of December 2019, Public Sector Banks (PSB) market share stood at 49.8% in overall MSME lending book, with highest market share in Micro segment at 59.2%. This is despite the fact that MSME credit continues to have lowest default rate in commercial lending. PSBs had been losing market share continuously. PSBs need to increase market share with affordable interest rates.
4. NBFCs can serve MSMEs through
 - (i) differentiated credit underwriting that takes into account multiple sources of data
 - (ii) designing product offerings that are best suited to their target segment;
 - (iii) risk-pricing exposures; andreduced turn-around time. NBFCs could become significant credit providers to MSMEs especially at the lower end. Their partnerships with well-established regional players with in-depth knowledge of micro markets and low-cost distribution
5. TReDS system will be helpful for MSMEs in accessing credit on two counts. First, the onus of collecting payments from buyers, or large corporates, will rest with the financier and not the MSME seller. Second, the rate of interest charged by the financier is based on the credit rating of the corporate buyer and not the MSME seller. However, all transactions undertaken on the TReDS have to be registered with the Central Registry of Securitization and Asset Reconstruction and Security Interest of India, which discourages small ticket sellers from using the platform. Further, it appears that large companies are somewhat uncomfortable in uploading invoices online due to the fear that their rival companies will be able to identify details of their MSME suppliers. A concerted effort to increase the use of TReDS system need to be implemented.
6. Providing reliable access to efficient formal credit to MSMEs has long been challenging due

to inadequate formal data for credit assessment in case of informal, micro SMEs Fintech lenders have capitalised on emerging sources of digital data as well as surrogates to evaluate credit-worthiness of borrowers and have combined this with technology-enabled analytics for more efficient underwriting. The large databases of borrower information with policy initiatives such as GST offer additional data sources. Given the diverse nature of the sector, the focus should be on using new methodologies to assess the creditworthiness of MSMEs. An institutional mechanism for providing credit rating, especially for the micro and small enterprises could go a long way for ensuring easy credit for the sector and push them into the virtuous cycle for formal finance.

7. Refinance and direct loans are instruments with a limited multiplier impact. When refinance is not performance-based, it may not be deployed for the most efficient intermediaries and high-potential MSMEs. Alternately, if resources were deployed in MSME loan securitization, that could unlock extra resources. Securitization helps to spread out

risk within the market, so that the risk is no longer concentrated solely in the hands of credit agencies. The main advantage of securitization is that it reduces an enterprise's funding costs. A policy towards more securitization of MSME assets need to be encouraged.

8. Currently, two bourses (BSE and NSE) have dedicated exchanges for the SMEs. BSE, being the first one to have an SME platform in 2012, currently has 310 companies listed on its 'BSE-SME'. Of these, 71 entities have exercised the option to migrate from BSE-SME to its main board. NSE followed in BSE's footsteps and established 'EMERGE' which has over 180 SMEs. Of these, 22 entities have migrated from EMERGE to NSE's main board. While the public listing offers myriad benefits to SMEs and their stakeholders, SMEs have historically been shy of listing due to increased disclosure requirements and compliance burdens when compared to an unlisted company. Therefore, it becomes imperative to sensitize the promoters of SMEs of the long-term sustainable growth benefits of SME listings and how a listing can help in growth prospects for SMEs.

ENHANCING INFRASTRUCTURE FACILITIES

Immediate policy measures

1. Existing and new industrial estates need to augment the infrastructure so as to attract investments. Developing state of the art infrastructure with 'plug and play' facilities need high priority. Terms of leasing must be attractive to new entrepreneurs as prohibitive costs of long term leasing and sale can act as a deterrent in attracting potential investors.
2. A set of private industrial parks, exclusively for MSMEs could be encouraged.
3. Tamil Nadu Government increased the maximum floor space index – the ratio of land area to built-up space – for industries in local planning areas from 1 to 1.5 and the maximum plot coverage for industries from 50% to 75 %, This would provide industrialists with the value for land by increasing FSI and maximum plot coverage. The increase in FSI will benefit small-scale industries. This could be availed in the existing industrial estate, which need to be encouraged.
4. As big firms are the end users of a large number of products and services of MSMEs, there exists a need for them to be co-located or within close geographical proximity of the big firms. Adequate infrastructure provision need to be provided near the SIPCOT parks and SEZs for related MSMEs. The concept of 'land banks' can be implemented with clearly demarcated space for MSMEs and effective allocation of land must be made within SIPCOT estates.
5. Growth of both small and big firms is interlinked and is organic in nature. Many MSMEs get as much as 30-50% of their revenues from big customers every year. Improving linkages between MSMEs and big firms would provide a 'win-win' situation for both. Providing access to ports and markets is an 'enabler' in this context, for which basic infrastructure provision need to be facilitated by the Government.
6. An area, which needs focus and attention, is the availability of cheaper electricity and natural gas to MSMEs. Currently, power DISCOMs and gas distribution companies do not permit MSMEs in the industry to procure their own electricity or natural gas and charge them higher rates. This means that even if MSMEs

become energy efficient, they are burdened with high fuel costs, which seriously harms their competitiveness, especially for exporting firms.

7. In times of economic down-turn, MD charges and fixed charges for electricity can be subsidised and EB Charges can be adjusted against the Security Deposit already available with EB. After specific time duration the Security Deposit can be collected.

Medium term policies

1. MSMEs depend on investment and access to knowledge that can come from skills providers, research and advisory services and networks of learning involving similar businesses and others. Value chain promotion fosters the development of firms within and around the value chain. Given Tamil Nadu's breadth and depth in industrial activities, MSME value chains can be developed either as (a) sets of value adding activities, or (b) as arrays of linkages, or (c) as networks or systems or (d) as cycles.
2. Industrial corridors recognise the interdependence of various sectors of the economy and offer effective integration between industry and infrastructure leading to overall socio-economic

development. The establishment of manufacturing zones along the industrial corridors would also prevent distress migration and provide people with job opportunities close to their dwelling place. Even though there has been efforts in the past to develop industrial corridors in Tamil Nadu, for the enhanced benefits of MSMEs we propose the following three corridors to be taken up as priority: (a) Madurai-Thoothukudi industrial corridor, (b) Coimbatore-Salem industrial corridor and (c) Chennai-Trichy industrial corridor,

3. Currently, migrants are pushed to stay further away into marginal locations and large-scale 'urban ghettos' are developed leading to serious social and spatial division. Providing affordable housing to the large number of low-income migrants as rental accommodation with some basic, but modern, amenities need to be considered. It could be employer provided accommodation, which is normally in the form of dormitories and rooms for sharing by several individuals. Gradual improvements in this area, upgrading, rent regulation and other softer policies may be more beneficial and sustainable in the long run.

4. Access to digital technologies and the skills required to utilize them are hindrances for MSMEs. This calls for a big push to encourage digital transformation. There are four reasons for MSMEs to embrace digital transformation. First, to identify new customers. Second, to ensure that existing customers are serviced effectively, leading to new opportunities. Third, streamlining the supply. The fourth reason is to manage its people through virtual offices and remote working. The current crisis thus opens up opportunities for digital push.
5. Standardization and certification must be given impetus and this can be attained by strengthening the existing labs with proper accreditation. These labs can be given functional autonomy and be enabled to undertake modernization matching market requirements.

IMPROVING BUSINESS ENVIRONMENT

Immediate policy measures

1. Facilitate the return of migrant workers: Labour shortages will not be an immediate issue as around 40-50% of the workers in the industrial estates are migrants and operations can begin with available workers. However, as and when capacity utilization increases, there will be demand for more workers. Hence, a strategy for the return of workers from within and outside the State has to be evolved.
2. *Further easing of the movement of goods and workers to restore supply chains and avoid raw material shortages.*
3. Stamp Duty for availing Bank Loans, the MOD charges for registration at present is 0.5% subject to a maximum of Rs.30,000 and registration fee is Rs.6,000. Micro units are exempted. Due to present situation, there could be reduction the MOD registration charges for other units as well as waiver of penalty for delays. Rationalising these and improving the ease of compliance by enabling online transactions instead of physical visits to Registration Offices will improve the flow of credit, access to credit and will bode well for overall business environment in the State.
4. Payment of Electricity Bills, Professional Tax, Licence Fees and all Statutory Payments can be deferred up to 30th September 2020
5. Regarding Contract Labour & Regulations Act, the mandate

to register contract labour by the principal employer and the contract labour to obtain license when there are 20 or more contract workers can be increased to above 50. Authorities under the above Act are too stiff in granting registration and license on the ground that contract labour cannot be used in production related work.

Medium term policies

1. Tamil Nadu has made significant strides in improving ease of doing business. However, the following two areas need further reforms. Renewals of licences must be made online and there must be a provision for deemed renewal especially for trade licences.
2. Labour regulations in the past have acted as hindrance for enterprise expansion as they change with the size. This limits the possibilities of the enterprises to reap economies of scale. A plethora of legislations kick into effect on the basis of the number of employees an entity employs with differing compliance requirements. There exists a need to have a set of basic labour laws, which are invariant of the number of workers.
3. The costs of statutory compliance have been noted to be among a significant constraint in MSMEs remaining small in scale and largely informal. The costs for an establishment, per worker, is estimated to increase by 35 per cent due to the range of regulations that find applicability once an establishment has 10 or more workers. State level reforms must be brought in to bring down compliance costs.
4. Simpler contract enforcement mechanisms are needed especially when an enterprise wants to exit. There should be a clear EXIT policy. Further, retrenchment of workers is extremely tricky as the dismissal of a worker in a factory and certain other specified establishments with more than 100 or more workers requires the approval of the Labour Department.
5. Synergy in policy space is needed. The current scenario is one of too many policies of various Departments affecting the sector. Hence, unintended consequences of well intentioned policies like the ban on single use plastic on MSME units including those setup under the NEEDS scheme of the Government need to be mitigated effectively.

6. A databank that would house a wide-ranging set of data points, acting as a custodian of data for its customers – individuals, MSMEs and corporates is proposed. It should have data on the ecosystem stakeholders that the MSME transacts with as part of its operations (e.g., Government entities, utility companies the MSME transacts with, suppliers of the MSME, the MSME's downstream customers, etc.).
7. The presence of a strong MSME sector is a pre requisite for attracting large industries to the State. Just as the MSMEs benefit from market access and technology from the large industries, the large industries in turn benefit from the locally available vendor base. Though the importance of the MSME sector in generating growth and employment is widely acknowledged, there is a widely held perception that the policy space is more attuned towards large industries necessitating an institutional mechanism exclusively for MSMEs. This perception is also shared by the MSME Associations with respect to organisations and chambers of commerce that operate both for large industries and MSMEs.

The Directorate of Industries and Commerce has a district level presence but has confined its role to administration of schemes and industrial cooperative societies. Their role must be transformed to a facilitation and investment promotion role. Though MSMEs contribute to 46.7% of the exports, export promotion is handled at the State level by the Industries Department and the District Level Export Committees are handled by the GM DICs as the Industries Department do not have a District level presence. There is a need to address the gaps in attracting investment, facilitating exports, identifying product requirements and technology transfer in the MSME sector. If the State has to take advantage of the synergies between large industries and MSMEs and also ensure a proportionate space for the MSMEs to attract investment and grow, there is a need to have a unified Department at the State level for Industries.

8. There is a need for regular conduct of training and development programs by the Government agencies. The currently running programs have to be assessed from time to time to understand their effectiveness. One of the

important reasons for slow intake in the utilization of Government schemes is the lack of knowledge about them and their likely benefits. The current knowledge dissemination system can be expanded in its outreach. There is a need to develop a better communication strategy and use of new age media tools. MTIPB must play an active role in this space.

STIMULATING DEMAND

Immediate policy measures

1. *As the overall demand in the economy is low more public spending could be used to stimulate demand, which would eventually help the MSMEs.*
2. Promotion of MSMEs in Government procurement can result in increased competition, leading to better value for money and increasing efficiencies of procuring entities. At the State level, annual targets can be established in terms of percentage value of total contracts awarded to MSMEs and the implementation can be undertaken through State procuring agencies and local and State authorities. The recent amendments in Tamil Nadu Transparency in Tenders Act are a welcome step in this direction.

3. Vendor identification for large firms can be facilitated by providing a role for MSME organizations. This would help the units within the State to forge stronger links between the small and large firms.
4. Even though within the State procurement has received some policy attention recently, more areas could be opened up for MSMEs in Government procurement. A directory of products with details of the producers can be compiled and made available to large firms and procuring agencies. This will enable ease of access to the manufacturers and customers.

Summary of Recommendations

A brief summary of the recommendations is provided below:

1. Despite the fact that MSME sector is the bulwark for Tamil Nadu's economy, the sector lacks access to timely and adequate finance at a reasonable cost. To bridge this and to tide over the present crisis faced by the sector there is a need to diversify the sources of funding available to the units.
2. *The challenge is twofold:* (a) to increase credit flows and

(b) to expand financial inclusion. A three-pronged approach is suggested to ensure more credit flows. First is to tap into the fund of funds announced by the Central Government formation of a State level fund of funds for the sector. Second infusion of equity capital. Third enhanced securitization of risk for other financial institutions/NBFCs to augment lending to the sector.

3. Term lending institutions at the State level needs to be strengthened. There is need to separate term lending activity and working capital lending done by some of the institutions.
4. Alternate trading platforms for equity and securities needs to be explored for the sector.
5. Ramping up infrastructure is key for long-term growth of the sector. Private industrial parks and improving the existing parks with plug and play facilities and

are important to attract more investments to the sector.

6. Creating industrial corridors and developing regional value chains and linking the sector with the large industries need a concerted policy push.
7. Improving condition of housing would be key to attract quality workers.
8. Synergy between various Departments is vital for improving the overall policy environment and also for ensuring adequate policy space for MSMEs
9. The set investor friendly policies need to be widely disseminated.
10. A reliable database of MSMEs must be developed for making informed policy decisions.
11. A product directory for MSMEs need to be compiled for enabling market access and vendor identification.

Appendix 1: Term Lending to MSME

Out of the nearly 50 lakh MSME units in Tamil Nadu, only about 10 lakh units have access to institutional finance. Most of this funding is from commercial banks. In addition, a number of industrial units are unable to access adequate term loan facility for investment and expansion purposes. After the conversion of the Development Finance Institutions into Commercial Banks in the 1990s, it was expected that the commercial banks will meet the long term debt requirement of industries. However, this has not happened. There is a niche space left for term lending institution. The non availability of low cost funds from RBI to Development Finance Institutions has meant that term lending institutions like Tamil Nadu Industrial Investment Corporation (TIIC) have no distinct advantage in accessing cheaper funds to finance industries. Low-cost funds available with Banks are basically demand deposits and do not easily translate into long term loans due to asset-liability mismatch issues. Revival of refinance facilities from SIDBI which was stopped to State Finance Corporations including TIIC in 2017-2018 may partially solve this problem. The State Government has taken up the issue of provision of at least Rs.1,000 crore as refinance

from SIDBI, with the Government of India and is awaiting a favourable decision.

This clearly indicates that the Government of Tamil Nadu intends to revive and expand the operations of TIIC which was formed in 1949 even before the enactment of the State Finance Corporations Act in 1951. The total balance sheet size of TIIC in 2018-19 was Rs.1,571.56 crore. This is relatively small compared to the overall annual credit plan of Tamil Nadu. Clearly, the size of the lending by TIIC needs to substantially increase. While one source of financing is refinance from SIDBI; that alone is inadequate.

The State Government needs to decisively step in. The Committee therefore recommends that in order to ensure that TIIC has sufficiently large corpus of funds, to lend at reasonable rate of interest, the Government of Tamil Nadu should make available a capital grant of Rs.1,000 crore over a period of 3 years to TIIC to blend with borrowed funds and lend at a reasonable rate of interest. The advantage with this approach is that the total quantum of lendable fund increases substantially with TIIC thereby financing the larger number of borrowers. This increases

access to credit. The lack of access to credit is far more serious concern than the cost of credit in the formal system. Credit in the formal system is in any case much cheaper than credit through informal sources. In that context, a superior policy option for the Government would be to expand the total amount of credit available at a reasonable rate of interest rather than provide interest subventions to firms which have already accessed loans through the formal credit system. The additional capital grant / revolving fund proposed to be provided to TIIC can also be sought as official development assistance from multilateral finance institution or from bilateral agencies like JICA and KfW.

Substantially expanding the lending operation of TIIC will also involve strengthening their appraisal capacity, strengthening the field network and enhancing their capital to meet the relevant RBI norms. In addition, to deliver loans particularly to the smaller units, the possibility of collaborating and leveraging the networks of micro finance institutions, NBFCs and technology based lending platforms also need to be explored.

TIIC also needs to explore tie up with commercial banks and small banks to provide working capital assistance to match the term lending so that the borrowers are able to effectively utilize the long term loans received and grow their businesses.

1. BIOTECHNOLOGY SECTOR

Biotechnology refers to application of scientific techniques using living organisms or their parts to make or modify plants, animals, micro organism and environment in line with human purposes and to enhance their performance or value. It has grown rapidly to include new and varied sciences such as genomics, recombinant gene techniques, development of pharmaceutical therapies and diagnostic kits, applied immunology. Current usage includes genetic engineering as well as cell and tissue culture technologies. Biotechnology has applications in four major industrial areas including crop production and agriculture, health care (medical applications), non food uses such as biodegradable plastics and environmental uses.

The Biotechnology industry in India can be traced back to 1980s when the Government of India created Department of Biotechnology (DBT), within the Ministry of Science & Technology. Over the years, the sector has grown from US\$ 1.1 Bn in 2003, to a US\$ 51 Bn industry

in 2018. The year-on- year growth rate of the industry is 14.7%. As of 2017, India accounted for approximately 3 percent share in the global biotechnology industry and stood among the top 12 destinations for biotechnology in the world (and ranked second in Asia after China).

The DBT has formulated the National Biotechnology Development Strategy, which involves: (i) building up a skilled workforce, (ii) establishing core facilities and instrumentation, (iii) creating specialised centres in and around existing institutes, (iv) strengthening core capacities in the existing institutes and (v) establishing theme based institutes, data centres and repositories. The strategy involves focus on nurturing innovation and entrepreneurship to embed translational capacity in all major research institutes, providing support for business incubation, technology validation and scale up infrastructure, promoting public private partnerships and setting up of bio clusters. Unfortunately the DBT has not supported any major initiative in Chennai or Tamil Nadu.

1.1. Sector Breakup

The Biotechnology industry in India is divided into the following segments

Subsector	Sub-segment with high contribution to growth
Bio Pharma (54.9%)	Biologics/Therapeutics
	Vaccines
	Diagnostics/Medical Devices
Bio Agri (21.57%)	Bt Cotton
	Biofertilizers/Biopesticides
Bio Industrial (7.8%)	Enzyme
	Biofuels
Bio IT (14.2%)	

In terms of contributions, Delhi, followed by Tamil Nadu, Karnataka, Maharashtra and Telangana have taken the lead. One of the reasons these States were able to capitalise on the sector development was due to their innovative potential and landscape. These States have established facilities that create a conducive environment for conducting business and the by-product of that involves increased innovation, output and employment. In terms of biopharmaceutical cluster, Maharashtra, Gujarat, Himachal Pradesh and Tamil Nadu lead the space. But Maharashtra, Gujarat and Himachal Pradesh are the States with highest share of clusters. Further, India witnessed a 32% increase in

biotech start-up formation in 2018. The average growth rates in the previous years in start-up formation have been in the 20-30% range. In regards to the start-up shares of contribution, Maharashtra leads by 14.46%, followed by NCR at 13.26%, Andhra Pradesh and Telangana at 13.26, Karnataka at 13.08% and Tamil Nadu at 5.25%.

In 2004, Tamil Nadu become one of the first States to set up Biotechnology incubator Park (TICEL-I) in Chennai with technical collaboration with Cornell University. In 2014, the State rolled out a dedicated Biotechnology Policy to support biotech companies. The Policy also recommended for constituting a Biotechnology Board.

Over a period of time, Tamil Nadu has set up TICEL-II and TICEL-III housing numerous biotech companies including Actavis Pharma Centre, HLL Biotech, Evolva Biotech, Hyoshi India, Levim Biotech, Perkin Elmer Health Sciences Pvt. Ltd., etc. A women's Biotechnology Park has been developed at Siruseri near Chennai.

Further, to support R&D and innovation, Tamil Nadu has set up numerous University Innovation Clusters (UICs) in the past. Some of them are located at TNAU (Coimbatore), Anna University

(Chennai), Bio-incubators (Bio- Nest) in IIT-M (Chennai), VIT-TBI (Vellore) and PSG-STEP (Coimbatore).

The Government of Tamil Nadu has constituted a Biotechnology Venture Capital Fund with a targeted corpus of Rs.500 crore with an initial contribution of Rs.50 crore from the State Government, TIDCO and TIDEL Park and the remaining Rs.450 crore to be raised by TNIFMC from the market.

1.2. Challenges in the Sector

R&D: This is a sector which is strongly linked with the capacity for research and development. According to the UNESCO data, India's R&D expenditure has been 0.8% (of GDP), which is relatively low compared to other developing and developed nations. This is the concern.

Regulatory Practices: The Indian biotechnology industry is regulated by multiple agencies: Ministry of Science and Technology, Ministry of Environment and Forests, Ministry of Chemicals and Fertilizers and Ministry of Health and Family Welfare. These are under different ministries and the coordination among Departments and ministries is not as strong as required. This leads to delays in getting approval and challenges in tracking applications.

Human Capital: The biotechnology workforce has got massive potential and could contribute to the national economy as projected. However, there is a need to align the demands of the industry with the university curriculum for the students to thrive in a competitive market. The lack of linkages between industry and the universities needs to be addressed in order to tackle the low employability challenge.

Infrastructure Facilities: The biotechnology industry's development is heavily dependent on the available infrastructure facilities such as physical (roads, rails, ports, etc.) and research (incubators, instruments, animal breeding, etc.) infrastructural facilities. India has made considerable progress on the physical facilities and should now shift its focus on improving the research facilities such as clinical trial infrastructure, bio-incubators, electronics records, etc.

Start-up ecosystem not fully developed: As per the Make in India Facilitation Cell at Biotechnology Industry Research Assistance Council (BIRAC) and the Department of Biotechnology (DBT) GoI, a total of 2,669 biotech start-ups got incorporated in India. Out of them, only 140 (5.25%) were from Tamil Nadu. This shows that other

States are providing a more attractive start-up ecosystem.

Absence of large Global/ Indian companies: Currently there are a very few major biotechnology companies in the State. Apart from the R&D centres of Biocon Biologics, Teva and Evolva (which are in Chennai), there is an absence of leading global or Indian companies in the State. In comparison, Maharashtra, Gujarat, Telangana and Karnataka have the presence of R&D Centres, Technology Centres and Manufacturing sites of large global companies. A large player attracts other companies, suppliers and start-ups and thereby helps develop a robust ecosystem. DBT has also not started any major institution in Chennai while it has established new initiatives in several other States.

Skill Development: Further to absence of large companies in biotech sector, the geographical concentration of Human Resources / skilling Ecosystem close to Chennai limits the growth of the sector within Tamil Nadu. It can also be seen from the MSME policy note 2018, that emphasis on entrepreneurship, innovation & biotech start-ups in Tamil Nadu requires greater attention.

Lack of awareness: Among students, firms and entrepreneurs

about biotech opportunities, policies and funding schemes/modalities in Tamil Nadu there is a lack of awareness. This can be further attributed to the lack of adequate dissemination of information on various initiatives of GoTN (PPP Biotech fund, TICEL Facilities, Common Facility Centres, etc.).

1.3. Opportunities for Tamil Nadu

1. Promote industries from the following sector to diversify the sector and create a robust ecosystem to support further growth,
 - a. Vaccines & Recombinant Therapeutics
 - b. Bioactive Therapeutics Proteins
 - c. Stem Cell Research
 - d. Cell Engineering
 - e. Cell Based Therapeutics
 - f. Animal Biotechnology
 - g. Contract Research
 - h. Clinical Trials & Outsourcing
 - i. Bioinformatics
2. *Promote Exports:* Industries can harness Tamil Nadu's industrial ecosystem to promote exports.
3. *Promotion of Biosimilars:* Tamil Nadu should focus on

production of vaccines and “Biosimilars”. Nearly 40 bio similar and equal number of non antibody biologics are expected to come off patent by 2025. The State should take a lead in promoting investment in research across areas such as Vaccine & Recombinant therapeutics, stem cell research, animal biotechnology and bioinformatics. Firms such as Biocon Biologics in TICEL, are gradually beginning to develop capabilities in this domain.

4. *Awarding Innovation in Biotech:* The State can come out with measures that encourage ideation (and thereby start-ups) and research investment from big players. Fiscal incentives such as subsidies and grants that support incubation and new product development can be decided in consultation with the industry and research institutions so that they make a positive impact.
5. *A New Biotech Policy:* The current Tamil Nadu biotech policy was rolled out in 2014 and since then a lot of changes in the sector have transpired. The State can develop a new biotech policy that is in line with the Tamil Nadu Vision 2023 and the country. To develop a new policy, a detailed review of the implementation efficacy of current policy in the last 6 years can be undertaken to understand what worked well for the State and what could have been better.
6. *A New Central Institution in Chennai:* Chennai does not have a world class research institution like Hyderabad, Bengaluru or Pune established by the Government of India. An institution like CCMB in Hyderabad, NCBS in Bengaluru and NCCS at Pune, needs to be established in Chennai. GOTN needs to take this up proactively with GOI. In parallel the University of Madras should focus on building up the Life Sciences Department on par with the University of Hyderabad.
7. *Bio Refineries:* Over time bio refineries may replace petrochemicals. Research and Development in this area has to be facilitated.
8. *Agriculture:* An Institute of Excellence in Tamil Nadu Agricultural University needs to be established to facilitate the application of bio technology for products to benefit farmers.
9. *Stem Cell Research:* A major Stem Cell Research facility has been created with ICMR funding at the Stanley Hospital

in Chennai. This needs to be upgraded with special funding and made autonomous as an Institute of Regenerative Medicine and Research.

10. *Nutraceuticals*: This has good growth potential and needs to be promoted.

1.4. Specific Recommendations

The key challenges for the State in accelerating the growth of the industry are in the areas of bio-manufacturing, clinical trials and drug discovery, capacity-building, entry into global production networks and creation of local supply chains. The following policy measures can be suggested for enhancing the growth of the industry:

1. A Tamil Nadu State Biotechnology Board should be immediately constituted to promote accelerated growth in the sector. The Board needs to galvanise the start-up culture in the State. The Board should meet once in every quarter to pursue industry-academia partnerships.
2. Establish a 100-acre Biotech park near Chennai, with high end analytical facilities and pilot scale GMP manufacturing facilities for product development as common facilities. This park will focus on

the following fields and leverage the Biotech Science clusters incentives of Department of Biotechnology, Government of India.

- Biosimilars
 - Diagnostics and AI based diagnostic imaging
 - Bioprocess
 - AI based start ups
3. Establish a Centre for Development of Bio pharmaceuticals with a state-of-the-art facility for cell line development and GMP manufacturing facility. A GLP compliant bio analytical facility is also to be set up.
 4. Vaccine Development has taken centre stage in the context of COVID. GOTN should act to establish vaccine development and production and leverage facilities in the King Institute and the BCG Lab besides promoting private sector initiatives.
 5. Facilitate access to the Accelerated Translational Grant for Commercialisation (ATGC) scheme of Government of India.
 6. Promote clinical trials and explore reducing the cost of clinical trials by optimizing the monitoring and supply chain networks.

7. Promote establishment of bio-incubators in various public and private universities by providing special funds for setting up.
8. Multiple incubator parks need to be established each having one thrust area. The parks need to be self-contained and autonomous with special subsidies on a case to case basis to facilitate operational expenses, common facilities, etc. Infrastructure like TICEL Bio park needs to be set up in other Tier II cities of Tamil Nadu – Madurai, Trichy, etc.
9. Similar to iSTEM Bangaluru, upgrade the Stem Cell Research Centre at Stanley Medical College as a Department/Institute of Regenerative Medicine and Research with focussed cutting-edge research in emerging areas in diagnostics and therapeutics.
10. Create an ecosystem for innovation and research by organizing Hackathons and Grand Challenges in collaboration with industries.
11. Promote Contract Analytical Services to support Biologics Analytics characterisation in Tamil Nadu similar to the CAPS Centre by Syngene in Bengaluru.
12. In the wake of COVID-19, the State Government may

consider expanding the scope of Biotechnology Venture Capital Fund of Rs.500 crore to include other emerging sectors such as Pharma and Bulk drugs, Medical devices industry, etc. This will diversify the risk, provide necessary seed capital to a larger group of sector which have huge potential and can act as growth multipliers of Tamil Nadu in the future.

2. PHARMACEUTICAL SECTOR

India is the largest producer of generics and supplies 50 percent of vaccines in the world. In 2018-19, the Indian Pharma Sector contributed 2% to the GDP. In terms of size, the India Pharma Sector in 2018-19 stood at \$35.7 Billion USD. The sector exports to more than 200 countries including highly regulated markets of US, Western Europe, Japan and Australia. In 2018-19, India exported pharmaceutical drugs to the tune of USD 19.13 billion (INR 1,33,910 crore) with a growth of 10.72%. The major States in the Pharma manufacturing sector are Gujarat, Maharashtra and Telangana.

Tamil Nadu has a limited contribution to the pharma sector in the country with a share in national output at 2.6% in 2017-18. The State exports of pharma products stood at

\$484 million in 2018-19, equivalent to 2.5% of total national exports. In terms of employment, Tamil Nadu's share in the sector at the national level stood at 4.3%. Apart from the Industrial Estate at Alathur near Chennai, which is small in scale, there is no dedicated industrial park infrastructure for the pharma industry in Tamil Nadu. The pharmaceutical industry can be divided into three product groupings, viz. intermediates, bulk drugs (also called Active Pharmaceutical Ingredients or API) and formulations. While bulk drug production can be sustained over a long period only through sustained involvement in R&D activities, formulation production can be carried out with relatively low levels of technological sophistication. Drugs can also be classified as patented and generic. Since the 1980s, India has had a strong generic pharmaceutical industry that has been providing medicines at prices that are among the lowest in the world. This has been facilitated by the Patents Act of 1970, which only recognised process patents, thus allowing Indian firms to reverse engineer many patented molecules. Although the product patent regime came into force following the signing of the TRIPS agreement, by then the Indian Pharma industry had matured enough

to be a leading player in the global market for generic drugs. However, the 1990s and the 2000s showed a significant change in the product mix of the Indian pharma industry. During the early 1990s, India was self-reliant in manufacturing APIs. However, once China entered the API market, the situation changed since their APIs were around 40% cheaper than Indian APIs. There were several reasons for this cost differential. This include huge capacities built up by the Government and now managed by the private industry; significant bank support in the form of loans at cheaper interest rates and relatively easier pollution and effluent treatment norms. Lower labour cost was another critical factor. As a result, Indian firms abandoned domestic production of APIs and moved to the formulation business, using imported Chinese APIs. Today, China commands 44% of the world API market by volume and India imports 70% of her API requirement from China. It is noticed that our API import dependence on China was only 0.3% in 1991. A TIFAC report indicates India does not have the technology, plants and infrastructure to manufacture key chemicals in a cost effective and less polluting manner. Solvent and chemical manufacturing costs in India are over 15% more than China.

India's operative National Pharmaceutical Policy is of 2002 vintage and has not addressed this issue. The draft Pharmaceutical Policy 2017 did take cognisance of the losing domestic capability in API manufacturing and sought to incentivise the same by exempting formulations made from domestically manufactured APIs, from the purview of price control. However, this policy was never finalised. Our import dependence has assumed a new significance in the wake of the COVID-19 outbreak. In the early days of the epidemic, when Chinese factories had shut down, there was considerable apprehension in India on whether there will be a shortage of essential drugs. The issue has assumed a strategic significance and Government of India is now very keen to reverse the dependence. Scheme for Promotion of Bulk Drug Parks and Production Linked Incentive (PLI) Scheme for promotion of domestic manufacturing of critical Key Starting Materials (KSMs)/ Drug Intermediates and Active Pharmaceutical Ingredients (APIs) in India have already been announced by GoI to promote bulk drug manufacture in the country.

COVID has also presented an opportunity in the sense that the supply chain disruption caused by

pandemic in China has proved to the world's generic producers that they cannot depend upon one source for their supply and in future, that they would like to maintain ties with additional source of supply. Another encouraging factor is that the Chinese pharma industry is going through challenging times because of many reasons that include rising wages, tighter implementation of pollution norms and US-China Trade war. Thus, it appears that there could be considerable investment flowing into the domestic pharmaceutical industry in the near future.

Tamil Nadu has several advantages that can be harnessed to develop the Pharma industry. This include good infrastructure, access to ports for imports and exports, availability of qualified manpower, developed manufacturing ecosystem in other sectors, cheap land in rural areas, presence of biotech industry in Chennai and Coimbatore, possibility of industry-academia partnership and industrial harmony. Yet, these advantages have not been properly harnessed.

The recommendations for the development of the pharmaceutical industry in Tamil Nadu are as follows:

1. Separate policy for pharma sector as in the case of Electric Vehicles may be drafted.

2. Tamil Nadu should take advantage of the Bulk Pharma Park Scheme announced by the Central Government, which provides a grant of Rs.1000 crore for a pharma park of 1500 acre size. The idea has to be to promote world class, cost competitive Bulk Pharma chemicals. If State support is needed it should be provided.
3. Additional pharma parks may be set up in coastal areas. In existing industrial parks and the new parks, the pricing of developed land should be competitive with reference to rates in competing States.
4. Sector leaders like Gujarat and Telangana had invested in developing dedicated industrial parks for the pharmaceutical sector. Though Tamil Nadu set up a pharma park in 1978, the State did not expand the activities. There is scope for at least three pharma parks of the spanning 250 acres range in the State. It can be located in different regions of the State. In such parks, common utilities such as solvent recovery and distillation plants, power and steam units, effluent treatment plants, warehousing, etc., must be set up to make smaller units economically viable.
5. All regulatory State approvals should be cleared within a fixed time frame of 45 days else deemed approval should be issued except in the case of hazardous category and in the absence of any longer time limited prescribed under any other law.
6. The State should encourage private industrial park developers to set up pharma parks. Separate incentives for private players may be devised. There must also be a policy for engaging joint venture developments through TIDCO and SIPCOT.
7. The Industrial Policy of the State must recognise pharma as a sector that would require a special focus in terms of incentives. The net incentive package offered including capital subsidies/tax refunds should be better than other States in order to attract investments.
8. The Indian pharma industry, as a whole, spends very less on developing new molecules. R&D efforts must be encouraged by the Government itself setting up common facilities for R&D in the newly established pharma parks or by establishing stand-alone R&D facilities in select locations. The running cost

should also be borne fully or partly by the Government for a few years. Further, incentivize lead universities and research institutions in Tamil Nadu to take up R&D projects in consultation with industries.

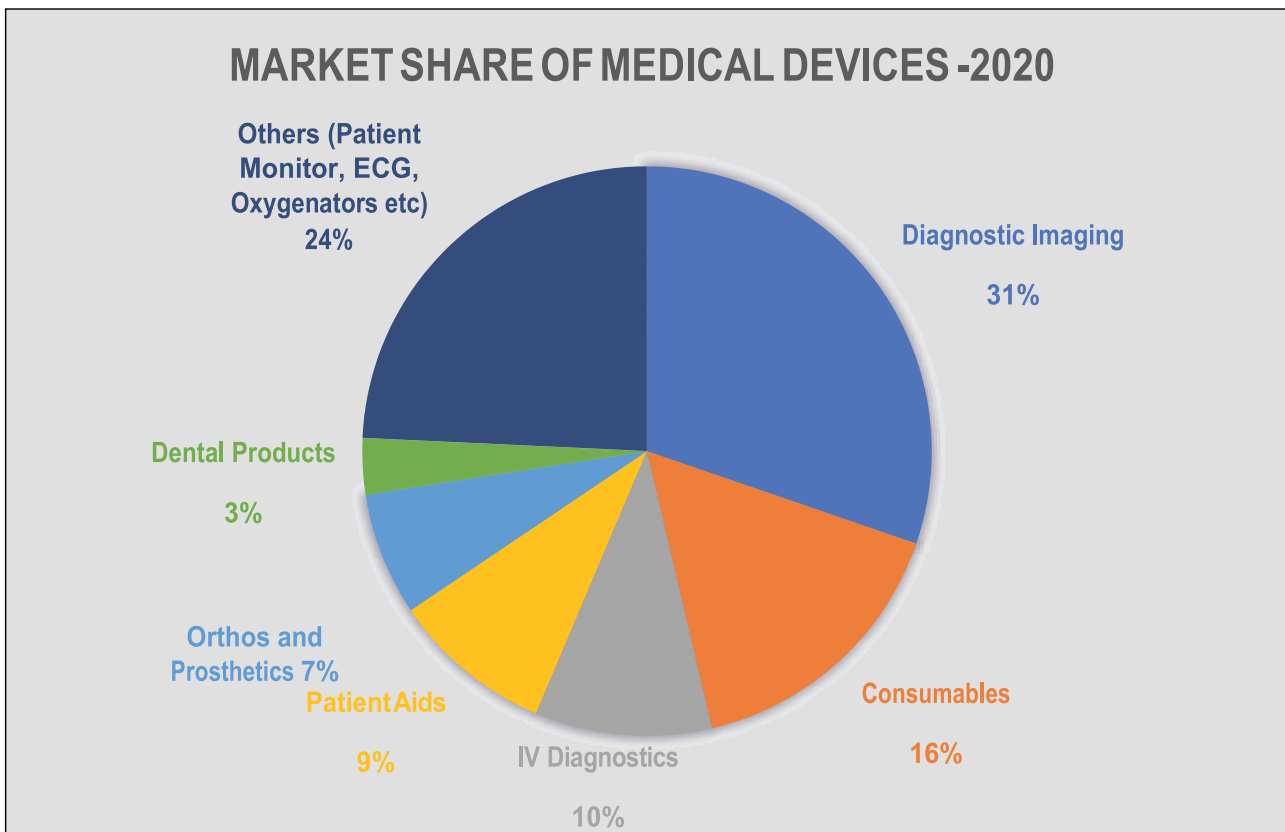
9. The Government should facilitate clinical trials in its hospitals, in compliance with the national safeguards in this respect.
10. Contract Research and Manufacturing Services (CRAMS) sector needs to be actively pursued by anchoring major investors in the field. An expert professional may be engaged exclusively for this purpose.
11. Availability of chemicals and other raw material is a pre-requisite to enable the growth of pharma industry. Steps to be taken to facilitate entry of chemical industry majors into API and other focused areas with suitable incentive mechanisms.

3. MEDICAL DEVICES MANUFACTURING

The Indian Medical Devices and technology market was estimated at approximately INR 41,216 crore (\$5.3 billion) in 2019. The market accounts for 4.5 - 5.0 percent of

the total Indian healthcare market size. The medical device market can be categorized mainly into seven segments and their market shares are depicted in the pie chart 'Market Share of Medical Devices-2020'.

India is amongst the top 20 global devices market and is the 4th largest markets in Asia. Diagnostic imaging is the largest segment within Indian medical device market. However, domestic medical devices market is largely import dependent with imports accounting to 85% of the total trade. In-fact, there is an almost complete dependency on imports for items like imaging equipment, pace makers, breathing and respiration equipment. The domestic manufacturing of medical devices and technology products are largely limited to medium to low value products comprising of consumables and low-end devices. The domestic manufacturing is hindered due to the absence of a dedicated and integrated infrastructure facilities, an enabling ecosystem, design capabilities and low focus on R & D and skill development. In addition, import duties, foreign currency fluctuations and other direct costs make these devices and equipment prohibitively expensive, leading to overall increase in costs of treatment. This has raised a serious concern of cost effective and affordable devices



to a large section of the Indian population.

Like most other industries, the health care sector is increasingly realising the transformative nature of IoT technologies, as advances in computing and processing power, wireless technology and miniaturisation drive innovation in connected medical device development. The rise in the numbers of connected medical devices, together with advances in the systems and software that support the capture and transmission of medical grade data, connectivity technologies and services, have

created the Internet of Medical Things (IoMT).

The manufacturing presence of Medical Devices and Technology sector in Tamil Nadu is very limited. The products that are being manufactured in the State include:

- Surgical prosthesis and sutures, orthopaedic implants and instruments, heart valves, etc.
- Ultrasound machines, high end colour dopplers, Bio-chemistry reagents, IVD products, modular healthcare solutions and medical support

systems, ECG recording systems, patient monitoring systems, ICU Ventilators, etc.

- Low end surgical instruments, critical care devices and hospital furniture
- IOL implants
- Ophthalmic equipment
- OT furniture
- Medical textiles

Some of the leading manufacturers of medical devices and technology products include Trivitron Healthcare, TTK Healthcare, Cura Healthcare, Sanmina, Appasamy Associates, Auro Lab, etc. Increase in the public sector investments in health care, augmenting the existing healthcare infrastructure, connected and Health products, local innovation, etc., would drive the domestic manufacturing and investments in the sector.

Tamil Nadu / Chennai offers an attractive ecosystem to create a world class manufacturing hub for medical devices and equipment, some of which are listed below:

- (a) Well-developed microelectronic, telecommunication, software and precision engineering industry to support the Medical Device & Equipment industry
- (b) Strong presence of life sciences sector including biotechnology

and allied sector offering a seamless convergence.

- (c) Possesses a strong base for the design, software development and service support for medical devices and equipments.
- (d) Large pool of Original Equipment Manufacturers (OEMs), which can be leveraged by the medical technology sector.
- (e) Health Capital of the Country: Chennai is a preferred destination for medical tourists from across the globe attracting 40% of international patients and 30% of domestic patients. Presence of some of India's best healthcare institutions such as Apollo Hospitals, MIOT Hospitals, Sankara Nethralaya and Sri Ramachandra Medical Center, Chettinadu Hospital, Global Hospitals, SIMS, etc., attracts medical tourists and create huge market for medical devices.

Government of Tamil Nadu is developing Medipark, an exclusive industrial park for medical devices and technology industry. Medipark being developed in 330 acres near Chennai would be a world-class manufacturing hub benchmarking with international standards would host an integrated ecosystem through creation of plug & play infrastructure, state-of-the-art

facilities, scientific infrastructure and specialised services, shared utilities and facilities which shall comply with Good Manufacturing Practices and meet the regulatory standards and compliances.

3.1. Recommendations

1. Tamil Nadu should immediately start the proposed Medipark at Chengalpet with a focus on latest diagnostic imaging and IV diagnostics manufacturing started incorporating medical electronics and other emerging technologies.
2. The scope for the industry is so huge that the State should immediately develop additional Mediparks near Chennai, Coimbatore, Trichy and Tuticorin. Coimbatore should be taken on a priority basis leveraging the proximity to Bangalore and take advantage of the start ups there.
3. Medical devices industry, like pharma industry, must be given special treatment in terms of incentives in the industrial policy. The net incentive package offered including capital subsidies/tax refunds should be better than other neighbouring States in order to attract investments.
4. "Built to Suit Model" must be created on a large scale in our

existing general industrial parks and in new parks. This is one of the major demands of the new investors in the electronics sector, who want to start manufacturing immediately and who do not want to lock up capital in buildings.

5. A good ecosystem for start-ups has to be created with dedicated handholding. A corpus similar to ATEA can be created to support start-ups.
6. Additionally, Tamil Nadu Infrastructure Fund Management Corporation Limited (TNIFMC) should create an Angel Fund for this sector.

4. LOGISTICS SECTOR

The logistics sector encompasses three broad components which are *Transportation, Storage and Distribution and Value-Added Services*. The need for logistics arises when there is a gap between the time a goods/service is produced and finally consumed. The Indian logistics sector is currently valued at \$160 Billion and employs around 22 million people. Some of the activities like cold chains, multi-modal logistics parks, etc. in the logistics sector have been included in the Harmonized Master List of Infrastructure sub-sectors' and has been granted infrastructure status in

2017 which will enable the sector to avail infrastructure lending at easier terms with enhanced limits, access to larger volume of funds as External Commercial Borrowings (ECB) and access to longer tenure funds from insurance companies.

The draft National Logistics Policy of India estimates the logistics cost as a percentage of GDP at 13-14% and aims to reduce it to 10% on par with global standards. India is ranked at 44 as per the World Bank's Logistics Performance Index (LPI), 2018. The logistic sector in the country is unorganized and fragmented with a large number of stakeholders both private and public. Different parts of the logistics value chain currently are being managed by many ministries including Road Transport and Highways, Shipping, Railways, Civil Aviation, D/o Posts, Commerce and Industry, Finance and Home Affairs. However, in 2017 a separate Logistics division was created in the Department of Commerce with the task of "Integrated Development of Logistics Sector". In addition, a large number of Government agencies including Central Drug Standard Control Organization, Food Safety and Standards Authority of India, Plant and Animal Quarantine Certification Service provide relevant trade clearances and impact the value chain.

Approximately, 60% of freight movement in India happens via road, which is significantly higher than most developed economies. Globally, the share of rail cargo in the multi-modal mix is higher. India lacks sufficient infrastructure to enable smooth transition and inter-connectivity between the different modes of transport and therefore a higher burden falls on the roads. The share of Indian Railways in freight movement has been declining over a period of time primarily due to non-competitive tariff structure. Innovative methods such as Road-Railers which were deployed during COVID pandemic emergency to transport trucks on rakes which will reduce the handling and inter-modal costs.

Details about the sub-components of the Logistics sector are given below:

- **Transportation:** Infrastructure related to the modes of transport viz. ports, road, rail and air forms the backbone of an efficient transportation system in the State. The average speed of a truck in India is around 300 km/day whereas in developed economies it is 700-800 km/day. Similarly, average ship turn-round time is 2.64 days as compared to the international desirable average of fewer than

24 hours. Tamil Nadu has several advantages on this front. It has the second-longest coastline with 3 Major seaports and 23 minor seaports. Tamil Nadu also boasts of 4 international and 2 domestic airports. Tamil Nadu's extensive road network covers a total distance of 1,99,040 km and is one of the most well-connected networks in the country. Its density is 2.5 times higher than the national average.

- **Storage:** This includes the warehouses for agricultural/capital goods and associated service sector. The Indian warehousing market is highly fragmented and unorganized. A large proportion of the warehouses are less than 10,000 sq.ft.in size and unorganized players account for nearly 90% of the market. An efficient warehouse can bring a 15-20% cost reduction in the entire logistics operations. There are also gaps in the quality of specialized storage infrastructure especially in the case of perishable agricultural commodities. Investments into the warehousing sector account for around 26% of the total private equity investments into real estate during 2014-18. In Tamil Nadu, as far as agriculture is concerned, Tamil

Nadu Warehousing Corporation established under the Agricultural Produce (Development and Warehousing) Corporation Act, 1956, with a total capacity of 7.34 lakh MT is the dominant player. There is tremendous scope for private sector.

- **Distribution Network:** Service providers enabling last-mile connectivity like Freight Forwarders and delivery agents constitute the Distribution Network. Several e-commerce companies and aggregator platforms have disrupted this space and offer tremendous scope in innovation and value addition.

4.1. Recommendations

1. A comprehensive mapping of existing and projected freight flows across main Origin-Destination stretches in Tamil Nadu needs to be carried out to identify the scope for potential multimodal logistics parks.
2. Fast track the Chennai – Kanniyakumari Industrial Corridor (CKIC), Chennai Bangalore Industrial Corridor (CBIC) and Tamil Nadu Defence Industrial Corridor.
3. Explore the possibilities of coastal shipping along the coast of Tamil Nadu.

4. Expand the employment opportunities in the sector by focussing on skill development in partnership with industries. Apex Skill Development Centre (ASDC) for Transportation and Logistics being established by Tamil Nadu Skill Development Corporation may be scaled up to southern and western Tamil Nadu in a phased manner.
5. Special focus to reduce losses in agricultural and perishable commodities through effective agri-logistics involving access to cold chain, packaging and other post-harvest management techniques and thereby enhance agriculture price realization and farmer income.
6. Incentivize warehousing property segment as a promising investment opportunity in the State. Post land acquisition, warehousing assets have a relatively shorter construction timeline (around 12–18 months) compared to residential, office and retail assets. Hence, private equity (PE) funds, which have a pre-determined fund life cycle (generally 8–10 years), are most active in this space. PE funds had a 49% share of the total investments into the warehousing industry. State may earmark land for Warehouses/Logistics park after assessing the demand.
7. Establish a Multi Modal Logistics Park in the periphery of Chennai.
8. Completion of the Chennai Port – Maduravoyal Expressway should be undertaken on a priority basis at the earliest.
9. Outer Ring road project should be completed and made fully functional at the earliest. The Northern Port Access Road (NPAR) and Northern rail connectivity project may be expedited
10. Real estate relaxations for FSI and concessions in stamp duty and registration fees for ware houses.
11. An incentive scheme to be devised to recognise/reward logistics companies which generate employment in Tamil Nadu. This need not involve significant financial outlay, but can be a recognition done every year.
12. Focussed efforts to be taken to ensure the turnaround time at ports be brought to less than 36 hours from the current rate of over 72 hours.
13. It is generally viewed that there are too many toll gates causing inordinate delay. There is an immediate need to standardize

the optimum distance between toll gates. Effective technology solutions such as FASTag need to be deployed on a widespread basis to reduce delays.

5. INFORMATION TECHNOLOGY

This two-decade-old Industry has evolved and stabilised so well that the challenge of COVID-19 did not have much impact like other Industries. It has offered an opportunity window for the IT Industry to explore New Norms and evolve with a strategic understanding of new business opportunities. The IT/ITES industry will continue to support the status of Tamil Nadu as one of the Key Engines of Indian economy's growth.

5.1. Tamil Nadu IT/ITES Industry: an Overview

- INR 1,24,000 crore of Exports.
- Strong Presence of Top 10 IT companies.
- Over 7 lakh direct Employees. Four indirect jobs around every direct employee.
- Only State in India which can legitimately boast of 8 Government owned IT parks spread across the State.
- State with the largest number of operating IT SEZ's in the Country.
- Well engaged State Skill Mission and the ICT Academy.

- Seamless Internet Connectivity (fiber covering every nook & corner of the State).
- Only State to announce Start up, Rural BPO and E-waste Policy.
- State with largest number of Arts & Science and Engineering Graduates.
- SAAS (Software As A Service) capital of the Country.

Push for Digital: COVID-19 mandated New Normal has ensured that everything is Digital and we need to capitalise the same with more dynamic policy for Digital empowerment to IT/ITES Business. All State transactions and enactments towards Business should have this as the steering agenda.

5.2. Possible Impact of COVID-19

COVID is an unprecedented event and a Black Swan Event of this century for the whole world. Tamil Nadu is no different. Mid of March 2020 saw a storm of panic amongst IT employers & employees, while April saw more of reflexive action from Industry to start execution of contingent plans to secure connectivity & decentralize their IT infra to the homes of employees. All plans were made on a short term, considering the situation would get better. However, with a clear understanding that COVID-19 will be there for a long time, the

IT/ITES Sector has fine tuned its strategy and are on a sustainable business path.

Impact on Employment

- IT Industry was not laying off employees as expected. Nevertheless they came up with options like pay cuts, no increments and reducing benefits.
- Some Companies had forced resignations due to business getting halted, but were given a timeline for the notice to be served before the last working day.
- Contract employees duration was shortened and they were the first in-line to face the lay-offs.
- Companies put the new hires on hold.
- Work From Home (WFH) has become the New Normal for most Companies of the IT- ITES and this model will be the future trend.

The clear expectation from Government by the industry is to regulate in a fair measure, the commuting directives inter & intra State, options to develop facility in Tier 2 & Tier 3 cities of Tamil Nadu and facilitate rent waivers. Any relief package that serves from bottom up will help the industry revive from this slowdown.

Tamil Nadu is the most urbanised State in India with a uniform and even spread of urban centres in Tier-2 and Tier-3 Towns. The next wave of innovation and creativity for IT will come from these Towns. The business model of ZOHO of Tenkasi based Sridhar Vembu should be popularized and propagated in Rural /Urban Tamil Nadu.

The COVID-19 pandemic has resulted in a slowdown in the overall economy and also in the IT services market. Although new contracts, as well as contract renewals in IT services, are expected to be affected during the crisis, it is also expected that Consulting Services, Modern Collaborative Applications, Managed Security Services, Network Management Services and Hosting Services will represent higher revenue-generating opportunities in the calendar year 2020.

Amid the COVID-19 outbreak, project-oriented services such as Consulting, Custom Application Development, Systems Integration, etc. are expected to reduce steeply in the short-term. But managed services, such as Application Management, Hosting Services, IT Outsourcing, Network Management etc. are expected to reduce only marginally in the short-term.

IT Outsourcing: IT outsourcing is one of the most flourishing industries in the world. However, with the outbreak of Corona Virus, a mixed impact is expected on the IT outsourcing industry. As many economies are continuing with the lock-down due to the COVID-19 issue, revenue generation for most companies across sectors has been affected while rate of unemployment has also inched upwards. Amidst fear of worsening economic conditions, the countries and companies largely dependent on outsourcing are trying to control the IT service imports so that they can employ their own resources to the assigned job.

However, many businesses who has never given a thought of outsourcing could capitalize on this situation to partner with a few outsourcing firms during this time to stretch their wings. Now companies are adopting work from remote location, thereby requiring more cloud services and IT applications to effectively enhance and strengthen their information related security from cyber attacks. So on one side, when the Indian IT industry is expected to witness pressure on new contracts and pricing, there are segments within the IT domain wherein outsourcing is anticipated to increase.

Unified Digital Infrastructure (UDI): UDI Platform should be implemented

on a priority basis which will have the convergence of TNSWAN, BharatNet, TamilNet and TACTV. The future growth of economy will be on convergent Telecom Platform which can deliver ample play of Voice, Data and Video to every household. In this context UDI for Tamil Nadu is very relevant.

5.3. Strategy for the Next Wave of Growth

1. Formation of Hon'ble Chief Minister's IT Advisory Council

We need to establish the Tamil Nadu IT Advisory Council chaired by the Hon'ble Chief Minister. It is important that we are inclusive and establish this Council which will be mandated to Brand the State and bring in more Businesses. This exists in some States like Karnataka, Maharashtra and Haryana, etc. This Council will consists of successful IT Entrepreneurs representing Services, Products, Anna University, IIT (Madras), Mathematical Institute and may include some other Universities of Higher order.

2. Tier-2 and Tier-3 towns – the New IT Hub

Have a strategy for facilitating the creation of 'Small Office Spaces' across Tier 2 & 3 Cities which can be used by the employees of the IT companies based in major towns to make use as their meeting points.

This infrastructure should have Uninterrupted Power, Internet and should be ergonomically designed. We can make use of Department of Industries and Commerce (DIC's), ELCOT/SIPCOT Offices for this purpose. This first mover advantage will help us to leap forward and establish Tamil Nadu's name in attracting more Business and branding all the Districts as IT/ITES destinations. This can also engage and evolve the start up ecosystem.

3. *The New Normal of Work from Home (WFH)*

Tamil Nadu from the beginning of these challenging times had been a forerunner in accepting and promoting Work from Home (WFH) which is the New Normal. The dynamic support from Government of Tamil Nadu helped the Companies to sustain their existing Business and rather garner more business.

Work from Home (WFH) has been well accepted by all the stakeholders and this will continue even after the pandemic. New blended models will emerge and it is an opportunity for the Government to be the first mover and establish a Policy to attract more business in the State by upgrading Telecom Infrastructure and by offering Industry Grade Bandwidth to homes.

4. *Start-up eco system in partnership with IIT Madras Research Park, STPI and leading Academic Institutions*

We need to work on connecting the Technological Institutes/ Universities with the Mentors and successful entrepreneurs. We need to showcase the innovative solutions of young minds through Government sponsored programs in each and every Tier 2 location. (At least in Tiruchirappalli, Madurai, Salem & Coimbatore) This can be coordinated by Trade bodies like NASSCOM or Confederation of Indian Industry (CII), etc. The Business owners can interact at the respective destination with the aspiring Tech Entrepreneurs and help them to kick start.

5. *Tamil Nadu as a Data Hub of India*

Tamil Nadu is the State Hub of India. Blessed by Geography, several under sea cables land in Chennai. Tamil Nadu has the potential to emerge as the Data hub of India. Already some marquee names like National Payments Corporation of India (NPCI) are locating their Data Centres in Chennai region with 8 layer security protection. TNSDC can be a flag bearer for this positioning of Tamil Nadu as the Data Hub.

6. Implementing Industry 4.0 in the MSMEs of Tamil Nadu and in particular in the units based in the Defence Corridor

Tamil Nadu has the maximum Micro, Small and Medium Enterprises (MSMEs). If Tamil Nadu has to stay competitive, then propagating 'Industry 4.0' in the MSME sector is vital. Early roll out of 5G in Tamil Nadu, will enable adoption of Industry 4.0 by the MSME/Industry sector and give Tamil Nadu an unmatched advantage in attracting new investments.

7. Make Tamil Nadu 5 G ready

Telecom Service Providers (TSPs) are already obligated to ensure that there is no abuse of telecom resources. The Fibre Internet availability across India is limited. It is essential to resolve this to effectively enable WFH for IT-ITES industry. India is ranked very low (at 126 in the world) on fixed-broadband subscriptions per individual (1.33 connections per 100 individuals) and less than one fourth of the towers are fibre connected. Therefore, the employees are primarily dependent on mobile cellular subscription to connect to the internet. Despite the 4G network improvement plans, the availability of network is poor. This is a serious impediment to WFH -different employees may need

to work online in a collaborative environment on the same project, often involving processing of global data, Further, employees may need to ensure (in case of voice processes) that calls do not break in between.

Fast track measures are required to augment the overall communication network with a view to enhance last mile connectivity, with an added emphasis on the residential areas.

8. Fast tracking the Electronic Manufacturing Cluster (EMC) policy in partnership with Industries Department and Guidance Bureau

Tamil Nadu has emerged as the largest Electronic Hardware Manufacturing and Exporting hub in India. Tamil Nadu has at present 8 Notified Electronic Hardware SEZs with a total area of about 1200 acres. To make India a Global player in the field of Electronics Manufacturing "Electronics Manufacturing Clusters" scheme has been notified by Government of India which will provide world-class infrastructure for attracting investments in the Electronics Systems Design and Manufacturing (ESDM) Sector. Under this scheme the Government of India will provide financial assistance for setting up the "Electronics Manufacturing Clusters".

The “Electronic Manufacturing Clusters” once developed would attract domestic and Global Investments for the growth of the ESDM sector in Tamil Nadu, help in development of entrepreneurial ecosystem, drive innovation and catalyze the economic growth of the State by increasing employment opportunities and tax revenues. Government of Tamil Nadu will setup Electronic Manufacturing Clusters (EMC) in 4 locations in Tamil Nadu through ELCOT with world class infrastructure to attract investment from Electronic Manufacturing industries across the globe . A policy in this regard is under consideration of Government

9. Electronics Hardware Policy to be released at the earliest

The vision of Electronics Hardware Policy would be to make Tamil Nadu a globally competitive Electronics System Design and Manufacturing (ESDM) destination with a thrust of innovation. This Policy will foster a conducive environment for ESDM start ups in the domains viz. Artificial Intelligence, Machine Vision, Internet of Things (IoT) Sensors & Networks, Additive Manufacturing, Industry 4.0, Automation and Robotics, Aerial/ Electric/ Autonomous/ Space Vehicles, etc., Expeditious release of the Policy will boost Tamil Nadu’s

chances for attracting investments from companies exiting China.

10. ICT Academy to plan for the new generation Technical Courses, which will enable Tamil Nadu capitalise on the Emerging Technologies

Technical skills on emerging technologies like Artificial Intelligence, Block Chain, Machine Learning, Cloud Computing and Cyber Security are required for the entry level jobs in the industry. In order to equip the teachers and students of Higher Educational Institutions, training programmes/ Courses on Emerging Technologies will be imparted by the ICT Academy.

Summary of Recommendations

1. Medical Devices manufacturing

Tamil Nadu can start the proposed Medipark at Chengalpet and immediately develop additional Mediparks near Chennai, Coimbatore, Trichy and Tuticorin. Coimbatore should be taken on a priority basis leveraging the proximity to Bangalore.

2. Pharmaceuticals

Separate policy for pharma sector as in the case of Electric Vehicles may be drafted taking advantage of the Bulk Pharma Park Scheme

announced by the Central Government. The proposed Pharma Policy must recognise pharma as a sector that would require a special focus in terms of incentives

3. Biotechnology Sector

Tamil Nadu State Biotechnology Board should be constituted to promote accelerated growth in the sector.

The State Government may consider expanding the scope of Biotechnology Venture Capital Fund of Rs.500 crore to include other emerging sectors such as Pharma and Bulk drugs, Medical devices industry, etc.

4. Logistics Sector

A comprehensive mapping of existing and projected freight flows across main Origin-Destination stretches in Tamil Nadu needs to

be carried out to identify the scope for potential multimodal logistics parks. Explore the possibilities of coastal shipping along the coast of Tamil Nadu.

Special focus on effective agri-logistics involving access to cold chain, packaging and other post-harvest management techniques. Focussed efforts to be taken to ensure the turnaround time at ports be brought to less than 36 hours from the current rate of over 72 hours.

5. Information technology

Establish the Tamil Nadu IT Advisory Council chaired by the Hon'ble Chief Minister.

Outline a strategy for facilitating the creation of 'Small Office Spaces' across Tier 2 & 3 Cities which can be used by the employees of the IT companies based in major towns to make use as their meeting points.

1. Introduction

As the effects of COVID-19 are witnessing around the world, real estate sector has been impacted in many ways. The gradual movement in Real Estate sector after various policy reforms from last 3-4 years has again subdued due to COVID-19 pandemic. The impact of the pandemic is foreseen in short, medium and long-term basis.

The real estate sector showed resilience in 2019. Residential market across the top seven cities in India recorded a growth of 6% y-o-y in the number of units sold and office absorption touched historical highs. As uncertainty grips the world, the year 2020 has started on a turbulent note. The COVID-19 outbreak has led to a global health crisis; putting pressure on economies across the globe. The current global environment is likely to lead to a decline in the inflow of foreign institutional investments into India. Moreover, a slump in oil prices to multi-year lows may affect sovereign wealth funds, which are likely to reduce investments into India. The State of the domestic economy presents another big challenge – GDP growth dipped to a six-year low of 4.7% in the last quarter of 2019,

the NBFC liquidity crunch continues and the inherent problems in India's banking and financial sector. In the aftermath of this ensuing slowdown triggered by a weak business climate and ongoing liquidity concerns, the Indian real estate market, which contributes nearly 8% to the GDP, is likely to be adversely impacted.

It is currently too early to provide a detailed, quantitative assessment of the COVID-19 impact on economic activity, industries and the real estate market. The effects of the outbreak will inevitably vary from market-to-market and the true impact and recovery will manifest in forthcoming quarters.

Construction sector is one of the largest seasonal employment providers in India next only to agriculture. The impact of the ongoing pandemic on business activities became more prominent since the beginning of March 2020 in the country. It is currently too early to provide a detailed, quantitative assessment of the COVID-19 impact on economic activity, industries and the real estate market. The effects of the outbreak will inevitably vary from market-to market and the true impact and recovery will manifest in forthcoming quarters.

Snapshot of Residential Sector in India

The last few years have been turbulent for the Indian residential market. As the market recovered from the impact of demonetization, the implementation of key structural reforms such as RERA and GST in 2017 acted as a dampener, deterring developers from launching new projects. Albeit the inevitable teething problems, these measures brought in the much needed transparency and efficiency into the system. With the dust over these policy changes settling, the year 2018 witnessed the market move towards revival. In 2019, the global economic slowdown accompanied by India's slower GDP growth resulted in consumer sentiments taking a massive hit. Amidst the gloom, the residential real estate market showed resilience – sales of residential units across the top seven cities recorded a growth of 6% y-o-y.

As uncertainty grips the entire world, the year 2020 will certainly present challenges. The COVID-19 pandemic is affecting the global economic slowdown. Turning to growth in India, the implied real GDP growth of 5 per cent for FY 2019-20 in the second advance estimates of the National Statistics Office, is now at risk from the pandemic's impact on the economy.

The Government has introduced several short-term relief measures to uplift the Indian economy from the immediate impact of the lockdown. The Reserve Bank of India, too, has been taking purposeful action focused on driving overall economic growth and mitigating the adverse macroeconomic impact of the pandemic. Following a series of rate cuts since February 2019, the repo rate today stands at 4.0% and reverse repo rate at 3.75%. To put things into perspective, this is lower than the policy rate of 4.75% post the 2008 Financial Crisis. More importantly, banks have already started transmitting the benefits to consumers in the form of lower mortgage rates; as well as granting a six-month EMI moratorium.

The hit to consumer confidence due to the economic slowdown seems to have a bearing on the decision making of homebuyers with the offtake of home loans witnessing a declining growth trend (Figure 8). Lower mortgage rates combined with other measures taken by the Government to improve sentiments is expected to arrest this declining trend and aid in the recovery of the residential market in India.

Subdued sentiments weigh in on the offtake of home loans. Home loans growth declines and as Pandemic

affects home buying and loan growth – further decline is expected. In spite of several measures being announced by the Government and the central bank to mitigate the adverse effects of COVID-19 and ensure financial stability and revive growth; the revival of the residential sector primarily hinges on the intensity, spread and duration of the global pandemic. With economic activity more muted, the real estate sector, which contributes 8% to the Gross Domestic Product of the nation, is poised to face some challenges. The impact of the ongoing pandemic on business activities became more prominent since the beginning of March 2020 in the country.

Even though new project launches came to a standstill in March, Q1 2020 witnessed a rise of 3% in new launches as compared to the same period last year. The homebuyer community deferred their purchase decisions in light of the impending crises, which led to sales dipping by nearly 30% in Q1 2020 on a y-o-y basis.

New Launches

The current quarter saw a marginal increase in new launches of residential units compared to the same period last year. Q1 2020 recorded a new launches of 40,574 units, an increase of 3% when

compared to Q1 2019. Developers across cities continued to launch new projects in the initial two months of the quarter. It gradually slowed down in the beginning of March in line with growing concerns of the impact of COVID-19 before it came to a standstill, on account of the nationwide lock-down.

With partial lock-down in place, construction activity and new launches have resumed at snail pace after complete halt. The economic package announced by the Central Government is expected to benefit 3.5 crore-registered construction workers. It will provide the much-needed relief to construction workers, affected due to the closure of construction sites.

Mumbai and Bengaluru continued to dominate new launches and formed nearly 60% of the overall launches during the quarter. The overall increase in new launches was driven by smaller markets like Pune, Kolkata and Chennai. While new launches in Mumbai witnessed a substantial decline of 18% as compared to the same period last year, it remained largely unchanged in Bengaluru (increase of 3%) and Delhi NCR (decrease of 3%). There was an uptick in launches by reputed developers on the back of expectations of an economy recovery.

The situation is likely to aggravate the liquidity challenges faced by developers and restrict new launches for some time after normal business conditions are restored. In the subsequent quarters, developers are expected to focus on completion of under construction projects and clearing their unsold inventory. Moreover, consolidation in the residential market with an increasing number of joint developments will continue to be a major trend with the size of pie belonging to reputed developers increasing consistently.

Development focus on mid and affordable segments continued in Q1 2020 as developers continued to capitalise on the demand and supply side incentives of the Government, to cater to the unmet demand in the lower and mid income groups and target first time homebuyers. These launches were mostly concentrated in the suburban areas of the cities, which have availability of larger land parcels at comparatively lower costs. Interestingly, new launches in these segments increased in the three larger markets of Bengaluru, Delhi NCR and Mumbai. Nearly all the newly launched units in Kolkata in Q1 2020 were under these ticket size brackets. Moving ahead, the focus on these price segments is expected to continue with developers

trying to reap the benefits of various Government incentives as well as the strong pent up demand in these price segments.

Residential Sales

The sales of residential units in Q1 2020 declined in all the seven major residential markets of India as compared to Q1 2019. This was the second largest dip in residential sales in the last five years, after Q1 2017, when the market witnessed a 37% y-o-y fall in sales due to demonetisation. Bengaluru, which was the largest contributor to sales in Q1 2019 witnessed the maximum decline in the offtake of units, registering a 52% fall in Q1 2020 on a y-o-y basis. While the three key markets of Mumbai, Bengaluru and Delhi NCR continued to account for a major chunk of the total sales, Pune and Hyderabad were not too far behind when compared to Bengaluru.

In the subsequent quarters, the pick-up in sales will primarily hinge on enhanced consumer confidence, which in turn depends upon the continued implementation of progressive Government policies amidst the gradual revival of the Indian economy at large. In the backdrop of fears over timely deliveries and the financial health of developers, buyers will become even

more cautious. Traction in completed projects, especially by reputed developers is expected to aid the recovery of the market.

Snapshot of Residential Sector in Chennai

The substantial growth in commercial real estate was an important driver for the growth of residential real estate in the city. However, the month of March witnessed fewer new launches, lesser walk-ins and postponement of home buying decisions due to the impact of the pandemic and subsequent measures to control the spread.

New launches remained active in the first two months of the quarter. Resultantly, the overall launches witnessed a growth of 23% y-o-y and reached 2,574 units in Q1 2020. Southern suburbs (Perungudi, Pallavaram, Navalur) garnered the maximum share of launches at 48% followed by the Western suburbs (Mogappair, Poonamallee) which contributed to 27% of the new launches. Launches in these submarkets are driven by their locational advantage - excellent connectivity and proximity to major IT hubs of the city; various upcoming infrastructure projects like flyovers and metro rail to further improve connectivity.

The majority of the new launches were concentrated in the mid and upper mid-segments, which accounted for 57% of the total launches. Developers focused on building more compact housing units rather than spacious apartments to cater to the right budget and improve their sales. Moreover, developers continued to offer freebies in the form of modular kitchen and home fittings in order to attract homebuyers.

However, sales registered 8% dip in Q1 2020 on a y-o-y basis. The Southern suburbs (Sholinganallur, Padur, Pallavaram) accounted for a majority of sales at 69%. Significant traction in sales was seen in the lower mid-income housing segment followed by the affordable segment. The price of residential apartments in the city largely remained stable at INR 4,624 per sq ft in Q1 2020.

Summary - Impact of COVID-19 on Residential Sector

- Walk-ins reduced by 30%-50% in the initial weeks of March 2020 and had come to a standstill during the lock-down.
- Buying discussions at advanced stages and negotiations are also being deferred / put on hold.
- Most of the prospective buyers are going into the wait and

watch mode, given the economic uncertainty.

- In some cases, buyers are resorting to significant negotiation with developers on the pricing front.
- Most developers have postponed the launch of new residential projects, except for those which were soft launched.
- First half of 2020 will be critical for developers who are already facing liquidity concerns. Even developers with healthy balance sheets are likely to face difficulties with sales expected to witness considerable drop.
- It is expected that the residential market to stabilize in the second half of the year, with likely 'U'-shaped improvement in economic conditions where there would be some permanent loss of output after the initial shock.
- Strong pent-up demand combined with rationalised pricing and able support from the Government will be key to recovery of the residential sector. This is likely to be further supported by the sharp declining trend with high degree of volatility prevailing in the stock market which is unlikely to experience reversal of trend in near future.

Snapshot of Commercial Sector in India

The office market witnessed a net absorption of 8.6 mn sq ft, a decline of 30% y-o-y when compared to the same period last year. To put things into perspective, the last such drop in net absorption was observed in Q1 2017; net absorption fell by 60% y-o-y in Q1 2017 post demonetisation in November 2016. However, while assessing the drop in net absorption, it is important to note that the office market touched new highs in the previous year and the net absorption witnessed in Q1 2019 was the highest first quarter net absorption in the last five years.

Net Absorption

The momentum continued in the first two months of 2020 before the pandemic impacted the Indian market in March and several leasing deals in the final stages of negotiation were deferred with occupiers asking for the removal of lock in periods and a downward revision of rents. Moreover, occupiers are adopting conservative leasing strategies and have put up decisions regarding fresh take up of spaces on hold for the next couple of months.

The three larger markets of Bengaluru, Mumbai and Delhi NCR accounted for nearly 75% of the

net absorption in Q1 2020. Net absorption in Mumbai and Chennai more than doubled in Q1 2020 as compared to Q1 2019. This was led by strong leasing activity in the first two months by IT/ITeS occupiers. The global health crisis arrested the growth of the Hyderabad market with limited relevant supply coming into the market. Hyderabad witnessed massive fall of 74% in net absorption in the first quarter of 2020 as compared to the same period last year, albeit on a very high base. Resultantly, Hyderabad's contribution to overall net absorption fell from 29% in Q1 2019 to 11% in Q1 2020.

Massive dip in net absorption of 30% as compared to the same period last year. However, net absorption in Mumbai and Chennai more than doubled in Q1 2020 as compared to Q1 2019. This was led by strong leasing activity in the first two months by IT/ITeS occupiers.

New completions take a massive hit of 40% as compared to the same period last year. This was the second largest dip witnessed in new completions in the last five years.

In synchronization with net absorption, Bengaluru accounted for a major share of the new completions in Q1 2020. The Delhi NCR market, which gained steam in

Q4 2019, witnessed a fall of 44% in new completions when compared to Q1 2019. Hyderabad's rise in the office market was also paused with new completions in Q1 2020 decreasing by 68% y-o-y. Even though Mumbai witnessed new completions of 0.84 mn sq ft in Q1 2020, supply of commercial Grade A office spaces in primary submarkets remained constrained.

Major Drivers

IT-ITeS occupiers drove the pre-commitment activity across most of the major office markets in India. These occupiers require larger floor plates and pre-commitment becomes a necessity in markets with limited availability of Grade A office spaces. IT-ITeS as well as co-working occupiers drove fresh leasing activity during the quarter. While the share of IT/ITeS occupiers in leasing increased to 56% in Q1 2020, co-working operators accounted for 13% of the leasing activity.

Vacancy levels came down to 12.8% in Q1 2020 from 13.3% in Q1 2019. Cities like Bengaluru (5.6%), Hyderabad (7.7%), Chennai (8.0%) and Pune (5.5%) continued to hover at single digit vacancies. Bigger markets such as Mumbai and Delhi NCR recorded vacancy levels of 12.7% and 27.2% respectively.

Outlook

In the medium to long run, the current health crises will lead to corporates re-evaluating their commercial real estate strategy to make it more resilient to such shocks. Business continuity plans and remote working strategies have been successful. Hence, future demand from occupiers is likely to take into account the need for flexible workspace. This could encourage occupiers to reduce capital costs, place greater emphasis on employee wellbeing & sustainability and fast track the adoption of flex working practises.

Snapshot of Commercial Sector in Chennai

Chennai registered a total gross absorption of 1.21 mn sq ft in Q1 2020, whereas the net absorption was recorded at 0.9 mn sq ft, a 110% growth over Q1 2019. The strong growth momentum witnessed in the last quarter of 2019 continued for the first two months of 2020. However, the spread of COVID-19 pandemic began to impact the office market in the month of March as the lock-down imposed slowed business activity leading to deferment of leasing decisions by corporates. Most of the activity was concentrated in Guindy, Mount Poonamallee Road which accounted for around 75% of the total leasing in the office sector.

The growth was attributable to the strengthening of the IT sector backed by rapid infrastructure development and the resurrection of electronics and manufacturing industry. While the IT/ITES sector contributed to 56% of total leasing in Q1 2020, the share of manufacturing and allied industries increased from 7% in Q1 2019 to 20% in Q1 2020. Moreover, there has been an increased demand from co-working players who are actively taking-up spaces in both Grade A and Grade B buildings.

This quarter witnessed new completions of 0.5 mn sq ft of Grade A office space in SBD (Mount Poonamallee Road) sub-market with the entire supply being pre-committed.

The vacancy levels continued to be at around 8% on the back of strong demand despite supply infusion. As a result, the overall rents increased by 3% y-o-y in Q1 2020.

Summary - Impact of COVID -19 on Commercial Office Sector

- Few large occupiers have begun re-negotiating their lease contracts for lower rents.
- Occupiers are adopting conservative leasing strategies and have put up decisions regarding fresh take up spaces on hold for the next 4-6 months.

- Most businesses are deferring their real estate decisions with an enhanced emphasis on managing costs and business continuity plans (BCP).
 - BCP and work from home (WFH) plans have been successful. From occupiers' perspective, future demand will always take into account need for flexible workspace (combination of fixed desks and collaboration areas).
 - Leasing to be mainly driven by renewals and consolidation over the next few months. Further, occupiers are likely to seek lease extensions without lock-in period.
- increase the cost of construction when the construction sector is in doldrums. The builder association is requiring Government intervention to stabilize the rates.
- Labor unavailability - The construction industry in India employs about 42 million people. Of these, about 85% are small workers like carpenters, masons, plumbers, etc. and rest are of the ranks of engineers, supervisors and managers. The guest workers accounts for 80%-90% of the workforce in construction activities. Due to halt in construction activities, the workers had decided to return to their natives due to job/income loss. With gradual resumption of construction activities, the industry is now requiring support from State Government to help in re-immigration of guest workers with more safety and security

Major Challenges due to COVID-19 pandemic in Real Estate Sector

Real Estate sector was already witnessing turmoil from last 3-4 years due to various policy reforms, demonetization, etc. The impact of COVID-19 has induced another set of challenges to the industry. Mainly, the labour unavailability, liquidity crunches, rising in material prices, higher approval charges have laid adverse impact on the construction activity.

- Rise in price of building materials
 - Cement prices have increased by INR 60 - 100 per bag. This will
- Approval Charges & Process
 - The approval charges are one of the major cost item in any development. With rising construction cost, it is becoming burdensome for the developers to incur huge cost towards approval in the preliminary stage of development. The approval is also very cumbersome and time taking process which is again

increasing the waiting period for the developers. Hence, single window system for approval and support in receiving approvals on time are need of the hour.

- Approval Timelines – The delay in construction activity due to various reasons has pressured the developers to complete the project on stipulated timelines. Hence, the developer association needs support from State Government to reduce the approval time frame. Moreover, the delay in approvals subsequently delays the construction activities which is the biggest worry for developers today.
- Sales Velocity – Lesser walk-ins and postponement of home buying decisions due to the impact of the pandemic and subsequent measures to control the spread have resulted sales dropping by 8% compared to last year in Chennai.
- Supply chain issues – Due to travel ban in red zones in the country and containment zones in the cities, there are issues on transportation and supply chain network.
- Employment & Salary - Job losses and pay-cuts across most corporates in the country

is a bigger concern for salaried individuals. Similarly, loss of revenue and income for self-employed and professionals will also impact their disposable income.

- Liquidity issues – Due to reduced sales velocity and likely deferred payments from existing buyers, cashflow management of developer’s community would be severely affected.

2. Key measures/incentives implemented by Central Government

Given the economic environment triggered by the health crisis and the resultant dent in consumer sentiments, the Central Government with the support of the State Governments and the Central Bank have introduced several relief measures for the economically weaker section and the economy at large.

Financial Support

- The extension of the Credit Linked Subsidy Scheme (CLSS) by one more year (March 2021) – It will help demand for the affordable housing sector to inch back as and when the economy starts to revive. This in turn will help the construction sector to restart operations at the earliest possible

and is expected to boost sale of affordable housing properties in the country.

- Special liquidity scheme of INR 30,000 crore for Non-Banking Finance Companies (NBFCs), Housing Finance Corporations (HFCs) and Micro Finance Institutions (MFIs) which now carry a guarantee by the Government. The announcement will ease liquidity woes for stressed players. This will benefit the real estate sector significantly given that NBFCs and HFCs together contributes 56% of total lending to real estate.
- 6 months moratorium period- Six month moratorium on all term loans by financial institutions will alleviate short-term liquidity concerns and help developers as well as home buyers survive in these uncertain times. It is a big relief for developers and homebuyers to help them mitigate the challenges faced currently.
- Vivaad se Vishwas - Under the 'Vivaad se Vishwas' scheme announced in the Budget 2020, the taxpayers will be able to pay their dues till 30th Jun, 2020, without having to pay extra 10 percent penalty on the principal amount.
- MSME Sector- Providing collateral-free loans to stressed MSMEs and INR 50,000 crore equity infusion and relaxation in TDS deduction will give a fillip to the sector, which is already facing an acute financial crunch. E-market linkages for MSMEs, focus on fintech to enhance transactions and limiting global tenders to INR 200 crore will go a long way in providing a level playing field to the industry.
- Pradhan Mantri Garib Kalyan Package (PMGKP) - Under the facilitative package introduced by the Finance Minister, 'Pradhan Mantri Garib Kalyan Package (PMGKP)' has been extended for another three months until August 2020. Under this, the Government will continue to contribute 12 percent of the salary of an employee on behalf of both employer and the employee.
- Income Tax Reliefs - Providing tax reliefs to the charitable institutions, proprietary firms and non-professional businesses, pending income tax refunds have been released immediately. The income tax returns and income tax audit date have been pushed to November 2020 and October 2020 respectively. The

Government's decision to push the deadlines of the various Government schemes, tax filing dates and relaxation of other compliances to tackle the current situation will help the Indian economy in these times of crisis

Regulatory Support

- COVID-19 disruption as Force *Majeure*- This would be treated as force *majeure* under Real Estate (Regulation and Development) Act provision which is a big relief to the developer and occupier communities
- Registration and project completion timelines extended by six months – This would provide big relief to the developers who are facing challenges in resumption of construction activities post complete lock-down
- Affordable Rental Housing Complex (ARHC) – A scheme announced to provide ease of living at an affordable rent to the migrant workers in various sectors. Under the scheme, Government-funded housing in the cities will be converted into Affordable Rental Housing Complexes (ARHCs) under the PPP mode through concessionaires.

The new scheme will incentivize manufacturing units, industries, institutions, associations to develop such complexes on their private land and operate them. It will incentivize Central and State Government agencies to develop ARHCs. More details are provided in Appendix.

Fiscal Support

- Lower interest rates for home loans - 75 bps rate cut followed by another 40 bps (bringing down the current repo rate to 4.0%) combined with a reduction of 90 bps in reverse repo rate and other measures have been introduced to infuse liquidity into the system. This is to ensure revival of growth, mitigate impact of COVID-19 while containing inflation
- Reduction rates in EPF - To leave higher disposable income in the hands, statutory contributions towards Employee Provident Fund (EPF) have been reduced from 12 percent to 10 percent until August 2020.
- TDS (Tax Deducted at Source) - 'Tax Deducted at Source' (TDS) and 'Tax Collected at Source' (TCS) have been reduced by 25 percent of the prevailing rates. This step will provide additional

liquidity of INR 25,000 crore to the system. Providing collateral-free loans to stressed MSMEs and Rs.50,000 crore equity infusion and relaxation in TDS deduction will give a boost to the sector, which is already facing an acute financial crunch.

3. Key measures/incentives required from State Government

The Real Estate and construction industry, being the second largest sector has been suffering for the last few years and the COVID-19 outbreak has further worsened the situation. The Government should support the sector by providing

- Financial support in the form of providing additional funding, relaxing lending norms, extending repayment schedules, etc.
- Regulatory support in the form of reducing number of approvals, reducing timelines for approvals, reducing fees, premiums, etc.
- Fiscal support in the form of tax incentives and reduction in GST rates, etc. All these measures will enable the sector to not only survive but also to perform to its fullest potential

Fiscal Support

Approval Charges

- Removal of Caution Deposit- With adherence to RERA, completion certificate, electricity connections, water and sewage connections given post CC and the caution deposit can be removed. It will be a big relief for developers if all the security or caution deposit paid is refunded at the earliest. This action will ease cash flows during these tough times to survive. In addition, it is suggested to release 50% of the security and caution deposit money for development where partial CC or in full has been applied for all proofs. The balance 50% can be released once final CC is issued. The builders can be allowed to mortgage their flats instead of payment of security deposit
- Staggered payment for approval charges - The approval charges for the project is humongous and further when paid upfront creates huge burden to the developer. If staggered system of payment across the project construction completion is followed towards approval charges, it will significantly reduce the burden on the developers.

- Premium FSI fees to be staggered
 - It is suggested that developer shall pay 10% of the fees payable; whereas, the balance should be allowed to be paid without any late fees or interest or penal charges. Alternatively, the developer shall offer as security built-up area equal to the value of fees payable, which should be discharged once fees is paid or before the CC is applied for. Due to cash flow constraints, all charges including premium paid on FSI to CMDA/DTCP from January 2020 to March 2021 should be allowed a window of one year until March 2022.

Legal charges related property and infrastructure

- Reduction of stamp duty and registration charges for a limited period - Considerable reduction in stamp duty/registration charges will benefit homebuyers and encourage fence sitters to take the plunge.

States already implemented

Gujarat - 2% to 3% rate reduction in stamp duty and registration fees from the present 6% rates for affordable housing, 1% concession in stamp duty and registration fees for properties that are priced above affordable housing category.

Karnataka - The stamp duty on apartments costing less than INR 20 lakh getting registered for the first time will be cut from the existing 5% to 2%. Further, the stamp duty on apartments costing between INR 21 lakh and INR 35 lakh will be down from 5% to 3%.

Maharashtra - Government reduced stamp duty on real estate by 1% for Mumbai, MMRDA Region and Pune for a period of two years.

Maharashtra Government has announced the following: They have 5% stamp duty for sale deeds in some cities and 6% in some cities. They have now reduced 3% stamp duty for all cities upto December 2020 and 2% stamp duty reduced for the period January - March 2021.

- Relaxation/Deferment in Property Tax and associated levies for a limited period - The property taxes and other associated levies could be relaxed / waived for a period of 1 year to support the real estate and construction industry.

Cities already implemented

Chandigarh - "Get rebate or pay penalty". The tax for 2020-21 can be paid with rebate between June 1 and July 31. Residents will get 20% rebate while commercial units

can claim 10% rebate if they pay the property tax between June 1 and July 31. After this two-month window, the consumers will have to pay 25% penalty, along with the dues.

Bangalore (BBMP) - The Government had provided 5% rebate on property tax till April 1 and further extended to Mar 31 in all the Urban Local Bodies, except the BBMP, in view of the COVID-19 lock-down.

GVMC (Greater Visakhapatnam Municipal Corporation) - One of the immediate options to find revenue sources is to press for advance payment of property tax by leveraging the 5% early bird rebate offered by the State Government.

- Rebate on electricity/power charges for limited period - In order to provide relief to both developers and residents, Government should provide rebate on electricity charges if paid on time. This would improve cash flow of power distribution companies during lock-down period and encourage consumers to pay electricity bills on time.

States and UTs already implemented

Odisha - In view of the ongoing lock-down to contain the Coronavirus

pandemic, the Central Electricity Supply Utility (CESU) announced a special rebate of 4% on and above the existing rebates and incentives for all consumers across Odisha while making payment during April 2020.

Delhi - Rebates, prizes for electricity consumers to promote self-meter reading. For bills raised until June 30, 2020, consumers can get a rebate of up to INR 220 on their electricity bills. Consumers have to do is pay their bills within 7 days of bill generation and do self-meter reading of their electricity usage.

Regulatory Support

Approval and legal process

- *Changes to pre-approved plans:* Due to COVID-19, pre-approved plans should be allowed to undergo revisions, as consumer's preferences might have changed in the post COVID world. This step will support developers in terms of assuring them with the saleability and relevance of these units. These changes in the plan when reapplied should be taken on a separate fast track channel. Proposals, which do not deviate from the already approved plans in terms of, built up area and building footprint should be cleared in 30 days.

- *Single Window System for approval:* The approval process can be computerised to reduce time for approval. Delay really hampers the time value money for the developers. Hence, single window system at this critical juncture will create avenue for the builders for timely delivery.
- *Online property registration platform:* Launching of an online portal for individuals to complete the registration of their property. This online process of property registration is also an effective way to complete the registration process of homebuyers who bought their homes before the lock-down but were unable to register. These steps initiated by the Government not only provides a sigh of relief to buyers but also provide hassle free services with a click of button.

Government directly and EMIs will be deducted at source. The scheme would provide incentives either in price or interest rates.

- *Land Pooling Policy -* The land rates are becoming highly unimaginable in core city areas. The suburb areas are still lacking basic infrastructure, which makes difficult to develop housing those locations. Moreover, the individual landowners are too charging skyrocketing prices in the market for the land. Hence, it is requested to bring in appropriate land pooling policy model as implemented in other States. Presently, the developers are compelled to develop projects in non-planned areas, which lack basic infrastructure and these challenges hamper the selling of these units, which again adds to the unsold inventory.
- *Housing Policy within industrial clusters:* There are many industrial clusters have been created within and in suburb locations of the city with very minimal provision for basic amenities. Affordable housing being a necessity, housing Department can consider aggregation of land parcels in and around these clusters and create basic minimal physical/

New Policy Formation

Ease to developer

- *Affordable housing scheme (Deduction at Source for Employees):* Affordable housing scheme by State Government such as "CM Sondha Veedu Scheme" can be initiated to promote affordable housing in the State where the Government or private employees can purchase from

social infrastructure. Thereafter, these lands can be made available to the developers for creating appropriate and affordable housing. This action will pave way for stabilization of land prices and allow redressing housing needs significantly and sustainably. This would primarily to promote affordable housing in and around large employment hubs/industrial clusters.

There should be eligibility criteria in terms of area built (e.g. 5 to 10 lakh sq.ft) for builders to participate in such developments. The minimum site area shall be 1 acre and reserve price shall be fixed at GLV+10%. The developers may be requested to pay 10% of the land value upfront and the balance proportionately in staggered manner in conjunction with registration of UDS by the customers.

- *Creation of sustainable ecosystem:* Tamil Nadu, being source of different type of food production, textile, manufacturing, energy and medical facilities, hold the potential to create ecosystem for the sectors such as Horticulture Park, Knowledge Park, electronic hub, Medical Park, financial center, Energy Park, Building

Construction Material Park, etc. This would create employment as well as and provide enormous boost to the economy. This would also help in upgrading infrastructure in suburb areas largely, which would further create opportunities.

Financial Support

- *Basic security to Labourers:* The minimum wages or basic security, accommodation and incentives to be provided by the Government to win back the confidence of labours. State Government may consider utilising labour cess fund collected from the developers to pay the construction workers during COVID-19 crisis. State Governments may utilise construction workers' welfare fund as directed by Central Government
- *Skill Development Centers* – Skill development centers are crucial for skill enhancement for various skills at different sectors. Construction being one of the labour intensive sector, State Government should focus in providing financial support for building more skill development centers related Real Estate and construction sector in the State.

It is suggested that the Department of Industries, Department of Social Welfare, Department of Labour and Department of Housing & Urban Development may jointly strategize the rapid development of labour housing including housing for migrant labour.

Approach could be broadly classified as under

1. *Industrial Labour:* Industrial labour Hostel and EWS accommodation centered around SIPCOT / SIDCO accommodate at least 15% of labour of the 28 SIPCOT Industrial Parks & SEZs, within 5 KM. These homes could be build on the industrial park land or nearby, using rapid construction technology like mivan and pre-fabs, which could result in buildings in 6-12 months. In association with SIPCOT, these can be built with funds from TNSF and VGF grant from the Labour Welfare Fund should be under 25%, as the industries are able and willing to contribute to labour welfare.
2. *Small Industries Labour:* Accommodate at least 10% of labour working in each of the 113 SIDCO Industrial estates, within 2 KM. As indicated above, except that the price-point may need to be lower. In association with SIDCO, these can be built with funds from TNSF and VGF grant from the Labour Welfare Fund should be under 50% for similar reasons.
3. *Construction Labour:* Identify areas of revival of construction activity and create labour accommodation for workforce. This is an housing strategy for areas of considerable construction activity and could consider a mix of mobile home solutions, quick-build temporary shelters and rapid construction budget homes that can later be repurposed as rental homes for the service-industry that emerges as accommodation & businesses grow, including servants quarters, etc. as EWS accommodation. Here the price point has to be social and would probably require upto 80% grant funding, the rest coming from TNSF. Labour Department and Social Welfare Department could execute this with assistance from TNIFMC.
4. *Redevelopment of Informal Industrial Townships:* Replacing informal dwellings in industrial-cluster townships: Identify industry-specific clusters such as Tirupur and Sivakasi and build dormitory and EWS apartments. TNSCB is best geared in this

area as it is already undertaking the task of replacing informal dwellings. Funds in TNSF-I and Labour Welfare Fund can be jointly applied towards this, with the model favoring 100% grant funding. However, local employers have indicated a willingness to contribute land on lease and pay a rental equivalent to the transport costs.

5. The purpose and role of Tamil Nadu Shelter Fund is to provide private-sector like speed and flexibility with internationally accepted standards of Governance, as jointly agreed between World Bank and TNIFMC and measured by the ESGMS system. By accepting private capital from TNSF, we can benefit from the following

1. Faster construction technology can be used (Mivan and Pre-fab are yet to be generally accepted by PWD) and PMCs can be appointed to ensure better quality of construction with rewards & penalties
2. Better management in the long term, without on-going budgetary support
3. Higher visibility with World Bank and other multi-lateral funders making it easier to

source future capital especially from global foundations and impact investors

6. Construction Workers Welfare Fund

There is a balance of Rs.3,200 crore in the Construction Workers Welfare Fund. It is currently inadequately utilized. The Supreme Court has already issued directions that the State Government should establish a Welfare Fund for the benefit of Construction Workers with appropriate rules for utilization of the funds. It is understood that such rules for the utilization of the fund are yet to be drafted in accordance with the Supreme Court judgement. It is imperative that these rules are finalized at the earliest so that the large sums available under the Construction Workers Welfare Fund can be utilized effectively for the benefit of the construction workers. The emphasis for the utilization of the funds could be on the following aspects.

1. Provision of quality housing to construction workers both rental housing at the work site and permanent housing where they intend to settle.
2. Provision of child care, health, nutrition and education services at work site and where the construction workers reside.

3. Provision of safety equipment and safety training to construction workers.
4. Training for upgradation of skills of construction workers.
5. Provision for investing the funds safely and effectively in order to achieve the objective of welfare of construction workers.

Summary of Recommendations

1. *Reduction of stamp duty and registration charges for a limited period:* Reduction in stamp duty/ registration charges will benefit homebuyers. The property taxes and other associated levies could be relaxed / waived for a period of 1 year to support the real estate and construction industry.
2. *Single Window System for approval:* The approval process can be computerised to reduce time for approval. Delay really hampers the time value of money for the developers. Hence, single window system will create avenue for the builders for timely delivery.
3. *Affordable housing scheme (Deduction at Source for Employees):* Affordable housing scheme by State Government can be initiated to promote affordable housing in the State where the

Government or private employees can purchase from Government directly and EMIs will be deducted at source.

4. *Housing Policy within industrial clusters:* Housing Department can consider aggregation of land parcels in and around industrial clusters and create basic minimal infrastructure and make the land available to the developers for creating appropriate and affordable housing. This action will pave the way for stabilization of land prices and allow redressing housing needs significantly and sustainably. This would primarily to promote affordable housing in and around large employment hubs/industrial clusters.
5. *Basic security to Labourers:* The minimum wages or basic security, accommodation and incentives are to be provided by the Government to win back the confidence of migrant labours. State Government may consider utilising labour cess fund collected from the developers to pay the construction workers during COVID-19 crisis. State Governments may utilise construction workers' welfare fund as directed by Central Government

APPENDIX

Note on implementation of Affordable Rental Housing Complexes (ARHCs) in Tamil Nadu

COVID-19 pandemic has resulted in reverse migration of workers / poor in the country. Urban migrants / poor consisting of workers in manufacturing industries, domestic/ commercial establishments, health sector, service providers, hospitality industry, construction or other such sectors play an important role in urban economy. They come from rural areas or small towns for seeking better employment opportunities in urban areas. Usually, they live in slums, informal / unauthorized colonies or peri-urban areas to save on high rental charges. Provision of rental housing options closer to workplace will improve their productivity. Therefore, providing ease of living through access to dignified affordable housing close to their workplace is an imperative. The affordable rental housing will promote inclusive urban development and prevent growth of slums.

It may further be stated that:

- i. ARHCs will be implemented in all Statutory Towns as per Census 2011 and Towns notified subsequently, Notified Planning Areas and areas of Development/

Special Area Development/ Industrial Development Authorities. States/UTs may consider any project as ARHCs in any other areas after due notification.

- ii. Projects under ARHCs will be applicable for consideration and funding till PMAY (U) Mission period i.e. March 2022.
- iii. Projects approved during the Mission period will continue for another 18 months to enable fund release and completion of projects.

The ARHCs will be implemented using two-pronged strategy (i.e) models.

Model- 1: The State will be required to convert the existing Central/ State Government funded vacant houses in cities into ARHCs through concession agreement for 25 years. The Government funded houses constructed under JnNURM and RAY for slum dwellers which are still lying vacant and unutilized will be repaired for retrofitted along with necessary civic infrastructure facilities required to make them livable for rental purposes for migrant / poor by the Concessionaire.

Model — 2 : The Public/Private entities may construct, operate and maintain ARHCs on their own available land for 25 years by themselves.

The following incentives are provided to the Concessionaire/ Entities:

- a. Concessionaire/ Entities will be eligible to get exemption of Income Tax on any profits and gains derived from operation of ARHCs. (Already available in IT Act).
- b. Exemption of GST on any profits and gains derived from operation of ARHCs (New).
- c. Project finance/loan at lower interest rate through concessional window under Affordable Housing Fund (AHF) by Housing Finance Companies (HFCs) and Priority Sector Lending (PSL) by Commercial Banks, upon inclusion of ARHCs in Harmonized Master List (HML). (Already available to private developers).
- d. States/UTs/ULBs/Parastatals shall follow a single window system for approval of design/ drawings and other statutory approvals within 30 days, after which proposed project will be considered as deemed approved for construction. (New-State Government to agree).
- e. Necessary trunk infrastructure facilities up to the project site will be provided by States/ UTs/ Parastatals without any additional cost to Concessionaire/Entities. (New-State Government to agree — The MAWS Dept. / CMA / ULBs / TWAD Board, etc. may extend these facilities).
- f. Municipal services such as water supply, electricity, house/ property tax, sewerage/ septage charge, etc. for operation of ARHCs will be levied at par with residential projects. (New-State Government to agree).
- g. State/UT may also provide 50% additional Floor Area Ratio (FAR)/ Floor Space Index (FSI) free of cost through necessary changes in local planning and Development Control Regulations (DCR). (Already permitted as per CDBR).
- h. *Funding:* (i) Entities using innovative emerging construction systems which help in faster construction, better structural and functional performance shall be applicable for TIG (Technology Innovation Grant) (i/c) (Rs.1,00,000/- per Dwelling Unit (DU) with Double bedroom, Rs.60,000/- per DU with Single bedroom and Rs.20,000/- per Dormitory bed will be released by MoHUA to Entities through

BMTPC). (ii) For Viability Gap Funding (VGF), if additional funds are required for, it may be borne by States/ULBs from their own resources.

A Memorandum of Agreement (MoA) has to be executed between Government of India and State Government for executing scheme. The important conditions set forth in the MoA are :-

- i. The ARHCs shall be administrated as per the ARHCs Operational Guidelines issued by First Party (Government of India) and amendments made thereto by it.
- ii. The Second Party (State Government) agreed to adhere ARHCs Operational Guidelines for implementation of ARHCs.
- iii. The Government of India has provisioned for an additional grant in the form of Technology Innovation Grant (TIG) for construction of ARHCs projects, using innovative and alternate technologies.
- iv. The State Government shall extend its support and abide by its share of financial support as per ARHCs Operational Guidelines issued by Government of India.
- v. The State Government for the purpose of effective implementation of ARHCs, shall provide:-

- a. Provision for "Use Permission" changes, if required;
- b. 50% additional Floor Area Ratio (FAR)/Floor Space Index (Floor Space Index), free of cost;
- c. Necessary statutory approvals for construction through single window system, within 30 days;
- d. Trunk infrastructure facilities (e.g. road and services, water sewerage/ septage, drainage, STP, etc.) upto project site (shall be provided by Municipal Administration and Water Supply Department).
- e. Municipal service charges such as water supply, electricity, house/property tax, sewerage/ septage, etc., levied at par with the residential properties.

Further, the Operational Guidelines shared by the Government of India for the ARHCs scheme can be seen at [www.http://arhc.mohua.gov.in/](http://arhc.mohua.gov.in/) cover both public & private entities. Therefore, Tamil Nadu Housing Board, Tamil Nadu Slum Clearance Board and the recently formed Special Purpose Vehicles (SPV) for working women's hostels and for Industrial housing would also be eligible to participate in the programme.

1. Context

The COVID pandemic has upended life as we know it, both on personal and business front. Businesses are wading through the challenges of lock-down and evaluating reopening. The consequences of lock-down like supply chain disruptions, challenges with logistics, flight of the migrant labour and post-lock-down safety measures like phased lifting of lock-downs, social distancing, health and safety measures, etc. are posing hurdles all around.

Even as clarity is emerging on the overall adverse impact of lock-down, it is clear that additional measures from Central, State and Local administrations will be necessary to smoothen the process.

2. Issues and Approach

The sectoral report has focussed on the various challenges facing businesses and how these can be addressed through banking system. The interventions could be from Banks on their own or in consonance with Government and Businesses themselves. Special attention is given to MSMEs and Major industrial sectors that are employment generators.

The group adopted a three - pronged approach in comprehending the evolving impact of COVID-19 and the aftermath of lock-down on the economy:

Undertake secondary research on Tamil Nadu Industrial and MSME profile

- Level of employment, industrialization, prominent industries for revenue and employment generation in the State.
- Current level of Tamil Nadu State finances, budget of Feb 2020, avenues of inflows and encumbrances on the State funds.
- Information on the schemes available for promoting MSME in Tamil Nadu and other States.
- Evolving situation on COVID Red – Orange – Green zones and the issue of migrant labour from the State.
- Relief measures from RBI and Central Government.

Empirical Analysis: Study of the performance of loans in the State to Corporates, MSME, NBFCs, MFIs, credit offtake since March 2020, opt-ins for RBI proposed loan

moratorium, enquiries and offtake of the COVID loans;

Views from the industry: Inputs / views from select customers and industry bodies captured through discussions and webinars.

3. Impact on the Economy

The spread of pandemic has derailed the economic trajectory and has impeded the business activity since the last 3 months. The financial consequences of COVID-19 on businesses of all sizes have been severe. The impact is seen both in the form of loss of demand and supply shocks.

a) Loss of demand: The full national lock-down in a bid to control the spread of the virus, has resulted in contracted demand in most sectors. The energy consumption has gone down by 30% during lock-down. Restriction on movement of goods and people has reduced demand for fuel. Similarly, across the sectors, not only is there loss of present demand but also uncertainty about the future.

b) Supply shocks: acute shortage of raw material will make the post lock-down revival very challenging. The global supply chain disruption and shut down of transportation will affect

the recovery of automotive, electronics and commodity companies.

c) Disruption of migrant labour: The State is home to 15 lakh migrant workers who are employed in Auto, Electronics, Textile, Construction, Hospitality, etc. Extended lock-down, lack of adequate housing facilities, reduced earnings and fear of contagion has triggered large scale displacement of these workers. About 60% of the migrant labour has dispersed, as the lock-down lifts, lack of labour will further delay/ dampen the revival efforts.

d) Revenue loss for Government: There will be a pronounced impact on the finances of the State, Stagnant economic activity, reflected in the shrunken GDP growth projections means lower tax revenue. It is expected that State Own Tax Revenue (SOTR) which contributes 63% of the total revenue will reduce by 15% due to lock-down and expected slow recovery. Further, the devolution of Central Government taxes is also expected to be lower due to shortfall in tax collections.

In this backdrop, we study the schemes that have been extended by Tamil Nadu Government and

other States to specific sectors. The committee members have provided suggestions for revival of key sectors

4. Present Trends

A. Impact of COVID on major industrial activity in Tamil Nadu

- i) *Textile Industry:* The textile industry, which contributes 15% of exports earnings for the GDP is faced with twin challenges of deferred payments through extension of credit cycles by large brands and delivery issues either due to lack of transportation or non-acceptance of delivery. Further, in the garment industry, the inventory has a high decay factor either due to change in style/ design or season (there is a change every month). The lock-down for 2 months has come at the cusp of change in season, which has resulted in the stock becoming dead weight. In an industry that was already dealing with slowdown in demand in FY 2020 and thin margins, the capacity to carry forward the inventory has a crippling effect on smaller units.
- ii) *Auto sector:* In April 2020, the automotive sector, with a large presence in Tamil Nadu, which contributes 8% to national GDP

sold zero cars and is expected to lose Rs.2300 crores per day. Automotive sector expects the exports for the next two quarters to be down. In fact the contraction / recession in world economy will have a telling impact on the export oriented sectors like textile and leather.

- iii) *FMCG/ Entertainment:* This sector had a drop of 70% as many retail outlets were closed and discretionary spends reduced. Malls and Cineplexes were hardest hit.
- iv) *Real Estate:* Demand for "new realty" is expected to shrink in the next 6-12 months with fear of job losses and pay cuts. Commercial real estate will face long term adverse shift in demand as corporates embrace remote working option.

B. Recent relief measures implemented by banks

i) Moratorium on loans:

- For all term loans (including agricultural term loans, retail and crop loans), a moratorium of 6 Months on payment of all instalments falling due between 1st March, 2020 and 31st August, 2020.

- For all working capital facilities (CC/OD) deferment of the recovery of interest applied during the period from March 1, 2020 upto August 31, 2020 has been permitted. Deferred interest to be repaid before 31st March 2021.
- ii) Measures to Support Exports and Imports:**
- Maximum permissible period of Pre-shipment and Post-shipment export credit availed by exports have been extended from existing one year to 15 months for the export credit availed upto 31st July, 2020.
 - For imports, the time period for completion of remittances against normal imports into India extended from 6 months to 12 months from the date of shipment for such imports made on or before 31st July, 2020.
 - Asset Classification: The asset classification will standstill for all these accounts during the moratorium / deferment period i.e., from 1st March, 2020 to 31st August, 2020.
- iii) Credit Facilities:**
- To assist the MSMEs to tide over the COVID crisis, COVID emergency Loan products have been launched for MSMEs
- a) Scheme for Reassessing the Working Capital Limits of MSME borrowers:
 - Reassessing the Working Capital Limits of MSME borrowers to meet the additional working capital requirements arising due to build-up of current assets, extension of debtors cycle, substitution of Trade Creditors, etc.
 - Leveraging operating cycle, Inventory holding level, debtors level, etc.
 - b) Guaranteed Emergency Credit Line (GECL) for MSME borrowers including interested Mudra Borrowers.
 - All MSME borrowers with outstanding credit upto Rs.25 crores as on 29.02.2020 which were less than or equal to 60 days past due as on that date i.e., regular, SMA 0 and SMA 1. Accounts and with an annual turnover upto Rs.100 crore would be eligible under this scheme.
 - 100% Government guarantee coverage. No guarantee fee, no additional collateral.
 - Nil processing charges.

C. State Government Schemes for MSMEs

The Tamil Nadu Government has a range of measures to promote specific sectors that have a comparative advantage in the global and domestic market viz., Textile, Leather, Auto manufacturing, ITES and Financial services.

Indicated below are the schemes that are relevant for consideration to promote the MSME firms in specific thrust areas:

- Subsidy / Allowance for Expenditure: 50% of Rent, subsidy on power tariffs, skill upgradation, marketing cost. Additionally, allowance may be provided for salaries / wages
- Subsidy on Interest Rate: Interest Equalization / subsidy for specific sectors (upto 3%) for term loan upto Rs.1 crore for tech upgradation. Increasing the cap to include Small and Medium enterprises
- Subsidy on Capital: Special subsidy on plant and machinery and Generator sets – currently 15% and 25% respectively with a maximum cap of Rs.5 lakh – this may be revised
- Subsidy on Tax: Concession on VAT and CGST; Exemption from

stamp duty and registration (currently only for TANSIDCO Industrial Estates close to 30 km)

Evaluate the offtake of benefit from the current schemes in order to identify and overcome any challenges in providing the benefits to the target segment, including building awareness of the schemes.

5. Views from stakeholders

Industry Associations: The effects of the pandemic on the financial health of the economy are expected to linger on for a couple of years at a very minimum. As many as 40% of the MSME firms are expected to be impacted. Medium to large corporates are also vulnerable, especially if they are burdened with high debt. Extended credit cycles will put further strain on the liquidity position of the downstream companies. The estimated demand contraction will diminish capacity for investment and capex.

Expectation from Banks / FIs: Banks should be more supportive of the units under stress. Though many banks have come out with emergency credit lines on their own, there are still hurdles in implementation. Many borrowers are either unaware of the availability of such lines or if aware, unable to access due to processes involved.

The GECLS scheme covers only a cross section of the needy units – (outstandings upto Rs.25 crore and turnover not more than Rs.100 crore). There are other units which may not have used existing credit facilities as on the relevant date i.e., 29th February 2020 or managing with own funds then. Now these are also in need but not covered.

6. Recommendations

1. MSME sector

- a) GECLS scheme of GOI. Ensure stimulus package reaches the needy quickly.
 - What Banks are doing – Banks are reaching out to all eligible borrowers to avail the facility, through sms, email, etc. Processes have been simplified.
 - Tamil Nadu stands top in both the number of beneficiaries who have been sanctioned loans and the amount of loans sanctioned and disbursed upto 16th June as per Hon'ble Union Finance Minister's post on twitter (1,08,867 beneficiaries sanctioned Rs.3,616 crores of which 59,472 have actually been disbursed Rs.2,251 crore).
 - Having said that, there are a few measures that could ensure faster delivery—

- a) Phone numbers to be updated on the bank records – many a time the changes are not registered with the bank.
- b) MSME associations can help banks connect with the beneficiaries, organise camps for disbursement, etc.

Other Info: Private Banks and NBFCs: It is understood from newspaper reports that while Public Sector Banks have been enthusiastically participating in this program and helped reach maximum beneficiaries, the Private Sector Banks and NBFCs have some catch up to do. This is after the interest rate for the loans on the same risk is 7.5% in PSBs, 9.25% in Private Banks and 14% in NBFCs. There have been demands from them to tweak the scheme to make it even more safe for banks. While this is so, a level playing field between all financial institutions should be ensured. At this critical juncture, when many NBFCs and Private Banks have a good share of the market in MSMEs and Mid Corporates, it is necessary that all come together to resolve the problem.

NBFCs: Following directives from RBI through the LTRO and TLTRO schemes and the Partial Credit Guarantee Scheme of Government of India, Banks have been extending

credit support to NBFCs to spread their liabilities over longer tenure at affordable rates.

b) *For units not covered by the GECLS:*

- A backstop on similar lines, even to the extent of 10% to 20% (against 100% given under GECLS) from the State Government would help the Banks extend loans on the basis of risk sharing.

Other initiatives that can be taken from Banks' side with support from Government

- Reduction in interest rates: Banks have been transmitting the reduction in Repo rate to borrowers. Specifically, all MSE (Micro and Small) and the retail loans are all linked to Repo and the entire reduction in Repo rate has been passed on to these units. For the others, to bring down the interest cost, State Government could provide a special interest subvention for units which fall under MSME under the new definition –(investment Rs.50 crores and turnover Rs.250 crores).
- Focus on building awareness, identify and monitor :what Banks can do

As a first step, leveraging the existing State apparatus and creating awareness on the plight of the businesses is key. Given below are some levers for consideration:

- Leverage Panchayat and Blocks network to identify the beneficiaries.
- *Portal* : Bank can work with State Government to onboard all MSMEs on a portal – the KYC check that registration on Government portal helps due diligence for both procurement and providing subsidies. The fact that Government functionaries and banks are on the same portal would definitely instill financial discipline.
- *Cluster financing*: Banks experience in cluster lending is better than individual SME lending – more clusters both industry wise and geography wise need to be formed and have one SLBC monitor the progress.
- Reviving traditional industries by creating local clusters and support in research and online marketing through tie-ups with reputed NGOs
- *SHGs/ JLGs*: the success of these formats needs to be extended to SMEs - the JLG format to joint

responsibility would ensure some crowd discipline.

- Tracker to monitor the performance of MSME within the Block / District with oversight by the District Collector

Skill Development : what Banks can do better

- *RSETIs*: Banks are running Rural Self Employment Training Institutes presently with support from both Centre and State Governments, where rural youth and aspiring entrepreneurs are trained in technical skills and then funded for setting up their own units. This is presently happening on a physical mode in classrooms. Now Banks have to move to online training through webex, etc. available on their mobile phones or if there is a good number from a village, arrange a TV streaming of such classes. Banks are moving to online training for their own employees, so the same technology can be leveraged to do this.
- *Business and Financial Skills*: Business owners need to own their numbers
- Today many business owners know running the manufacturing or service part of their business

but they are totally dependent on their auditors or outside CAs to make their financial statements, interact with Banks, etc., leaving them vulnerable on critical measures. Banks are to conduct workshops on various inputs required for a Promoter, basic knowledge on financials, cash flow, liquidity, profit and loss, tax, etc. also networking with promoters in similar lines or along the supply chain can be coordinated by banks with support from Industry Majors.

- Handholding for registration with GST, Udyog Aadhaar, PAN No., etc. through specialised branches of banks for MSME.

2. Industry

Further, promoting large industries also has helped improve the prospects of MSME. The State has been a front-runner in manufacturing and exporting auto and other industrial parts. The manufacturing /industrial corridors have created employment, generated tax revenue putting the State on the world map. Leverage the industrial corridors to attract FDI and global companies. The migrant labour issue needs immediate redressal. Some measures which can be considered are given below:

- Provide land on lease in Industrial corridors for affordable housing to workers employed in the Industrial estates
- Incentivise companies that continue with jobs even in the downturn and provide housing and other basic facilities for migrant workers – through a special Rating Matrix with Rating Agencies, weighing in the social objectives also.
- Asking companies and MSMEs to submit reports to the Government (in e-form) of number of permanent and contract labour employed as of March 2020 and giving an update to the Government on the same on a quarterly basis. This would help understand whether there are any job losses due to COVID-19 and then take suitable steps to mitigate based on data
- Providing support for creation of large number of tenements for migrant labour with the cost being borne by industries and rented out to migrant workers at a concessional rate. Banks can fund these at finer ROI. Housing may also be provided under PPP arrangements

Other Measures

- ZED Rating for MSMEs (Zero Defect Zero Effect) – as enunciated by Hon'ble Prime Minister (high quality with limiting adverse impact on environment) needs to be implemented. Banks can link interest loans to these ratings
- Clear the dues payable to MSMEs within a TAT of 30 days. Strict penalties on companies if this is not done

3. Hurdles Faced by Banks

- Directive that end use of funds to be ensured while allowing transactions in running accounts (now with digital transactions this is difficult to ensure, especially for smaller loans).
- Verification of quotations from Suppliers of machinery and raw material – reason for most of the frauds - a Portal where everyone is registered helps check this.
- Electronic platforms to ring fence the receivables to financing bank only or to escrow account in case of consortium
- Tamil Nadu Stamp Act requires that all mortgages of properties for loans need to be registered with the SRO. Given the disruption in Government services, consider a onetime amendment to make

mortgages valid so long as the same are registered with the SRO on or before 31st March 2021. This would help speed up the process of bank loans across the board.

Summary of Recommendations

1. For units not covered by the GECLS a backstop on similar lines, even to the extent of 20% (against 100% given under GECLS) from the State Government would help the Banks extend loans on the basis of risk sharing.
2. Banks can work with State Government to onboard all MSMEs on a portal – the KYC check that registration on Government portal helps due diligence for both procurement and providing subsidies. The fact that Government functionaries and banks are on the same portal would definitely instil financial discipline.
3. Banks' experience in cluster lending is better than individual SME lending – more clusters both industry wise and geography wise need to be formed and have one SLBC monitor the progress.
4. The success of SHGs/ JLGs formats needs to be extended to SMEs - the JLG format to joint responsibility would ensure some crowd discipline.
5. Tamil Nadu Stamp Act requires that all mortgages of properties for loans need to be registered with the SRO. Given the disruption in Government services, consider a onetime amendment to make mortgages valid so long as the same are registered with the SRO on or before 31st March 2021. This would help speed up the process of bank loans across the board.

1. Introduction

The Indian tourism and hospitality industry have emerged as one of the key drivers of economic growth. Tourism in India has significant potential considering the rich cultural and historical heritage, variety in ecology, terrains and places of natural beauty spread across the country. Tourism is also a potentially large employment generator besides being a significant source of foreign exchange for the country. In 2019, Foreign exchange earning were US\$ 29.96 billion registering a growth of 4.8 per cent year-on-year and reached US\$ 5.40 billion during January-February 2020.

India's rising middle class and increasing disposable incomes has continued to support the growth of domestic and outbound tourism. During 2019, foreign tourist arrivals (FTAs) in India stood at 10.89 million, achieving a growth rate of 3.2 per cent year-on-year. In 2019, a total of 29,28,303 tourist arrived on e-Tourist Visa registering a growth of 23.6 per cent. As of 2019, 4.2 crore jobs were created in the tourism sector in India which was 8.1 per cent of total employment in the country. The number is expected to rise by two per cent annum to 52.3 million jobs by 2028.

India is the third largest globally in terms of investment in travel & tourism sector with an investment of US\$ 45.7 billion in 2018, accounting for 5.9% of national investment. During the period April 2000 - December 2019, the hotel and tourism sector attracted around US\$ 14.42 billion of FDI, according to the data released by Department for Promotion of Industry and Internal Trade (DPIIT).

Tamil Nadu is a land of timeless traditions and cultural heritage, where ancient architecture blends with contemporary urban epicenters. The legacy left by the illustrious kings of Tamil Nadu and their patronage to art and culture, resulted in an evolution of a unique Dravidian culture that symbolizes Tamil Nadu today. Endowed with several historical and ancient temples, heritage sites, forts and museums, the State carries the pride of having five UNESCO heritage sites, the highest number in India. The unique blend of modern and the past, with a plethora of opportunities for tourists and pilgrims is what makes it a leader in attracting the largest number of foreign and domestic tourists at the national level. Tourism being an important contributor of Tamil Nadu's Gross

State Domestic Product (GSDP) and generates substantial employment opportunities.

The Government has accorded high priority to the tourism sector through various initiatives, especially through *Vision 2023* document where Tourism has been identified as one of the critical sectors that need to be developed over the next 11 years to propel the State of Tamil Nadu to the fore front of socio-economic development.

2. COVID-19 - The great disruptor in Tourism industry

Prior to COVID-19, the entire industry, all over the globe was in an expansion mode. In India Tourism was also been expanding on all fronts viz inbound, outbound and domestic tourism. COVID-19, would slow down the expansion mode. Even for the Industry, it will be considered prudent and appropriate to first "recover the lost ground" and then after due consolidation process, to go again for gradual expansion. The industry should wait for the new 'Supply-Demand Imbalance' arising from COVID-19 and then should take a call on expansion. In this context more than expansion, the Industry needs innovation, diversification and digitalization to meet the challenges of disruption caused by COVID-19.

2.1 Defining the Demand for Tourism

Tourism demand is characterized by three important factors, which are: i) elasticity ii) sensitivity iii) seasonability

Tourist demand elasticity means the degree of demand's responsiveness to changes in price structures or changes in various economic conditions of the market. Since tourism demand depends to a large extent on the disposable incomes, costs are an important factor in generating or retarding tourism and especially holiday tourism. Demand for tourism is expressed in three ways such as

- i) Effective demand which generally refers to the number of people who actually participate in a tourist activity or visit a given area.
- ii) Deferred demand which relate to those who could participate either due to lack of knowledge or lack of facilities or both.
- iii) and Potential demand which is the number of persons who fulfill the basic elements of travel and are in a position to travel. The deferred and potential demands relate to predicting future pattern of demand.

2.2. Impact of COVID-19 on Travel & Tourism in India

The most visible and immediate impact of COVID-19 is seen in the hotel and tourism sector in all its geographical segments - inbound, outbound and domestic and almost all verticals - leisure, adventure, heritage, MICE (Meetings, Incentives, Conferences & Exhibitions), cruise and corporate. The impact on the inbound and outbound passengers is expected to be most severely affected in the next couple of quarters. India's total foreign tourist arrivals (FTA) stood at 10.9 million and the foreign exchange earnings (FEE) stood at Rs.210,971 crore during 2019, with Maharashtra, Tamil Nadu, Uttar Pradesh and Delhi accounting for about 60% of foreign tourist arrivals (FTAs). However, now with travel restrictions in India for over 80 countries and most of the flights of major airlines being suspended, along with the lock-down till June 10th, 2020, the Indian domestic as well as foreign travel and tourism industry is expected to witness a sharp negative impact in 2020.

The tourism sector was already facing some trouble before the rise of the COVID-19 pandemic due to the impact of the global economic slowdown. Economic growth in the world decelerated in 2019-20, resulting in weaker growth

in foreign tourist arrivals and foreign exchange earnings from tourism in India. India's hotel and hospitality industry's occupancy has declined sharply in the first quarter of 2020, as the COVID-19 outbreak impacts various segments of the sector, according to a report by *JLL India*.

The containment measures introduced by the Centre have resulted in a severe drop in foreign and domestic travel, across both the tourism and business traveler segments. The JLL report estimates that at least 30 per cent of hotel and hospitality industry revenue could be impacted if the situation doesn't improve by the end of June 2020. With more than 60% of organised hotels in India already shut and several others operational with single-digit occupancies, recovery will be gradual. Industry estimates indicate that in India, branded and organized hotels annual revenue is Rs.38,000 crore (\$5 billion). Corporate businesses will be left with less money to spend on travel, lodging and entertainment. Behavioral changes will lead to a reduction in socializing, which in turn will impact F&B in hotels.

3. Government Interventions Sought

Indian Association of Tour Operators (IATO) estimates the hotel, aviation and travel sector

together may suffer a loss of about ₹85 billion keeping in mind the travel restrictions imposed on foreign tourists. Impact of COVID-19 would be felt on both white and blue collar jobs. India's outbound and inbound travel will witness an all time low. The restaurant industry in India is expecting almost zero revenue in the immediate term and a drop of 50% in the months to come. At least 30 per cent of hotel and hospitality industry revenue could be impacted if the situation doesn't improve by the end of June 2020. There is a threat of job loss of nearly 15% in the hotel and restaurant industry once the lock-down is lifted, as they will not see an immediate surge in demand. Aviation industry in India could incur losses worth Rs.27,000 crore (\$3.3-3.6 billion) in the first quarter of 2020-21. The passenger growth of airlines is likely to fall sharply to a negative 20-25% growth for the 2020-21.

The Federation of Associations in Indian Tourism & Hospitality (FAITH), has appealed for an immediate relief package from the Government to stay afloat and avoid job losses. FAITH has further sought a complete deferment for 12 months of all statutory dues payable by tourism, travel and hospitality industry at the Central,

State and municipal Government level without attracting any penal interest. These would include GST, Advance Tax payments, PF, ESI, customs duties, fixed power & water charges and any fees for licenses and renewal at the State level, as part of the relief package. It has also appealed for an extension of the moratorium period requested by the RBI to 12 months as against three months without any accrued and accumulated interest during this period. It is reiterated that hotels are a capital intensive, cash flow strapped and highly volatile business to be in.

Hotelivate and CII have presented a detailed write-up on ways and means to either mitigate or defer these costs. Hotels owe over Rs.45,000 crore to various banks and lending institutions. With zero revenues now (and in the foreseeable future), this burden is impossible to bear. A 6 to 9 months' moratorium on all working capital, interest payments on loans and overdrafts bringing in liquidity allowing for business continuity, without categorizing the companies as NPAs is recommended. Short term interest-free or low-interest loans for rebuilding the business and immediate transmission to all industry segments viz., Hotels, Travel agents (online and offline),

Tour operators and any other ancillary entity that is supporting the industry on term loans and working capital loans would be very useful. Existing overdraft limits can be doubled for the industry and immediate cash relief to be given to avoid mass lay-offs of employees; reduced tax burden including lowering of GST rate and deferred GST; deferring taxes and charges by State Governments in power and water rates.

FICCI-Grant Thornton Report 'Travel and Tourism - Survive, Revive and Thrive in times of COVID-19' that a combination of monetary, fiscal and financial market measures is needed to help the businesses and people cope with the crisis. The report highlights the support from the Government with respect to regulatory and policy measures including a one-time rescheduling of principal/interest dues in line with the estimated cash flows, direct cash support, waiver of statutory dues as well as the extension of the current six-month moratorium among others.

4. Recommendations

The recent changes in the definition of micro, small and medium-sized enterprises wherein the investment and turnover figures were changed to larger values and

the abolition of distinction between the manufacturing and service sector, result in a larger number of medium-sized enterprises of Tourism and hospitality sector industries coming into the formal fold of MSME definition of upto 250 crores.

To evolve a strategy to revive tourism post COVID, a stake holder meeting through Webinar was convened by the Additional Chief Secretary, Tourism HR & CE on 20th May 2020. The meeting was chaired by Hon'ble Minister for Tourism. As a follow up action, another Webinar was conducted by the Commissioner of Tourism on 01-06-2020 with leading associations and based on the representations received from various associations; the following recommendations are submitted to the Government.

4.1. Short term Non-fiscal measures

Developing innovative Branding strategy

The branding and promotion strategy of Tamil Nadu Government and Industry will have to be built around two factors. Firstly, how travel could be made "seamless and health-risk free" and secondly, how 'health-safe' is the destination. If Tamil Nadu overcomes the

COVID-19 crisis relatively more successfully, Tamil Nadu should emerge as a 'Safer and Healthier' tourist destination in the world. Destination which can brand itself as a '**health-safe destination**', will be a preferred destination for travel. within India also there may emerge '**safer regions and destinations**'. The domestic travellers, as well as inbound travellers, will prefer to visit such safe destinations only in the initial period. Travel and Tourism Sector has high degree of historic resilience industry will certainly stage a come-back, sooner than later, with more agility . The mantra for tourism during this pandemic period is "*Stay home today – to be able to travel tomorrow*".

Use technology to allow Zero / least human contact

Some suggestive interventions which are summarized below:

Self-check-in with codes given on the guest's mobile to open assigned guest rooms. Guest mobile apps should be able to connect to all buttons and switches in the room to avoid using fingers for touch. It would include controlling the room temperature, switching on lights, controlling the temperature of the shower, remote for the television, etc. Virtual views on the TV of restaurants, lobby

and bar to see the atmosphere to avoid crowds. Have gourmet food dispensers on floor pantries. Digital payments of bills and food and beverage at kiosks which will give out receipts much like the ATMs. Liquor options in the guest room mini-bar which will automatically bill the guest folio when bottles are withdrawn from the bar. Self-service room amenities from dispensers in the floor Housekeeping store. Self-monitoring gadgets for fever. Revenue Management Software to do the predictions of room occupancy and rates. Big Data analytics to be used to constantly determine the behaviour and attitude of guests to give them customized services.

Need for a new innovative active premarket strategy

There is need for a new pro-active market strategy which must be driven by new technology and in tune with consumer demands. Tamil Nadu's continuing dependence on long haul markets has to be reassessed. Strategy for alternative development of profitable and shorter haul arrivals should get priority attention.

Renewed vigorous focus on the tourism promotional incentives in terms of easy travel, comfort journey, customer orientation and focused policies, etc. Increase the availability

of short break packages targeted to regional markets. Use special events and performances as triggering cues for short break vacations. Develop marketing systems that deliver timely information to regional markets. Encourage extended stays through education and cultural programmes attractive to overseas visitors. Create a brand for Tamilnadu and innovative tourism products with special focus on destination as the "gateway". Develop entertainment and information sites around regional themes and identities. Provide convenient packages that link overnight city stays with excursions to special interest attractions. Develop special interest marketing strategies for consumers those can travel in the off season and are less sensitive to weather conditions. Encourage and cooperated with regional destination database systems. Expand regional cooperation in product development, long haul marketing and advocacy. Have a system of anchor attractions that are linked by key tourist routes. Encourage tourism development programmes that include benefits for and utilizations by community residents. Work with rental car companies and other ground transportation providers to include tourism industry information and directions on board their GPS and GIS systems. Use special events and performances as triggering

cues for short break vacations. Incorporate high quality and reliable information technology in new resort developments and renovations that serve the connectivity needs of telecommuters as a growing market of those who can live, work and enjoy vacation anywhere they choose. Provide quality and timely information that encourages the successful deployment and application of new technology throughout the industry. Develop databases of travel intermediaries and distribution systems for key specialty markets and distribute these databases to the industry. Identify tour operators that include you in their tour packages for specialty markets and help them communicate their message via database marketing and information technology. On the Internet, develop partnerships and link to all credible home page providers. Use of the Internet to provide real time linkages between the home, office, staff and databases with regional offices, visitor centers and overseas offices and sales representatives. Encourage tourism attraction, accommodation and transportation operators to participate in the joint development of customer databases when that makes sense as a destination asset. Distribute tourism information through a variety of electronic network services and use a variety

of view data formats for presenting attraction, accommodation and region descriptions.

4.2 Short term Fiscal Measures

1. The existing overdraft limits to be increased to 50% for Tourism sector. In this regard it is stated this may be considered for 20% increase without collateral as applicable to MSME under the Emergency Credit linked Guarantee Scheme (ECLG).
2. Interest reduction or subvention on term loans and working capital loans. This can be addressed by dovetailing the interest subvention schemes availed by MSME under TIIC and NEEDS schemes of Government of Tamil Nadu.
3. A complete deferral of GST for tourism, travel and hospitality industry for the next 12 months till the time the recovery happens. This can be considered the issue by placing before the next GST council meeting.
4. A complete deferment relief in taxes and charges by State Governments in the form of reducing the power and water rates. Water rate deferment relief can be considered by taking up the matter with the appropriate authority.

5. Removal of fees for any upcoming licenses, road tax, permits renewal, excise exemption for liquor, etc. for the hospitality and travel industry in Tamilnadu proportionately for the period of lock-down. Extension of license period and renewal for liquor and others except road tax may be considered.
6. Government may allow the use of insurance corpus of ESI (Employee State Insurance) for paying wages to tourism sector employees. In this regard it is submitted that ESI and EPF have already notified reduction in employer and employee contribution from 12% to 9% and 8% respectively.

4.3 Long Term Measures

1. Subsidized / low-interest term loans for rebuilding the business and immediate transmission to all industry segments viz., Hotels, Travel agents (online and offline), Tour operators and any other ancillary entity that is supporting the industry. This issue can be addressed by dovetailing the capital subsidy schemes availed by MSME in view of revised definition of Micro Small and Medium on capital and turnover basis and tourism sector may

avail the concessions and 25% capital subsidies of MSME in this regard.

2. 6-12 month waiver on loans, both on principal and interest and one-time restructuring of loans by banks without having to take a provisioning hit, besides soft loans for working capital. In this regard RBI have already stated that loan have been extended from the public deposits at a committed rate of interest and hence not feasible to consider the request.

Summary of Recommendations

1. A complete deferral of GST for tourism, travel and hospitality industry for the next 12 months till the time the recovery happens. This may be considered by placing before the next GST council meeting.
2. A complete deferment of relief in taxes and charges by State Governments in the form of reducing the power and water rates. Water rate deferment relief can be considered by taking up the matter with the appropriate authority.
3. Deferment of fees for any upcoming licenses, road tax, permits renewal for the hospitality

and travel industry in Tamil Nadu for the proportionate period of lock-down may be considered.

4. Government may allow the use of Insurance corpus of ESI (Employee State Insurance) for paying wages to tourism sector employees. In this regard it is submitted that ESI and EPF have already notified reduction in employer and employee contribution from 12% to 9% and 8% respectively. Government of India may be addressed in this regard.
5. Subsidized / low-interest term loans for rebuilding the business and immediate transmission to all industry segments viz., Hotels, Travel agents (online and offline), Tour operators and any other ancillary entity that is supporting the industry may be considered. Annual turnover criteria may be adapted.
6. RBI / SLBC authority may be addressed to place Tourism Sector under Priority Lending Sector for credit lending from Banks at lesser rate of interest and longer period for repayment.
7. Various license fees like bar license, property tax, garbage tax, etc. should be waived or reduced for the current financial

12. TOURISM

year 2020-2021. All renewal fees paid for 2020 should also be extended till the end of 2021 without any incremental fee or charges.

8. The Government may give necessary direction to TANGEDCO to adjust the excess amount charged in electricity demand charges for the month of June bill. This concession should continue upto December 2020.
9. Tax & Insurance waiver to be given for all Tourist vehicles in

Tamil Nadu for the proportionate lock-down period or up to March 2021 and need financial stimulus may be considered for longer period of repayment.

10. Sanction of loans based on the Income Tax returns filed for the earlier three year period and based on the average amount on that business, at a lesser rate of interest through banks and longer repayment period between five to seven years.

I. Healthcare

COVID-19 has brought out clearly two things in Tamil Nadu (as in rest of India as well): (a) Huge dependence on public healthcare facilities and demonstration of a considerable amount of resilience power of the existing delivery system and (b) Big "gaps" in the existing delivery system that need to be attended to most urgently. Unless we address these "gaps", both loss of lives and livelihood may occur on a much larger scale, as epidemics in the future are not going to be uncommon, going by what we have witnessed across the world over the past few decades.

We first highlight the "big-gaps" in the public healthcare system - which became evident during the past few months, as COVID-19 progressed. In the next section we put forward some specific suggestions for building the resilience and effectiveness of the healthcare system in Tamil Nadu over the next few years.

The gaps in the healthcare system in Tamil Nadu

1. *Inadequate primary healthcare:* The current COVID-19 pandemic has revealed weaknesses in primary healthcare in terms of lack of human resource, poor infrastructure to meet the acute

healthcare needs that emerged during the pandemic, lack of continuity of care between primary, secondary and tertiary care and deficiency in decentralised planning based on community healthcare needs. Although urban healthcare system has received a spurt in the infrastructure in the recent past, the cumulative "gaps" particularly in the human resources component at lower levels of care and the consequent burden on higher level institutions are causes of concern.

2. *Inadequate diagnostics capacity:* Inadequacy in diagnostic capacity could be seen across the world while handling this pandemic, as in Tamil Nadu. The State has enhanced its capacity in the last two months. However, the challenges in regulating the availability of testing as well as the charges for diagnostics (as well as treatment) by the private approved facilities remain.
3. *Need for investment in tertiary care:* In terms of providing tertiary care, Tamil Nadu is one of the leading States in the country. However, the current COVID-19 pandemic has shown that a much higher level of investment in

tertiary care is required to meet the demands of such epidemic situations.

4. *Weak public-private partnership (PPP)*: The private sector's response to meet the needs of the pandemic has not been encouraging. Several reasons can be attributed to this current weak response and need to be addressed.
5. *Lack of reliable data for policy-making*: It is now well recognised that we need a much more robust disease surveillance system that could have been put into use the current crisis period. Data reliability and sharing such data in the public domain to build the overall trust of the people remain a serious challenge in India.
6. *Health literacy*: Health literacy is an underestimated problem across the world. Awareness among people for self-reporting (of symptoms) is essential for early assessment, diagnostics and containment measures to be effective. This posed a considerable challenge in managing the current pandemic and is a pointer to the challenges we continue to face in controlling other infectious and non-communicable diseases in the State.

What must be done by the Government?

The question that remains now is to "how much more to spend and on what aspects of the public healthcare system to spend over the next few years". We shall postpone for a while answering the question "How much more to spend?". Instead, we shall focus on public investments that MUST be made to enhance the effective coverage of services delivered through the public healthcare system.

We list below what we consider as essential areas of investment. The order of listing is made in reference to the response to COVID-19 pandemic, so that it reads in context. In "peacetime" we would have presented it in a different order.

1. Invest in Comprehensive Primary Health Care:

A decentralized health care delivery system has become necessary in the context of the pandemic.

Health and Wellness Centres (HWCs) as visualised under Ayushman Bharat should be established to provide Comprehensive Primary Health Care as part of Health Coverage to the entire population. The State had already piloted these centres in three blocks by strengthening the Health

Sub-Centres with a Middle-Level Health care Provider (MLHP) with remarkable success. Unfortunately, it has not been possible to replicate this success in the further roll out of the HWC scheme due to various policy and implementation issues, including identifying and training the MLHPs and software glitches both in the population database software (which had to be abandoned) as well as the lab information software (which could not be implemented at the field level). This scheme needs to be revived and implemented with a much higher level of financial and political investment and clarity in operationalising these centres in the rural as well as urban areas. The objectives as set out in the Government policy and operational documents for the provision of Universal Healthcare Coverage should be literally and comprehensively met.

Specific areas of investment that require special attention to strengthen HWCs and make Comprehensive Primary Health Care a reality are as follows:

1. *Infrastructure:* Adequate building and equipment so that the prescribed services are available at the appropriate level of care starting from the Health Sub-Centres (HSCs). Physical infrastructure up to Block Level
2. *Human Resources:* A major concern recognised over the past two years through the implementation of the Universal Health Coverage scheme has been the identification and role of Mid-Level Health care Providers as well as outreach workers. The State must soon decide on who these MLHPs will be (VHNs as originally suggested or Staff Nurses/AYUSH practitioners as insisted by the Government of India) and recruit and deploy these cadres at the earliest. An effective training programme must also be developed so that these workers are provided the necessary skills to discharge their functions efficiently, with constant upgradation through continuing education. In the context of Tamil Nadu, there is an urgent need to reposition the male-workers at the sub-centre level particularly to manage infectious outbreaks at the community level as the cadre is practically vanishing now due to various administrative reasons;

3. In rural areas, it is suggested that we retain the option of trained VHNs or diploma nurses for manning the Health and Wellness Centres as Staff Nurses with degree qualifications are unlikely to take up field postings in remote areas. In urban areas, we recommend the establishment of Nursing Stations / Urban Health and Wellness Centres (per 10,000 population) to meet healthcare needs of the poorer sections of the urban populations, the migrants and those in the un-organised sector (such as the street children, homeless population); Each Nursing Station / Urban Health and Wellness Centre should be manned by a staff-nurse who will maintain the population database and be able to provide outreach services and ensure basic primary healthcare needs of the urban settlements within a radius of 0.5 km;
4. Both the Nursing Stations (Urban Health and Wellness Centres) and the Health Sub Centres in the rural areas which have been upgraded as Health and Wellness Centres will function on the same lines and provide all primary healthcare that does not require the intervention of doctors; which include care for minor ailments, provision of first aid, health and nutrition counselling, health literacy activities, preventive and promotional health activities, immunisation and other maternal and child care services. Importantly, they would also be the point of supply of drugs initiated by doctors and followed up by the MLHPs with well laid down protocols for diagnostic services, free prescription refills and counselling wherever required. Under this model, the needs of patients suffering from infectious diseases like Tuberculosis (TB) and leprosy along with NCDs like hypertension, diabetes, epilepsy, asthma and mental illness should be addressed (MoHFW 2014).
5. While studying the model of Mohalla Clinics established in Delhi, which are primarily run by a physician and a nurse, offering primary outpatient care, catering to about 140 patients per day, it is felt that there are dispensaries and urban health centres in our bigger municipalities and Corporations which function with regular staff in the daytime. However, to increase their access and make them more functional for the working-class public, we can try models on the lines of

Mohalla clinics where the existing premises are used in the evening hours for clinical consultations.

6. Urban Primary Health Centre should also be complemented by Mobile Units to deliver basic services to the more inaccessible settlements. (This is already being done in the rural areas). It is essential to “map” facilities that are functional and services available for urban poor and non-poor as well, which are necessary for designing and location of urban care centres. The mandate of the Urban Health care system be to provide population-based care, in coordination with the Nursing Stations (Urban HWCs), Mobile units and Mohalla clinics, to ensure that preventive and curative services are reaching the poorest and most vulnerable with appropriate demand creation through outreach services where awareness is low and have flexible timings to improve access.
7. Referral Linkages- In the rural areas, especially the remote and underserved habitations, referral linkages should be set up enabled by telemedicine and transport systems. The MLHP at the Health and Wellness Centre should be trained to deal with uncomplicated cases and refer

acute and chronic illnesses in the population for higher-level intervention. It is essential that detailed protocols are developed for training the MLHPs and doctors at PHCs so that they are equipped to treat what they can and refer the rest of the cases to the higher levels of care. Over time, a gatekeeping system should be developed so that the patient will approach the nearest level health facility instead of crowding the secondary and tertiary care centres for simple minor ailments or for routine drugs for NCD care.

8. In the context of urban primary care, the need to decongest the tertiary health care facilities so as to enable them to take care of more serious cases is very critical. We need to design a sustainable and effective urban primary health care delivery system that provides outreach services for population coverage, facilities with more accessible timings which inspire public confidence and appropriate referral practices which will help to decongest higher-level facilities and enable them to deliver secondary and tertiary services more efficiently.
9. Diagnostics support- Point of care diagnostics plus “hub and spoke” arrangements should be

established so that the patients can access quality diagnostic services at an affordable cost; all primary care facilities (including HWCs) should have basic diagnostic facilities which are identified for that level. These services should be publicised widely so that the general public are well aware of the tests which they can get at each level of health care. The test results should be sent through “sms”, social media or email. All health facilities should have special desks to attend to the aged and disabled on a fast track mode.

10. Building a population-based information system: It is extremely important to design and maintain a population-based information system on members of every household in rural and urban areas. We may call it Family Health Registry which will contain both demographic details and medical history and conditions of every member of a household. Such Family / population-based information system should be integrated from primary care level to tertiary care level including those availing care under Government -sponsored health insurance schemes; we strongly

recommend that this should be integrated with the Household Folder system that is being developed by the State TNeGA.

2. Invest in Disease Surveillance and Health Information Systems:

- i This requires in the minimum an apex body that is autonomous and has powers equivalent to the Centre for Disease Control and Prevention in the USA and technical leadership that is drawn from the best in the country;
- ii A network of higher-level laboratories, not less than one per million suitably dispersed, which have the staff and the capacity, to monitor a wide range of disease requirements, ranging from antibiotic resistance patterns to viral zoonosis working on a “hub and spoke” model with all levels of health care facilities;
- iii Regular information on causes for which persons are seeking treatment from the health care facilities of every district or a representative sample of the same– the real-time morbidity pattern that helps with what is known as indicator-based surveillance as well as surveillance of chronic illness;

iv Real-time availability of mortality data along with the presumptive cause of death (not necessarily medically certified) but with age and gender and residence patterns. The surveillance team should be able to access this data by district every month and be able to present an annual report within a one-year time frame.

3. Increase in deployment of human resources for health:

There is a considerable body of work within the H&FW Department of Tamil Nadu estimating requirements of specialists, doctors, nurses, other paramedical professionals, technical staff needed for PHCs, CHCs, district and medical college hospitals; efforts must be made to fill in the vacancies at the earliest, while it is necessary to *revisit the norms* currently in place for the deployment of human resources across the delivery system. Norms for human resources at UPHCs should be revised to deliver the services prescribed for each level of care. Key policy issues include the need for a leave-reserve for key functionaries so that services are never stopped (for instance, of MLHPs and staff nurses). Guidelines for deputation and deployment of staff also need to be tightened so that staff are available at the stations where they are needed most.

The State should also put in place public investment and policy instruments for attracting and retaining the necessary specialists, doctors and nurses required for rural, remote areas and under-serviced communities. Suggestions for implementation include:

- i Sponsoring candidates from under-serviced areas for suitable training and conditional licensing/bonds
- ii Special compensation packages and appropriate incentives; and
- iii Building a positive workforce environment that can help in retention;

The State has consciously decided to appoint ASHAs only in tribal villages and other remote habitations. Women-led village level official groups (such as the poverty alleviation groups) could also be effectively harnessed to provide service support as well as for communicating health messages throughout the State.

4. Strengthening tertiary health care

Tertiary healthcare facilities will become more effective and efficient once the primary care and referral systems are strengthened (as suggested above). Further

improvements in the functioning of these facilities need immediate attention to human resources and well-designed partnerships, especially with non-governmental (not-for-profit) providers for select (medical / non-medical) services. There must be an Expert Committee to constantly review the upgradation and maintenance needs of the tertiary health care institutions with funds being provided to ensure that "state of the art" equipment is provided and kept in optimum condition. Tertiary health care institutions which are doing well on the health insurance programme should be incentivised and provided with more facilities to improve their performance further.

5. Promote health literacy and awareness

An imaginative IEC strategy should be rolled out over the next few years that can bring about a positive change in the manner in which individuals view public health threats and challenges which require collective action and collaborative efforts. Tamil Nadu has a large number of NGOs engaged directly in the provision of primary health care across districts and the State has considerable experience in the past in leveraging their presence in implementing effective preventive and control programmes - as in

the case of HIV/AIDS. The State must renew its efforts in engaging community health organisations for promoting health literacy and awareness. COVID-19 has given us this opportunity to review and recast the IEC policy as a potent preventive and promotive tool.

6. Coordination between Health and Municipal Administration Department

A standing arrangement for better coordination between the Health and Municipal Administration Departments needs to be put into place. Though there is a committee for the National Urban Health Mission, there has to be robust arrangements put in place for seamless functioning of these two Departments. At the district level, the District Collector plays a coordinating role, but the arrangements are largely *ad-hoc* and come into play at the time of an epidemic or other health crisis. This is particularly true for the larger Municipal Corporations. The Government should examine how best the two Departments could function synchronously and synergistically which includes joint monitoring arrangements as well as allowing free movement of staff including specialists between Government and the Urban Local Bodies.

7. Care for elderly citizens

A major system of social care for the elderly and disabled- modelled and built on Kerala's approach to palliative care is necessary. Elderly health has been one of the neglected areas in India. The elderly population (60 years or above) accounts for 10.4% of TN's population, which is higher than the national average (8.6%).

8. Promote domestic capacity for medical technology

A special investment in developing domestic manufacturing and building the innovation ecosystems required for health security and self-reliance. This will include the necessary medicines, diagnostics, devices, vaccines and personal protective equipment that the country needs. COVID-19 has shown us that global supply chains are unreliable and inequitable. EU and the US are likely to enter into advanced marketing commitments that will corner supplies of any new vaccine or medicine even before they are manufactured. But we are, or to be precise, we were the pharmacy of the developing world. We need to understand what went wrong and do whatever it takes to rebuild our domestic capacity;

9. Leverage on ESI system

We need to revisit and strengthen the ESI system and integrate it better with the National Health Mission. The strength of this system is that the medical benefits it provides are only a part of a very comprehensive social security. The program reaches 3.49 crore insured persons and close to 13 crore beneficiaries, but suffers from under-utilisation and large unused surplus. The COVID-19 pandemic has brought home to us an unduly high price that people pay for the absence of social security. If the Health and Wellness centres at HSC and PHC level become acceptable as ESI dispensaries, the medical benefits of the ESI could be delivered more effectively.

10. Scale-up Public Health Cadre

The contributions of the "public health cadre" (which does not exist in any other State of India) to the public health status of the State has been well recognised. It is important to enlarge the size of public health professionals substantially to build further public health workforce capacity right up to Block level administration and to upgrade/modernise the content of training to meet contemporary requirements.

As already suggested above, the Government must consider (re) deployment of male health worker cadre "responsible for environmental and public health at the sub-centre level" who will work together with the local bodies in the key areas of sanitation, epidemic control and dissemination of public health messages.

11. Partnering with private sector including NGOs

While the private providers play an important role in the provision of tertiary care under the CMCHIS, there is further scope for further partnering with private/NGO providers with regard to bridging the gaps in provision of secondary/tertiary health care and effective implementation of health promotion and awareness creation schemes. The success stories of harnessing the NGO sector for leprosy prevention and later for blindness control through provision of cataract surgeries are well documented. Especially in the urban areas, the well-functioning NGOs should be nurtured and supported to continue to serve as an effective part of the health system. It is relevant to point out that such 'not for profit' organisations have badly been hit by the pandemic and ensuing lockdowns and may have

to be supported by the Government even to survive.

12. Regulation of Clinical Establishment

It is time to revisit the Tamil Nadu Clinical Establishment Act (1997, later amended 2018) and enforce it to ensure a better quality of clinical care delivered through public and private clinical facilities across the State. While TNCEA cannot directly regulate fees/charges for hospital services, it can ensure the provision of quality of care by mandating standards of care and basic infrastructure for the provision of care.

13. Quality Assurance

As a medium-term measure, it is necessary to scale up quality assurance systems across all health facilities and hospitals with mandatory acquisition of quality accreditation under National Quality Accreditation Scheme of MOHFW for public sector and with the necessary State support and institutional mechanisms required for oversight and technical support and monetary incentives to ensure that quality is sustained. The high rates of hospital acquired infection which form a major hurdle in handling any pandemic, would be much more limited if such systems are in place.

II. EDUCATION

1. Introduction

COVID-19 is primarily a health crisis and the pandemic has adversely affected several sectors of the country and world at large. One of the sectors which has been severely affected is education. According to the ILO Sectoral Brief (April 16, 2020) "Nationwide closures [of educational Institutions] have been mandated in 192 countries, interrupting learning for close to 1.58 billion learners (91.4 per cent of total enrolled learners)".

Education is one of the largest and most impactful Government activity in the State. Tamil Nadu is one of the few States in India which has accorded high priority for education and this has helped the State to achieve significant strides in education. The State has achieved near 100 % access and stands at first place in terms of providing access to schools at the primary education level. It is one of the few Indian States to achieve almost 100% Net Enrolment Ratio (NER) in primary education. Thus the Government is committed to provide quality education to all the children in the State by introducing various educational reforms, best teaching and learning practices, innovative welfare schemes and digital initiatives. Tamil Nadu has

made remarkable achievement in higher education as evident from the Gross Enrolment Rate which is 49.0% way above the all India rate of 26.3%. The gender parity (female to male ratio) in enrolment is also higher in Tamil Nadu (96.6%) compared to all of India (94.7%) implying female advantage. The Universities in the State provide innovative curriculum and the students are trained to meet the manpower requirements of industry 4.0 Digital Revolution.

There are 1.33 crore students studying in 58,929 schools and 34 lakh students studying in higher education institutions which includes 59 Universities, 2,466 Colleges and 918 Stand Alone Institutions. The Schools and Higher Education Institutions employ about 5.65 lakh teachers and 1.96 lakh teachers respectively. About 49% of students at school level and 60% of students in higher education are enrolled in private un-aided institutions and 17% and 21% of students are in private aided or partially aided schools and colleges respectively.

Following the mandatory lockdown announcement of the Central Government, the Government of Tamil Nadu ordered closure of all educational institutions with effect from 24th March, 2020 and this was subsequently extended. The effects

of closure of educational institutions are several. Its immediate impact include disruption in learning, conduct of end-of-year/ semester examinations, postponement of national level entrance examinations for admissions to various levels of higher education, admission and semester calendar, fall in revenues, slowdown in research activities, closure of laboratories, etc. In the medium term it is likely to lead to students dropping out from institutions, affect enrolment and intake, skill development, financial crunch, have adverse impact on mode of work and wages of teachers, besides psychological problems for students, teachers and parents.

This Committee has not addressed the implications of the National Education Policy 2020 (NEP 2020) as separate Committees have been constituted to examine this.

The Government of Tamil Nadu has taken several measures to mitigate the impact of COVID-19 on the education. The School Education Department had appointed an Expert Committee to advise on academic and teaching issues arising due to COVID-19 (G.O. (1D)No. 68 School Education (Budget-2) Department, dated 12.05.2020 and G.O.(1D) No. 79 School Education (Budget-2) Department dated 29.05.2020).

The Committee submitted its report to the Government on 14.07.2020. Similarly, the Higher Education Department also constituted a Committee with Principal Secretary, Higher Education and all Vice-Chancellors of State Universities as members under the Higher Education Department to take policy decisions regarding conduct of examination, admission and other matters.

2. Summary of Initiatives

- *Assessment of the impact of COVID-19 pandemic:* All schools have students from families who have been deeply affected by this pandemic. The financial aspect on the one hand and the psychological distress aspect on the other hand, will have their effect on receptivity to learning. It will be difficult to trace and re-enrol the children who have dropped out due to economic hardship or migration. The break in continuity of learning will lead to significant learning losses and remedial education will become essential. These losses will be more severe for marginalized children and those with special needs. Personal interactions are acutely missed when a move to a completely online education

scenario is done in schools. Success at a distance learning program requires a great deal of financial privilege – that can afford stable internet, the required devices in sufficient numbers and a technologically literate adult.

- *Repositioned Initiatives of the State Government with regard to remote learning:*
- *Veettupalli (school at home) through Kalvi TV and laptops:* The Department of School Education has made arrangements for shooting of video lessons with the help of the teachers in Government schools for Standards 1 to 12 in such a way as to cover all the learning outcomes in the textbooks of the Tamil Nadu State Board. This programme has been arranged sub-topic wise, proceeding from the first chapter to the last chapter in the textbook just like classes are held in a regular school. For the standards 1 to 10, these video lessons are being telecast from 15th July, 2020 according to a standardized time table, like the time table followed in regular schools, through Kalvi TV (Education TV) run by the School Education Department. The classes for 11th standard will start on Kalvi TV soon after

10th Standard results are declared in Tamil Nadu. The 12th standard students in Government schools have been given laptops by the State Government in 2019-20. The video lessons prepared for 12th standard students by SCERT are being transferred to their laptops through the Hi-tech labs established by the Government in the schools from 15.07.2020 to facilitate learning at home.

- *Partnering with other TV channels:* The video lessons will be made available for re-telecast through other private TV channels starting from August 1st week, 2020 to increase the reach of the video lessons to the students at the comfort of their homes. Tamil Nadu is the only State in India, which has come forward with the “veettupalli (school at home)” concept through a standardized telecast schedule like the way it happens in regular schools. Further, the telecast time for one particular child has been limited at one sitting to a maximum of one hour, keeping in view the health of the students.
- *Video lessons accessible through QR codes in textbooks:* The textbooks of standards 1 to 12 are energized in Tamil Nadu.

i.e., they have 3 or more QR codes embedded in each chapter. The QR codes have all the relevant audio-video lessons in the form of electronic content including the current video lessons linked to them. If a student scans the relevant QR code with a QR code reader in a mobile phone/tablet, (s) he can electronically access/view all the electronic content. The QR codes have been embedded in the current video lessons too.

- *Video lessons offline:* The electronic content is downloadable from multiple sources for facilitating offline studies at the pace of the individual learner. The official websites for the purpose are <https://e-learn.tnschools.gov.in/>, <https://diksha.gov.in/tn> or <https://diksha.gov.in/explore>, <https://www.kalvitholaikaatchi.com/>.
- *NEET Exercises through online tests:* Online practice tests with detailed analysis are being made available for students studying in Government and Government Aided schools preparing for NEET exam.

The above are repositioned initiatives, over and above the following e-learning initiatives already existing/accessible in

Tamil Nadu like e-PATHSHALA, National Repository of Open Educational Resources (NROER), Swayam, TN-DIKSHA, Tamil Nadu Schools e-learn, Tamil Nadu Teachers Platform (TNTP), Kalvi Tholaikaatchi (KALVI TV) and TNSCERT You tube channels, Facebook – Workplace.

3. Immediate steps required to kick-start activity in the sector

- The School Education Department may draw up Standard Operating Procedures (SOPs) with regard to physical distancing norms, wearing of masks, schools located within containment zones and quarantine areas, reopening and running schools in batches on alternate days with adequate transport arrangements to be ready for re-opening of schools as and when the Government decides.
- For all standards and divisions 1st-12th, lessons may start remotely from July, 2020, electronically or through other modes irrespective of whether schools reopen or not. The portions covered maybe monitored on a Learning Management System to be on-boarded on Tamil Nadu Educational Management

Information System (TNEMIS). It is understood that the Government has approved project ALAI [Assistance for Learning Acceleration of the Individual] for the initiation of the development of such a Learning Management System. That project may be executed with speed.

- Teachers may be trained so that teaching and learning will continue seamlessly whether schools are closed or open in such a way that no child is left behind. Equity in learning outcomes can be achieved if the outcomes can be monitored (electronically). Special and intensive teaching sessions will have to be organized when the schools reopen, for those students who missed out on all the remote learning/electronic overtures made by the schools.

4. Medium term measures required to accelerate growth of learning in schools

- All teachers may be trained in Computer-Aided teaching and content creation.
- The focus also should be on active applied learning (with focus on core functional skills, life skills and employability skills) from 9th standard and upwards in line with

the pilot project AALAI [Active Applied Learning And Innovation] Hubs being implemented as a SBGF (State Balanced Growth Fund) project by the Department. These Hubs need to be expanded.

- All the administrative requirements of all the above interventions may be integrated on TNEMIS with single sign on facility appropriately.
- The Government may arrange for a dedicated oversight mechanism, as appropriate.
- The Government may consider reduction in school holidays, examination days and also consider completely replacing face-to-face teacher training with electronic teacher training, in the current academic year.
- The Government may review whether the total teaching days (electronic working days included) are sufficient to cover the portions by March 2021 and an appropriate decision may be taken regarding extension of the academic year and timing of Board exams suitably.
- The Government may consider adding computer as a subject and Tamil and English typing as part of curriculum in all classes in an age-appropriate manner.

- The Central Government may be appraised of the fact that more flexibility may be given to the State in utilizing funds according to the priorities which emerged consequent to the pandemic.

5. Impact of COVID-19 on Higher Education

Following the temporary State-wide closure of all higher education institutions and hostels in mid-March, students were asked to leave and return to their home town. Educational institutions still remain closed. The course completion and awarding of degrees to graduating students are delayed. The placement activities have been disrupted for the final year students. Due to the unprecedented and continued spread of the pandemic, most of the educational institutions/hostels being used as temporary make-shift quarantine centres and the reopening of the educational Institutions and mode of functioning are still to be decided. The restriction on Inter-State movement, suspension of transport facilities and shutting-down of hostels, the outstation-students are facing difficulties in resuming their studies. This could affect enrolment of students from other States/districts. The delay in course completion would lead to

delayed admission to next level for those aspiring to pursue education and also postponement of labour-market entry, withdrawal of job offers and hence loss of productivity, employment and earnings. This puts not only the students but also their families into hardship. The teachers are also facing a difficult situation, having to prepare themselves for a different mode and schedule of teaching.

6. Immediate Response to Restore Activities in Higher Education Institutions

- *On-line teaching* : The COVID-19 crisis has created an opportunity to introduce and expand digital mode of teaching. Many Universities and Colleges resorted to on-line teaching in order to ensure continuity, completion of syllabus and thereby reduce the impact of loss of learning due to the sudden lockdown. Thanks to the Government of Tamil Nadu's ongoing free laptop computers scheme to secondary, higher secondary and college students in Government and aided institutions, online teaching appears to be a viable option and is already being explored.
- *Psychological counselling*: Following the UGC guidelines,

Universities and Colleges offered psychological counselling for the students to keep them motivated, engaged and stay focused on studies.

- *Meeting with stakeholders:* The Principal Secretary to Higher Education has been holding frequent video-conference meetings with Vice-Chancellors of State Universities who represent the views and problems of teachers and students in their respective institutions, to discuss common and specific issues *faced by the Universities and colleges due to COVID-19 pandemic*. The inputs and suggestions from them are used to guide appropriate policy decisions regarding examination, academic calendar, courses and syllabus pruning, online teaching, etc.
- *Webinars on course, programmes and skill development:* Many Universities and Colleges have started to offer free webinars on courses on skill development which have attracted a large students/parents participation. Experts from various universities and colleges within the State and outside have been invited to offer guidance.
- *Even Semester 2019-20 - examination and evaluation:* In view of the prevailing spread of COVID-19 and the difficulties faced by students, the State Government decided to cancel all, except final semester, examinations (G.O. (D) No. 111 dated 27.07.2020). The students will be assessed based on their internal assessment (70% marks) and performance in the previous semester examinations (30% marks). For allied and optional subjects 100% weightage will be given to the internal examinations. Students are also given the option to write the examinations if they are not satisfied with the assessment methodology. The State Government is examining the modalities to conduct the final year examinations as per the UGC guidelines.
- *Admission to Educational Institutions:* Considering the safety of the students and avoid any further spread of COVID-19, the Higher Education Department has issued necessary orders to conduct admission process through on-line mode. Tamil Nadu is one of the frontrunner States in

the country in terms of electricity for all and internet connectivity and IT related services. Hence the online admission process will not be a setback to aspiring students from remote localities.

7. Medium term measures

- *Reopening of Universities and Colleges and teaching schedule for the academic year 2020-21:* The Higher Education Department, following the discussions with Vice-Chancellors, has asked the universities and colleges to commence on-line classes from August 3, 2020 for the second and third year students. It has been decided to conduct classes for 450 hours, the mandatory requirement of teaching in a semester, without compromising on course content and syllabus.
 - *Policy Decision on Face-to-Face teaching and blended learning:* When situation improves to normalcy, the universities and colleges can consider the possibility of introducing blended learning with face-to-face and on-line methods. The students may be encouraged to use the courses offered through SWAYAM and NPTE platforms. The materials developed for the distance education programmes
- may also be used wherever there are common courses and syllabus for regular and distance education programmes as in the case of University of Madras. Mobility from regular to distance learning and vice-versa during the course of the study programme which has been put in place at the University of Madras and perhaps some other Universities, is also an option worth considering.
- *Training of teachers:* Teachers may need to be trained for combining face-to-face teaching with on-line teaching. Higher education Institutions may organise training programmes through the Human Resource Development Centres of the Universities.
 - *Financial allocation for maintaining safety protocol, infrastructure and digital learning:* An Expert Committee may be constituted to estimate the additional financial allocation required to strengthen infrastructure facilities such as on-line teaching and learning, classrooms with social distancing, hand sanitizers, water facilities, etc. and preventive measure to mitigate the impact of COVID-19 on the higher education sector.

III. EMPLOYMENT: MINIMUM WAGE GUARANTEE PROGRAMME FOR URBAN POOR

1. Introduction

The COVID-19 pandemic and consequent lockdowns have adversely impacted the livelihood of the urban poor in Tamil Nadu. They are mostly daily wage earners and are primarily engaged in the construction sector. With the advent of COVID, the Construction sector has faced severe lull leading to loss of jobs of urban poor, thereby impacting their livelihood. Being daily wage earners, they have very little savings to meet out any eventuality as well. Besides this, the urban poor in the Construction sector have to travel frequently to the work sites and are primarily dependent on the Public transport. In the wake of COVID-19, travel restrictions are in place especially the public transport and have severely constrained the mobility of this group. This has aggravated their problems of job loss and limits their capability in seeking alternate jobs. In this situation, there is a dire need to create a short term programme for providing alternate employment to urban poor, preferably in-situ jobs, so that apart from employment, the programme will ensure minimum wage guarantee

and social safety to this vulnerable group and enable them to tide over the crisis caused by the pandemic.

2. Aim

Create employment opportunity to improve livelihoods of urban poor through provision of daily wages for construction of socially and economically useful public assets such as Community Centres, Drains, Roads, Night Shelters, Kitchen sheds, noon meal centres and their maintenance works and other community requirements. Special emphasis will be on construction of community assets in low-income neighbourhoods with strong involvement and participation of local communities.

3. Broad design of the programme

The Programme will be implemented by the Urban Local Bodies with assistance of key stakeholders such as Line Departments of the Government and Community Based Organisations.

Scope of work

- Regular Works -De-silting of tank, ponds, channels with provision of rain water harvesting, Storm water drain cleaning, Soak Pitting; Minor construction works in Schools, Anganwadies, Noon

Meal centres, PDS shops, Road, Drain, Culvert;

- Construction of individual and community toilets, Housing, Plumbing;
- Painting, Electrician works, Masonry, Carpentry, Polishing, etc.
- Solid Waste Management
- Special works -Nursery raising & maintenance, Avenue Tree maintenance, Tree plantation, Construction of rain water harvesting structure, Community kitchen, etc.
- Rejuvenation of existing buildings, Flood/Drought Mitigation

Duration/ days of works & Minimum wages

Generally, the programme may be designed to provide minimum 75 to 100 man-days of work per year to the beneficiaries. Applicable Minimum wages will be provided to the beneficiaries.

Eligibility criteria of the Beneficiaries

The beneficiaries are unskilled, Semi-skilled and Skilled person aged from 18 to 70 years of all genders.

Implementation Structure

For implementing the Programme, it is proposed to establish a three tier

institutional structure at the State level, District level and Urban Local Bodies Level. The State level unit will be responsible for the overall implementation and monitoring of the programme. The District level will be responsible for preparation of detailed annual work plan, budgeting, district level monitoring and address other issues raised by the third tier. The Third tier of ULBs will be responsible for the day-to-day management of the scheme.

Implementation Process

- List of beneficiaries under the category of Unskilled, Semi-skilled and Skilled Labourers shall be identified and will be sensitised about the opportunities and details of the programme.
- Development of technology based solutions including mobile app for geo-tagging for enhancing transparency and accountability in implementation.
- Job Cards will be issued to beneficiaries.
- Weekly monitoring of works and standard practices like M-Book to be put in place.
- Equal pay for equal work for both men and women. Payment of wages will be through Direct Benefit Transfer modes.

- Standard Accounting practices to be followed by ULBs and monitored by the District level unit. The Audit will be conducted by Local Fund Audit Department and will also be under the purview of audit by the C&AG.

4. Financing

It is assessed that the programme will require about Rs.500 crore for its effective implementation. The Government of Tamil Nadu shall find the necessary funds for meeting the requirements of the programme through available means.

Summary of Recommendations

1. Health and Wellness Centres (HWCs) scheme needs to be revived and implemented with a much higher level of financial investment.
2. Urban Primary Health Centre should also be complemented by Mobile Units to deliver basic services to the more inaccessible settlements. In the context of urban primary care, the need to decongest the tertiary health care facilities is very critical. Models on the lines of Mohalla clinics in dispensaries and urban health centres in bigger municipalities, where the existing premises can be used in the evening hours for clinical consultations can be attempted.
3. Point of care diagnostics plus "hub and spoke" arrangements should be established so that the patients can access quality diagnostic services at an affordable cost; all primary care facilities (including HWCs) should have basic diagnostic facilities, which are identified for that level.
4. Efforts must be made to fill in the vacancies at the earliest and guidelines for deputation and deployment of staff need to be tightened so that staff are available at the stations where they are needed most. It is important to enlarge the size of public health professionals substantially to build further public health workforce capacity and to upgrade/ modernise the content of training to meet contemporary requirements.
5. A major system of social care for the elderly and disabled- modelled and built on Kerala's approach to palliative care is necessary.
6. All teachers may be trained in Computer-Aided teaching and content creation.
7. The focus also should be on active applied learning (with focus on

core functional skills, life skills and employability skills) from 9th standard and upwards in line with the pilot project AALAI [Active Applied Learning And Innovation] Hubs being implemented as a SBGF (State Balanced Growth Fund) project by the Department. These Hubs need to be expanded.

8. The Government may consider adding computer as a subject and Tamil and English typing as part of curriculum in all classes in an age-appropriate manner.
9. When situation improves to normalcy, the universities and colleges can consider the possibility of introducing blended learning with face-to-face and on-line methods. Teachers may need to be trained for combining face-to-face teaching with on-line teaching. Higher education

Institutions may organise training programmes through the Human Resource Development Centres of the Universities.

10. An Expert Committee may be constituted to estimate the additional financial allocation required to strengthen infrastructure facilities such as on-line teaching and learning, classrooms with social distancing, hand sanitizers, water facilities, etc. and preventive measure to mitigate the impact of COVID-19 on the higher education sector.
11. Create employment opportunity to improve livelihoods of urban poor through provision of daily wages for construction of socially and economically useful public assets.

Tamil Nadu is both a destination and provider of Inter-State migrant workers. However, a comprehensive database on the number of workers moving in and out of the State is still absent, hindering the effective welfare policy implementation. Apart from the Census data, surveys conducted by various organizations in specific regions and sectors are the major source of information on the number of migrants in the State. As per a study commissioned by Tamil Nadu Construction Workers Welfare Board, around 11,53,170 Inter-State migrant workers were working / living in Tamil Nadu during the study period between October 2014 and April 2015. Different sources put the present figure in the range of 15 lakhs. Some sectors such as construction are heavily dependent on the migrant workers. It is estimated that 75% of the workforce in the construction industry consists of migrant workers.

In the wake of the crisis faced by the migrant workers during the lockdown period, the State Government has taken steps to identify and enumerate the migrant workers. An exclusive portal has been developed for this purpose. Till mid-June 2020, 4,90,789 migrant workers have been

registered in the portal. Each District Collector has been given a unique username and password to enable them to have a real time updation of data. In spite of the best efforts taken by the State Government to provide food and other facilities to the migrant workers, a large number have left for their native places. It is estimated that close to 3.75 lakh migrant workers have left Tamil Nadu until 14.6.2020.

An important legislation governing inter-state migrants in India is the "Inter-State Migrant Workmen (Regulation of Employment and Conditions of Service) Act", 1979. This Act requires all establishments hiring inter-state migrants to be registered and contractors who recruit such workmen be licensed. Contractors are obligated to provide details of all workers to the relevant authority. Migrant Workmen are entitled to wages similar to other workmen, displacement allowance, journey allowance and payment of wages during the period of journey. Contractors are also required to ensure regular payment, non-discrimination, provisioning of suitable accommodation, free medical facilities and protective clothing for the workmen. The

Act of 1979 is applicable to every establishment that employs five or more migrant workmen from other States; or if it had employed five or more such workmen on any day in the preceding 12 months. The provision for registration creates a system of accountability and acts as the first layer of formalising the utilisation of their labour and also helps the Government keep track of the number of workers employed.

To understand the migrant worker's conundrum in the wake of COVID-19 lock-down, a close look at Inter-State Migrant Workmen Regulation of Employment and Condition of Service Act, 1979 is essential.

Provisions relating to ISM Workers under the Act: As per Section 2(e) – “Inter-State migrant workman” means any person who is recruited by or through a contractor in one State under an agreement or other arrangement for employment in an establishment in another State whether with or without knowledge of the principal employer in relation to such establishment”. According to Section 13 (1) (a) – The Wage rates, holidays, hours of work and other conditions of service of the ISM workman shall be on par with other workman who performs same or similar kind of work in the establishment and Section 16

states that suitable residential accommodation, medical facilities at free of cost, protective clothing shall be provided to all ISM workmen by the contractor. Further, according to Section 14 – Displacement allowance - Fifty percent of the monthly wages shall be paid to the ISM workers during recruitment and Section 15 – Journey allowance - Two-way fare from the place of residence to place of working in other State shall be paid to the ISM Workmen. Section 17 States that a contractor shall be responsible for payment of wages to each Inter-State Migrant Workman employed by him and such wages shall be paid before the expiry of such period as may be prescribed.

Issues in Implementation: ISMW Act could not be applied on all the establishments engaging migrant workmen due to the following reasons:

- In some establishments, the migrant workmen are directly employed by the management (principal employer) and not through the contractors.
- The migrant workmen are employed through the contractor in an establishment but they are not recruited by that contractor in their home State.
- Some workmen from different States migrate on their own

and seek employment in Tamil Nadu through their personal contacts and join the contractor / establishment.

- Because of the above provisions, some managements do not apply for the registration by citing the legal provisions. In many cases, the licensing could not be imposed upon the contractors due to the afore mentioned reasons.
- The migrant workmen keep switching over from one contractor to another and to different establishments as per their convenience and it is very difficult to track them.

It can also be noted that the existing provisions are adequate to ensure the working hour and wage requirements. But it is not fully implemented in letter and spirit; Firstly, because there are loopholes available to the employers and secondly the concerned Departments have not enforced it effectively. Their wages and working conditions are inferior to the local labourers in most cases. Most often residential accommodation, though inadequate, is provided near the workplaces. In most cases very little medical facilities are provided. Protective clothing and safety gears wherever required are provided but not at the appropriate level. Further, in most

cases the principal employer only deals with the contractor and does not interfere in disbursement of wages, etc. Enforcement also has not been upto the mark anywhere in the country for several reasons including legal loopholes.

Almost no State seems to have implemented this law in letter and spirit, though Tamil Nadu is on a relatively better footing. The primary reason for this seems to be the onerous compliance requirements set out in the law. It not only requires equal pay for inter-state workmen, but also requires other social protection that would make their employment significantly more expensive than intra-state workmen. Thus, the law never considered issues, like compliance costs, Government capacity for enforcement and importantly, counter-productive consequences such as incentivising contractors and employers to under-report. The law must therefore be rationalised and made pragmatic to ensure that employers and contractors have incentives to come forward and register labourers.

Steps to be taken to protect the interest of migrant workers:

1. 100% Registration of Migrant Workmen under ISMW Act to be ensured:

a) The definition of Inter-State Migrant Workman under Section 2(1) of (e) of the ISMW Act needs to be amended. This may be done as follows in order to widen the scope of applicability of the said act and mandate 100% registration.

“Inter-State Migrant Workman” means any person who is employed either directly or through a contractor in an establishment in a State other than his native State, whether with or without the knowledge of the principal employer in relation to such establishment”.

ISMW Act is a Central legislation and amendment of definition of Inter-State migrant workman has to be taken up with Government of India.

b) Managements could be instructed to furnish the details of all migrant workmen employed in their establishments in a specific format which may be made available through the online portal. This data collection could be monitored through the online portal by DISH / Labour Department officials in each region. If required, an

advisory may even be issued by the Government under the provisions of Disaster Management Act, 2005. Non-compliance may be dealt with Disaster Management Act, 2005 / Section 188 of IPC.

c) Some incentives to the migrants for registering will go a long way in ensuring 100% registration. They may be given Rs.100 / Rs.200/- as mobile top up once they register.

d) Each migrant worker may be given a unique ID number which should be portable.

2. Though the Inter-State Migrant Workers Act, 1979, has flaws /limitations, still a better enforcement of the provisions of the Act will surely improve the overall wellbeing of the migrant workers. The Enforcement of the legal provisions has been rather half hearted all over the country. Enforcement will go a long way in improving their wage and health security, besides improving the quality of accommodation. Better enforcement will certainly improve the bargaining positions of the Inter-State Migrant Workers. Field officials have to be made accountable for any omission.

3. It is to be noted that in cases where provisions of this Act as well as that of BOCW Act have been enforced by the authorities, there has not been much support coming from the judiciary. The courts have, in almost all the cases, chosen to act under the less stringent provisions against the violators. The Government Pleaders need to take up these cases with all seriousness and press for appropriate orders commensurate to the violations.
4. Migration support centre as provided under Deen Dayal Upadhyaya Grameen Kaushalya Yojana (DDU-GKY), along with a dedicated helpline with multi lingual volunteers may be set up at the district level, in districts having large number of migrant workers like Chennai, Chengalpattu, Thiruvallur, Kancheepuram, Coimbatore and Tiruppur, etc.
5. In order to have a focussed approach towards the overall wellbeing of the migrant workers, it is desirable to establish a separate Welfare Board for the migrant workers. The Board could be made self sustaining, by collecting a small cess / fees from the employers of the migrant workers.
6. Portability of the benefits being extended to the migrant workers in their native places is also a necessary step. The Ration card portability now being implemented by the Government is the good step in this direction.
7. Portability of voting rights in the destination States is a *sin-qua-non* for ensuring the overall wellbeing of the migrant workers. Though, theoretically they have voting rights, in practice very few of them get to vote in any election. As a result, they have failed to emerge as an effective "pressure group" to enforce policy decisions. It would be better if they are enabled to exercise voting rights in the places where they are working at.
8. The migrant workers also need to be gradually integrated into the local society. Presently, in many States like Tamil Nadu where language is a major barrier for the migrant workers who come predominantly from the Eastern States, they have little interaction /integration with the local community. This lack of integration aggravates the sense of alienation and lack of security even during normal times. The best way to achieve a gradual

integration could be to make them participate in the local festivals, cultural activities, sports, etc.

9. Though the responsibility of providing decent accommodation to migrant workers lies with the Contractor / Principal employer, it is most unlikely to happen. Hence, the State needs to intervene and provide affordable rental accommodation in the form of small apartments / dormitories in various parts of the State having good concentration of migrant workers.
10. Skilling and upscaling the skills of migrant workers can also be an instrument to retain them as this adds to their income levels as well as their position in the hierarchy at the work site. State Government can provide the same through TNSDC free of cost.

Summary of Recommendations

1. Implementation of the ISMW Act and 100% Registration of Migrant workmen under ISMW Act to be ensured. Each migrant worker may be given a unique ID number which should be portable.
2. Though the Inter-State Migrant Workers Act, 1979, has flaws /limitations, still a better enforcement of the provisions of the Act will surely improve the overall wellbeing of the migrant workers. Enforcement will go a long way in improving their wage and health security, besides improving the quality of accommodation. Better enforcement will certainly improve the bargaining positions of the Inter-State Migrant Workers. Field officials have to be made accountable for any omission.
3. Migration support centre as provided under Deen Dayal Upadhyaya Grameen Kaushalya Yojana (DDU-GKY), along with a dedicated helpline with multi lingual volunteers may be set up at the district level, in districts having large number of migrant workers like Chennai, Chengalpattu, Thiruvallur, Kancheepuram, Coimbatore and Tiruppur, etc.
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workers also need to be gradually integrated into the local society.

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APPENDIX

1. No. of migrant workers who have left Tamil Nadu till date by various modes of transport

No. of migrant labourers sent to their native States by train & bus		
Train	Bus	Total
4,03,042	21,344	4,24,386

2. Total expenditure incurred towards paying their rail fare by the State Government – Rs.33,07,20,441/- as of 11th August, 2020.

I. Introduction

The resource envelope for a State Government is limited by own revenue receipts, Central resource transfers through tax devolution and grants and borrowing permitted by the Centre. Fiscal shock due to COVID-19 containment measures and those aimed at arresting contraction in economic activity will increase the gap between revenue and expenditures. The economic contraction due to lockdown will result in shrinking of the tax base and a sharp fall in revenue. Government expenditure is also likely to increase sharply for saving lives and livelihoods, in addition to restarting the economy after the lockdown. In addition to the committed budgetary expenses, expenditure for containment of the pandemic, relief and social protection measures and for reviving the economy will result in widening of the fiscal gap. One of the mandates of the Committee is to examine the

“fiscal situation and way forward to improve the fiscal position, including increasing the tax-GDP ratio and diversifying revenue sources and re-prioritizing expenditure.” The impact of COVID-19 induced fiscal shock on the State finances of Tamil Nadu is the focus of this chapter.

II. Overview of State Finances: Tamil Nadu

Tamil Nadu Budget for the year 2020-21 was presented on 14th February, 2020. Aggregate revenue receipts as per 2020-21 (BE) was 10.49 per cent of GSDP, while the revenue expenditure was estimated at 11.52 per cent. Own tax revenue was estimated at 6.38 per cent of GSDP and transfer from the Centre was expected to be 3.34 per cent of GSDP. The capital expenditure was estimated at 1.74 per cent of GSDP and revenue and fiscal deficits were expected to be 1.03 and 2.84 per cent of GSDP respectively.

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TABLE 1: TAMIL NADU FINANCES: AN OVERVIEW

	2020-21 BE (Rs.Crore)	2020-21 (BE) (% to GSDP)
Total Revenue Receipt	219375.10	10.49
Own Revenue Receipt	149429.10	7.14
Own Tax Revenue	133530.30	6.38
Own Non-Tax Revenue	15898.80	0.76
Central Transfers	69946.00	3.34
Share in Central Taxes	32849.30	1.57
Grants-in-aid	37096.70	1.77
Revenue Expenditure (a+b+c+d)	240992.80	11.52
a. General Services-RE	90712.60	4.34
Developmental Expenditure-(RE) (b+c)	131112.90	6.27
b. Social Services-RE	82685.70	3.95
c. Economic Services-RE	48427.10	2.31
d. Compensation and Assignment to LBs	19167.40	0.92
Capital Expenditure (a+b+c)	36367.80	1.74
a. General Services-CE	1596.00	0.08
Developmental Expenditure-CE (b+c)	34771.80	1.66
b. Social Services-CE	12022.20	0.57
c. Economic Services-CE	22749.60	1.09
Total Expenditure	277360.60	13.26
a. General Services-TE	92308.50	4.41
Developmental Expenditure-TE (b+c)	165884.60	7.93
b. Social Services-TE	94707.90	4.53
c. Economic Services-TE	71176.70	3.40
d. Compensation and Assignment to LBs	19167.40	0.92
Education Art & Culture	41626.20	1.99
Medical and Public Health	12857.80	0.61
Interest Payment	37120.30	1.77
Pension	32009.35	1.53
Salary	64208.55	3.07
Recovery of Loans & Advances	5364.30	0.26
Loans & Advances Disbursed	6725.20	0.32
Revenue Deficit	-21617.60	-1.03
Fiscal Deficit	-59346.30	-2.84
Primary Deficit	-22226.00	-1.06

Source: Budget Documents 2020-21, Department of Finance, Government of Tamil Nadu.

The economic shock arising from COVID-19 and its impact of fiscal situation of the State is not reflected in these numbers. The effect of the lockdown and staggered recovery when it is lifted in a phased manner would substantially reduce the revenue collections from own sources and transfers from the Centre and the actual fiscal imbalance will be much higher than what was reflected in the Budget Estimates of 2020-21. In order to estimate the extent of revenue shortfall, we start with the deviations between actuals and budget estimates that are generally observed in a normal fiscal year. On the revenue side if we examine, the difference between the pre-actual of 2019-20 and 2019-20 RE is Rs.12,614 crore. If we take the revenue increase

assumed in the year 2020-21 (BE) over the 2019-20 (Tentative Actuals or TA), the difference is Rs.40,128 crore which is an increase of 22.38 per cent. This increase is expected to come from increase in the revenue from commercial taxes of Rs.1,8513 crore, of which, Rs.10,525 crore is from taxes on petroleum products and taxes on alcohol, followed by IGST (Rs.5,147 crore) and SGST (Rs.2841 crore). The expected increase in the State's own non-tax revenue is Rs.1,704 crore. An additional Rs.13,000 crore is expected out of central transfers-both tax devolution and grants. Rest of the increase in expected out of State excise, tax on motor vehicles, stamp and registration and other minor taxes.

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TABLE 2: DEVIATIONS IN REVENUE AND EXPENDITURE

(Rs.Crore)

Heads	RE 2019-20	Tentative Actual (TA) 2019-20	BE 2020-21	Difference Between 2019-20 (TA) and 2019-20 (RE)	Difference Between 2020-21 (BE) and 2019-20 (TA)
A. Commercial Tax (a+b+c)	92665.78	83727.19	102241.14	-8938.59	18513.95
a. SGST	30213.49	24201.92	27043.65	-6011.57	2841.73
b. IGST	14004.89	14004.89	19151.90	0.00	5147.01
c. Other CT Collections	48447.41	45520.38	56045.59	-2927.03	10525.21
B. State Excise	7262.33	7201.96	8133.80	-60.37	931.84
C. Tax on Motor Vehicles	6018.63	5665.53	6897.73	-353.10	1232.20
D. Stamps & Regn.	13122.81	10767.07	14435.09	-2355.74	3668.02
E. Others	1740.09	833.50	1822.54	-906.59	989.04
1.State's Own Tax Revenue (A+B+C+D+E)	120809.64	108195.25	133530.30	-12614.39	25335.05
2.State's Own Non-Tax Revenue	14195.28	14195.28	15898.81	0.00	1703.53
3.Share in Central Taxes	26392.40	26392.40	32849.34	0.00	6456.94
4.Grants-in-Aid from Central Government	30463.57	30463.57	37096.69	0.00	6633.12
5. Revenue Receipts (1+2+3+4)	191860.89	179246.50	219375.14	-12614.39	40128.64
Revenue Expenditure (1+2+3+4+5+6)	216932.51	216932.51	240992.78	0.00	24060.27
1.Salaries	56967.82	56967.82	64208.55	0.00	7240.73
2.Non-wage O&M	11840.58	11840.58	13531.27	0.00	1690.69
3.Subsidies & Transfers	87487.48	87487.48	94099.94	0.00	6612.46

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Heads	RE 2019-20	Tentative Actual (TA) 2019-20	BE 2020-21	Difference Between 2019-20 (TA) and 2019-20 (RE)	Difference Between 2020-21 (BE) and 2019-20 (TA)
4.Pension & Other Retirement Benefits	28236.04	28236.04	32009.35	0.00	3773.30
5.Interest Payments	32369.31	32369.31	37120.33	0.00	4751.01
6.Others	31.27	31.27	23.35	0.00	-7.92
Capital Expenditure	31220.89	31220.89	36367.78	0.00	5146.89
Loans and Advances Net	-1234.13	-1234.13	1360.87	0.00	2595.00
Revenue Surplus/Deficit	-25071.62	-37686.01	-21617.64	-12614.39	16068.37
Fiscal Deficit/Surplus	-55058.38	-67672.77	-59346.29	-12614.39	8326.48

In the aftermath of the lockdown of the economy since 25th March, 2020, the estimates of the State's own revenue and tax devolution from the Union Government have to be revised substantially downward. The tax devolution from the Centre is likely to markedly decline as Central tax collections will be substantially lower due to sharp decline in economic activity. The totality of this has been estimated as an input for the State Government for appropriate policy response and for making advocacy with the Central Government for higher transfer of

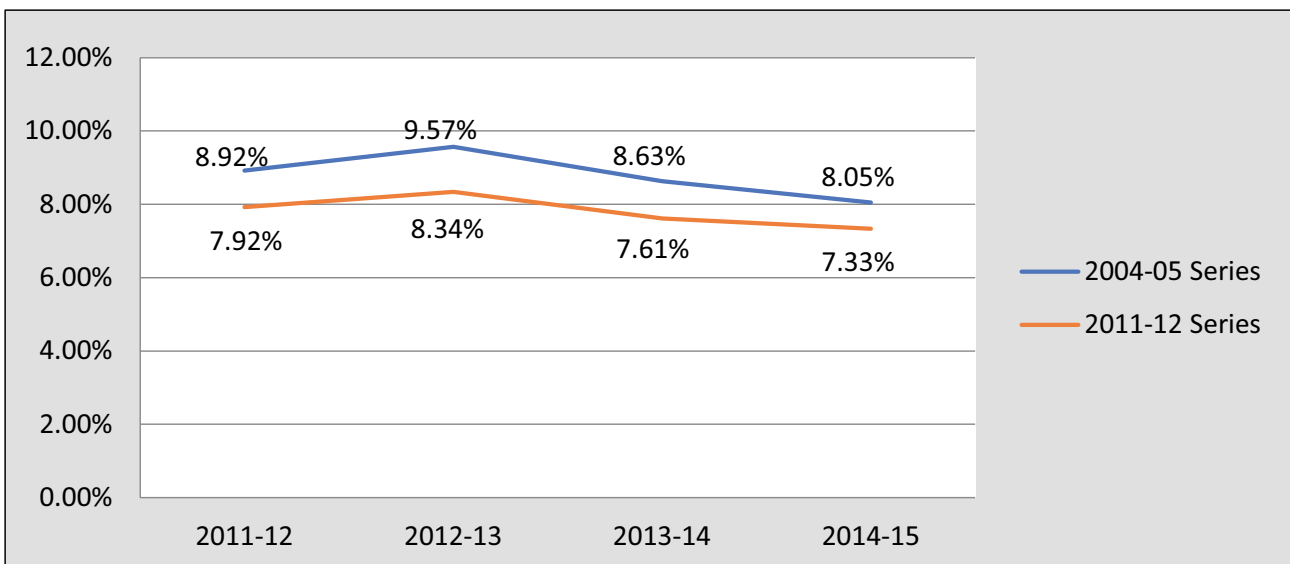
Central resources. The fiscal situation of the State is precarious unless the Central Government makes additional resources in the form of grants available to the State to compensate for the loss of revenue from tax devolution. Avoiding a fiscal crisis and assisting in the revival of the economy crucially depends on receiving additional Central grants. In this exercise, we examine the monthly trend in revenue collection of all the major taxes in the State and also consider inputs received from the Government of Tamil Nadu on various aspects of State finances.

III. Own Tax Revenue of the State

In recent years, the own tax to GSDP ratio of the State has been on the decline. As evident from Figure 1, the own tax revenue to GSDP ratio declined sharply from 7.92 to 6.34 percent of GSDP between 2011-12 and 2018-19—a fall of 1.58 percentage points of GSDP in 8 years. If we consider the trend in tax to GSDP ratio prior to the introduction of GST, the decline was from 7.92 per cent in 2011-12 to 6.60 per cent in 2016-17—a decline of 1.42 percentage points.

What are the reasons for such a steep fall in tax to GSDP ratio? One plausible explanation is the change in the method of calculating GSDP itself. The upward revision resulted in the expansion of the denominator without any effective increase in tax base and corresponding tax revenue collection. As evident from Figure 1, if the tax to GSDP ratio is calculated on basis of the old series, the ratio in the years from 2011-12 to 2014-15 is significantly higher than that based on the new series. However, it is to be noted that in both the series, tax to GSDP ratio shows a secular decline from the level reached in 2012-13.

FIGURE 1: TAX-GSDP RATIO



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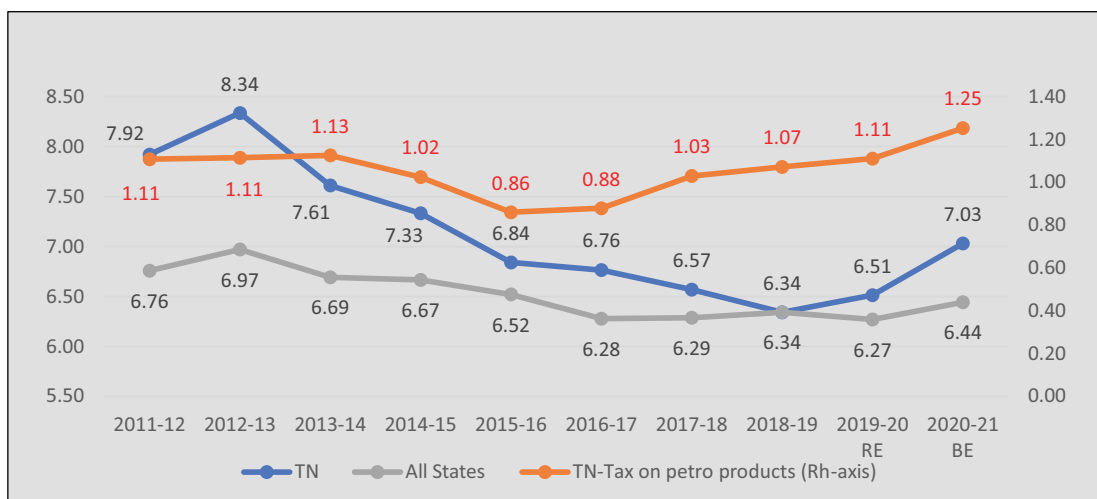
Further insight can be provided if we compare Tamil Nadu's tax to GSDP ratio with the All State tax to GSDP ratio. As evident from Figure 2, the fall in Tamil Nadu's tax to GSDP ratio is sharper than the decline in All State tax to GSDP ratio during 2011-12 to 2018-19. During this period, the All State tax to GSDP ratio declined from 6.76 per cent to 6.34 per cent—a decline of 0.42 percentage points. During the same period, Tamil Nadu's tax to GSDP ratio declined by 1.59 percentage points.

As is well known, taxes on petroleum products is a major source of own tax revenue of the State. In the secondary Y-axis of Figure 2, we have plotted the data on taxes collected from

petroleum products. As evident from Figure 2, petroleum tax to GSDP ratio declined sharply from 1.11 per cent of GSDP in 2011-12 to 0.86 per cent in 2016-17. However, the petroleum tax to GSDP ratio has started increasing since 2017-18 and is expected to be 1.25 per cent of GSDP as per 2020-21 (BE). This has also happened due to various measures initiated to increase the collection of petroleum taxes in a manner such as the rate structure in the case of petroleum products in which the consumer is protected when the prices go high and revenue is protected when the prices go low. This seems to have worked and petroleum revenue seems to be buoyant in recent years.

FIGURE 2: TAX GSDP RATIO OF TAMIL NADU AND ALL STATES

(In Per cent)



We have also examined tax to GSDP ratio of individual taxes for the period from 2011-12 to 2016-17 to understand the factors responsible for the decline in own tax to GSDP ratio. As evident from Table 3, State Excise duty collection declined sharply as a percentage of GSDP from 1.33 per cent to 0.48 per cent of GSDP during this period.

TABLE 3: TAX TO GSDP RATIO OF MAJOR TAXES

(In Per cent)

	2011-12	2016-17
Taxes on Commodities and Services	7.03	6.03
State Excise	1.33	0.48
Sales Tax	4.83	4.85
Taxes on Vehicles	0.41	0.37
Taxes on Goods and Passengers	0.28	0.20
Taxes and Duties on Electricity	0.14	0.10
Other Taxes and Duties	0.04	0.03

Sharp fall in excise duty collection requires further analysis. The prices as well as taxes on alcoholic products are determined by the Government. Based on the information received from the Finance Department, the Government of Tamil Nadu on 29.03.2013 had abolished the Vend fee and the rate of licensee renewal fee had been reduced from Rs.500

crore p.a. to Rs.1 lakh p.a. The structural change related to vend fee is an outcome of the definition of "Income" in the IT Act effected during 2014. The Government vide notification No.328 Act No. 28 of 2013 dated 08.11.2013 amended retrospectively from 01.04.2013 the rate of VAT at second point of sale from 38% (single rate) to 11 slabs rates (with reference to basic price) ranging from 185% to 245% in respect of IMFS. The rate of sale tax on Beer increased from 38% to 260% at 2nd point. In respect of wine and Draught Beer the rate was increased to 250% & 270% respectively. The rate of Excise Duty on local IMFS and Beer was also increased with effect from 20.08.2014. The rate of Special fee for purchases from other State and other Country were also increased with effect from 20.08.2014. There was also increase in rates at second point sales to 220 per cent in November 2014. At the same time, based on the orders of the Government, the working hours of the retail vending shops has been reduced from 10.00 a.m. to 10.00 p.m. to 12.00 noon to 10.00 p.m. with effect from 24.05.2016. Based on the orders of Government 500 Retail vending shops were closed with effect from 19.06.2016. In 2017 also 500 retail vending shops were closed. Based on the orders

of Hon'ble Supreme Court of India, 3321 retail shops along the National and State Highways were closed with effect from 01.04.2017. The rates of excise duty on IMFS were further increased in October 2017.

TABLE 4: EXCISE REVENUE COLLECTION

(Rs.Crore)

Year	Excise Revenue	VAT	Total
2012-13	12125.31	9555.36	21680.67
2013-14	5043.82	16640.07	21683.89
2014-15	5731.18	18433.77	24164.95
2015-16	5836.01	20018.81	25854.82
2016-17	6248.17	20747.08	26995.25
2017-18	6009.25	20788.71	26797.96
2018-19	6863.11	24294.72	31157.83
2019-20	7197.05	25887.38	33084.43
(As a per cent to GSDP)			
2012-13	1.42	1.12	2.54
2013-14	0.52	1.72	2.24
2014-15	0.53	1.72	2.25
2015-16	0.50	1.70	2.20
2016-17	0.48	1.59	2.07
2017-18	0.41	1.42	1.83
2018-19	0.41	1.46	1.87
2019-20	0.39	1.40	1.78

From the above analysis, it appears that increase in rate could not compensate the loss in revenue (See Table 4). It is possible that there has been a reduction in consumption due to various measures to reduce

availability including closure of shops. It is important, to examine in detail the excise duty structure and its rationalization given the steady decline in revenue.

Therefore, a detailed study on the decline of tax buoyancy needs to be undertaken to identify the underlying reasons for the decline and take suitable measures to improve the buoyancy.

IV. Evolving Fiscal Scenario

Commercial Taxes

Commercial taxes in the State comprise of SGST, IGST and 'other commercial taxes'. Other commercial taxes include taxes on alcohol, petroleum products and tobacco. In order to arrive at an estimate of revenue shortfall, we have compared the monthly collection of the State's own tax revenue from April for the current fiscal year, i.e., 2020-21 with the collection in the corresponding months of the last year. The SGST collection for the month of April was 16 per cent, for the month of May was 70 per cent and for the month of June was 89 per cent of the corresponding months of the previous year. The collection of 'other commercial taxes' for the month of April was 47 per cent of the corresponding month of the previous year.

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We have assumed a separate recovery path for the SGST and for Sales Tax (petroleum, alcohol and CST). We assume that SGST will have full recovery in the month of July.³ Since Sales tax is primarily collected on petroleum products and alcohol and both these commodities

are inelastic in demand, normally one would expect the tax revenue to grow at a faster rate compared to SGST. As evident from Table 5, we expect, the Sales tax collection to reach last year's monthly collection in September 2020 and continue to show a modest growth thereafter.

TABLE 5: SGST COLLECTION

(Rs.Crore)

	2018-19	2019-20	2020-21	Recovery Rate (%)
April	2934.17	3530.54	556.00	0.16
May	2685.85	2615.95	1833.00	0.70
June	2634.42	2904.23	2587.00	0.89
July	4576.89	2360.40	2360.00	1.00
August	2979.06	4750.40	4988.00	1.05
September	3060.64	2997.84	3178.00	1.06
October	2844.75	2819.04	3045.00	1.08
November	3950.66	3240.80	3532.00	1.09
December	3338.23	3044.42	3349.00	1.10
January	3028.43	3381.88	3754.00	1.11
February	2854.11	3324.72	3690.00	1.11
March	3645.87	3236.59	3593.00	1.11
Total	38533.09	38206.81	36465.00	

Note: Recovery rate is defined as a month specific percentage of revenue of corresponding month of previous year

³ The likely collections of Gross GST till 27th May have been reported by CT Dept. It is as follows: SGST- 968.28 crore, IGST- 745.62 crore, Non GST collection (POL plus Liquor sales tax)- 481.51 crore and Others-7.23 crore; Total-2220.06 crore. Actual receipt for May is higher than our estimate. GST has exceeded expectation by more than double while non GST revenue has more than halved (Check whether this is due to compensation payment by the Centre for 3 months). GST actuals will reduce with subsequent refunds, but gross collection is higher. The dip in non-GST shows that growth pick up is slower than expected in the first quarter of FY2021. During discussion with TASMAL (a Government agency selling liquor), their estimates for FY2021 is around 31,000 crore as against 39,723 crore in BE 2021 (Sales tax-31589 croer plus State Excise- 8,133 crore). Their estimates factors in the recent upward revision of rates as well as loss of sales in the first 1.5 months of 2020-21. This has been considered for estimation.

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TABLE 6: SALES TAX

(Rs.Crore)

	2018-19	2019-20	2020-21	Recovery Rate (%)
April	2832.07	3067.16	1432.55	0.47
May	2768.35	2836.21	529.00	0.19
June	3542.56	3745.91	2775.00	0.74
July	3563.07	3820.27	3056.00	0.80
August	3651.11	3776.46	3399.00	0.90
September	3715.58	3764.06	3764.00	1.00
October	3725.21	3670.97	4038.00	1.10
November	3636.34	3728.48	4101.00	1.10
December	3396.69	3435.06	3779.00	1.10
January	3368.28	3605.94	3967.00	1.10
February	3461.45	3786.78	4165.00	1.10
March	5040.36	6277.43	6905.00	1.10
Total	42701.07	45514.73	41910.94	

Note: Recovery rate is defined as a month specific percentage of revenue of corresponding month of previous year

TABLE 7: COMMERCIAL TAXES

(Rs. Crore)

	2018-19	2019-20	2020-21
April	5766.24	6597.70	1988.86
May	5454.20	5452.16	2362.24
June	6176.98	6650.14	5362.10
July	8139.96	6180.67	5416.62
August	6630.17	8526.86	8386.73
September	6776.22	6761.90	6941.77
October	6569.96	6490.01	7082.63
November	7587.00	6969.28	7633.80
December	6734.92	6479.48	7127.43
January	6396.71	6987.82	7720.42
February	6315.56	7111.50	7855.90
March	8686.23	9514.02	10497.79
Total	81234.16	83721.54	78376.28

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State Excise

In the case of State Excise Duty, similar assumption has been made and the month specific recovery rate

is reported in Table 8. Based on this the yearly revenue collection will be Rs.6801 crore.

TABLE 8: STATE EXCISE

	2018-19	2019-20	2020-21	Recovery Rate(%)
	(Rs.Crore)			
April	490	501	4	0.01
May	509	580	343	0.59
June	570	588	724	1.23
July	566	588	470	0.80
August	590	598	538	0.90
September	583	596	596	1.00
October	587	631	695	1.10
November	564	572	629	1.10
December	526	588	647	1.10
January	553	620	682	1.10
February	639	773	850	1.10
March	685	566	623	1.10
Total	6863	7202	6801	

Note: Recovery rate is defined as a month specific percentage of revenue of corresponding month of previous year

Other Taxes

Other taxes include Motor Vehicle Tax, Stamp and Registration and other minor taxes. The slowdown in the economy has already hit the real estate sector in a major way. Prolonged lockdown and near complete collapse of economic activity persuades us to assume that recovery in these sectors will take time. When it comes to Motor Vehicle Tax, this component of the

tax has not shown any growth in the last two years. The growth rate for the year 2018-19 and 2019-20 were 3.92 and 1.66 per cent respectively. This is also reflective of the overall trend of subdued demand of automobiles at all India level. This year, it will be further compounded due to lockdown and would also depend on the overall policy related to automobile sector including gradual transition to e-vehicles. These

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policies/strategies/incentives are in the domain of Central Government. Thus, a positive growth in this sector may be difficult to achieve. We assume that revenue shortfall will be significant. Based on available evidence and understanding of the sector, we assume that Stamp duty and Registration fees for the year 2020-21 will be Rs.8,274 crore compared to the budget estimate (2020-21) of Rs.14,435 crore. In case of Motor Vehicle Tax, the

collection is expected to be Rs.4,095 crore as against Rs.6,898 crore as per the 2020-21 (BE). Other minor taxes as per 2020-21 (BE) are estimated at Rs.1,822 crore. Given the tax specific information and the early trend we expect only Rs.394 crore. In case of own non-tax revenues, the 2020-21 (BE) is Rs.15,898 crore. We assume that only 70 % of this could be realized and that works out to be Rs.11,129 crore.

(Rs.Crore)

Tax type	Budget Estimates 2020-21	Revised Estimates 2020-21	Difference between Estimate (RE-BE)
Commercial Tax	102241.14	78376.29	-23864.85
State Excise	8133.80	6801.30	-1332.50
Motor Vehicle Taxes	6897.73	4095.45	-2802.28
Stamps & Registration	14435.09	8274.19	-6160.90
Others	1822.54	394.26	-1428.28
Total State's Own Tax Revenue	1,33,530.30	97,941.50	-35,588.80

Share of Central Tax Devolution

The central tax devolution for Tamil Nadu as per the Tamil Nadu Budget 2020-21 (BE) is Rs.32,849.34 crore. Actual devolution will be much lower than what is reflected in the Union Budget 2020-21. All State tax transfers for the year 2020-21 is estimated at

Rs.7,84,180.87 crore. This works out to be 3.48 per cent of GDP. Available prediction suggests that India is likely to record its worst growth performance since the 1991 liberalization during 2020-21 fiscal year. GDP Growth rates predicted by various agencies are reported in Table 9.

TABLE:9
GDP GROWTH RATES OF INDIAN ECONOMY

Agency	Expected GDP Growth (%)
Asian Development Bank	-4
World Bank	-1.5 - 2.8
International Monetary Fund	-4.5
India Rating and Research	-5.3
Moody's Investors Service	3.1
Goldman Sachs	-5.0
Standard and Poor	-5.0
Nomura	-5.0
Fitch	-5.0
State Bank of India	-5.8
<i>Source: Respective websites of the Agency</i>	

Given all these forecasts and in the face of prolonged lockdown, our view is that there will be a sharp economic contraction in real terms. Most forecasters have expected the contraction of more than five per cent. Most optimistic scenario will be to assume here that there will be a zero growth of GDP nominal term compared to 2019-20. This would mean GDP for the year 2020-21 to be Rs.20,442,233 crore. Even if we assume that tax devolution to GDP ratio will remain at 3.48 per cent, with a reduced GDP number, the total tax devolution will be

Rs.69,50,35 crore. In other words, compared to the Budget Estimates, tax devolution will be reduced by Rs.89,145 crore. This in turn means reduction to Tamil Nadu's tax devolution to Rs.29,115 crore. This implies a shortfall of Rs.3,733 crore.

However, given the past trend, central tax devolution still seems to be on higher side. Considering the growth fall in Centre's tax collection, it is expected that not more than 24000 crore will flow to the State as against BE 2020-21 of Rs.32,849 crore. In FY 2019-20, Tamil Nadu faced a similar shortfall in RE against BE by about Rs.7,586.07 crore in tax devolution.

Grants-in-aid

On the Grants, Tamil Nadu has received Rs.15,769.80 crore till 22nd July, 2020 which constitutes 42.51 per cent of the Budget Estimates 2020-21. However, the fall in Union Government receipts may result in inadequate release for Centrally sponsored schemes during FY 2020-21. However, we hope that given the extent of shortfall in revenue, Central Government would provide the grants estimated in the Tamil Nadu Budget 2020-21 and make additional grants for COVID response and recovery. Without

Central support, fiscal space of the State for meeting the requirements of economic response post COVID-19 will be seriously muted.

V. Measures Taken by the Government

(i) The State Government was quick to see the fiscal crisis and has taken some important measures to both raise revenues and cut down expenditure. The age of superannuation for Government servants, teaching and non-teaching staff working in aided institutions and employees of all statutory bodies was increased from 58 years to 59 years. The saving on account of the 'Pension and Retirement Benefits' on this account is estimated at Rs.6,700 crore. In addition, economy circulars have been issued to withdraw leave encashment for Government staff during the year (Rs.2,500 crore) and freezing of DA at the level of January 2020 which would avoid 8% increase in the pay (Rs.4,900 crore). The economy circulars have banned the creation of new posts and filling the required positions through redeployment, avoiding filling in of new posts, minimizing travel and hospitality expenses and ban on travel by executive class.

The revenue and expenditure measures already undertaken are estimated to increase revenues by about Rs.9,000 crore and save expenditure by Rs.14,440 crore.

(ii) State Excise Duty has been revised upwards twice in recent times by the State Government. The rate of Excise duty on local beer was increased from Rs.10/- per bulk litre to Rs.11/- per bulk litre on February 2020 vide G.O (Ms). No.8 Home, prohibition & Excise Department dated 7.2.2020 and the excise duties on the Indian Made Foreign liquor (IMFL) were increased in May 2020 across categories such as increase from Rs.150/- to Rs.174/- per proof litre for Ordinary brands, Rs.165/- to Rs.214/- per proof litre for medium brands, Rs.190/- to Rs.239/- per proof litre for Premium -1 category and Rs.220/- to Rs.269/- for Premium-2 category brands of IMFL as per G.O (Ms) No. 15 Home, Prohibition & Excise Department dated 6.5.2020.

(iii) The Government has also taken measures to improve the VAT collections from Petroleum products by revising the rates. In May 2020, as per the G.O (M.s) No.83 Commercial Taxes and Registration Department dated

3.5.2020, the structure of VAT was changed to a combination of ad-valorem and specific rates per litre. For diesel, 34 percent tax was replaced by 15 percent plus Rs.13.02 per litre and for Petrol, VAT of 25 percent was replaced by 11 percent plus Rs.9.62 per litre. The advantage of this structure is that when the prices fall, the revenue is protected and when the prices go up, the interests of the consumers are protected by moderating the tax burden.

VI. Re-prioritizing Expenditure

The Committee has been tasked with making recommendations on re-prioritizing expenditure. In the context of the COVID-19 pandemic, given the drop in revenues it is unavoidable that an enhanced fiscal deficit will be incurred. The State Government has already effected expenditure cuts equivalent to about 0.7 % of GSDP. Further expenditure cuts are not warranted. The Government of Tamil Nadu should ensure that necessary conditions to avail of at least 1.75% to 1.85% of GSDP as additional borrowings under the special scheme announced by the Government of India. With those additional borrowings, the State Government needs to ensure that the following priority is accorded to expenditure:-

- i. Expenditure to provide medical equipment, supplies and services and to upgrade medical and health infrastructure to meet urgent COVID-19 pandemic response, are undoubtedly the highest priority. Already Rs.1,760.11 crore has been spent for this purpose including operation of COVID Care Centres and such expenditure will need to be continued until the COVID-19 pandemic abates. It is expected that this expenditure would be of the order of at least Rs.5,000 crore through the rest of the current financial year.
- ii. Over and above, the additional food provided under the Prime Minister Garib Kalyan Anna Yojana to Priority Households, the Government of Tamil Nadu has committed to supply the additional rice to all households in State till November, 2020. This means an additional expenditure of Rs.1,331.18 crore in the current financial year. Based on the impact of COVID-19 pandemic, the continuance of supply of additional rice would need to be examined.
- iii. Cash doles were provided to all ration card holders on one occasion in April and to ration card holders in Greater Chennai area and Madurai area on one more

occasion. In addition, cash doles of Rs.2,000/- has been provided to 42.70 lakh unorganized sector workers. If public transportation does not resume and many unorganized sector workers are unable to return to their jobs, a further round of cash assistance for unorganised sector workers would have to be considered.

- iv. Scheme related expenditure for various social security and welfare schemes of the Government of Tamil Nadu including ongoing schemes like Food subsidy, PMAY Rural and Urban schemes, Post-matric scholarship, Muthulakshmi Maternity Benefit Assistance, SSA, Free & Concessional Bus pass to students, Free supply of school supplies to students, Chief Minister's Comprehensive Health Insurance Scheme, ICDS, Noon Meal Programme, Old age pensions, Free supply of sarees and dhoties, MGNREGS as well as new schemes like providing ration free of cost to the poor and marginalized, funding to Amma Unavagams which provide subsidized food to the needy, etc. should be continued and front loaded to ensure flow of welfare benefits to the vulnerable sections of the population.
- v. Elsewhere in the report we have recommended an

urban employment guarantee programme implemented in Tamil Nadu as part of the COVID response. This also needs to be given high priority.

- vi. A key element of growth reviving expenditure is capital expenditure particularly on major construction projects. Such expenditure not only generates employment for construction labour in particular, but also revives demand for certain construction materials industries including cement and steel, thereby giving an impetus to the broader economy. It also results in build out of infrastructure which is an essential requirement. Hence in the current financial year, every effort should be made to ensure that not only the capital expenditure on works as budgeted is incurred in full, but also an additional expenditure of Rs.10,000 crores is undertaken.
- vii. Incentives to MSMEs and a special programme to expand credit to the industrial sector is also critical. Hence, in addition to the present levels of expenditure on industrial incentives, an additional package has been suggested for expanding industrial lending. This should also be appropriately prioritized.

VII. Capital Expenditure

Capital expenditure for the year 2020-21 is budgeted at Rs.36,367.78 crore. Based on past trends, usually only around 85 percent of the Budget Estimates is spent, owing to various factors such as monsoon, execution capabilities and land acquisition. In the present situation, as part of the expansionary fiscal policy, there is a need to accelerate capital spending by the Government in order to kick start the economy through increased employment and investment in public infrastructure. Hence, the Government should aim to achieve the capital spending estimated in the Budget by ensuring that the execution of capital works is accelerated.

VIII. Post-COVID-19 Aggregate Fiscal Position

The aggregate revenue shortfall and its impact of fiscal imbalance is presented in Table 10. As evident from Table 8, own revenue position will decline by more than 2 percentage point of GSDP compared to the Budget Estimates. There will be a shortfall in tax devolution to States. We expect the grants to continue at the BE 2020-21 level. We also expect that economy measures introduced will result in savings in expenditure and accordingly a downward adjustment

is made in both revenue and capital expenditure. Combination of all these are going to increase the revenue deficit to 2.65 per cent of GSDP and the fiscal deficit to 4.15 per cent of GSDP. It is important to note that this level of fiscal imbalance is to maintain the existing level budgetary expenditure. With additional expenditure for response and recovery, the deficit will further increase. Also, calculation of the fiscal deficit is based on the GSDP number provided in the Budget. The decline in growth in GDP would mean higher fiscal imbalance as a per cent of GSDP.

TABLE 10: REVISED FISCAL POSITION OF THE STATE

	2020-21 (Rs.Crore)	2020-21 (as % to GSDP)
Own Revenue	109070.67	5.21
Own Tax	97941.50	4.68
Own Non-Tax	11129.17	0.53
Central Transfers	61096.69	2.92
Tax Devolution	24000.00	1.15
Grants	37096.69	1.77
Revenue Receipts	170167.36	8.13
Revenue Expenditure	231552.80	11.06
Capital Expenditure	36367.80	1.74
Revenue Deficit	-61385.4	-2.93
Fiscal Deficit	-99114.1	-4.73

On the expenditure side, the Government of Tamil Nadu had to incur emergency expenditures in the Context of COVID-19 pandemic to

provide relief to vulnerable sections and inter-state migrant workers in terms of financial assistance and free supply of rice, food kits and other essential commodities. The total sanctioned amount for this purpose as on 28th July, 2020 works out to Rs.6,262.31 crore of which Rs.4,355.24 crore is from general budget, Rs.1,756.62 crore is to be drawn from State Disaster Relief Fund and Rs.150.45 crore from other funds like funds of Tamil Nadu State Disaster Management Authority. The expenditure trend is likely to continue in the current year in order to successfully overcome the adverse effects of the pandemic.

IX. Recommendations

1. Reforms to fulfill additional borrowing conditions

In the package announced for reviving the economy, the Union Finance Minister has allowed the States to avail increased borrowing powers by 2 per cent of GSDP on fulfilling four sets of conditions. States can increase their borrowing by half a percent automatically without any conditions. An increase of another one per cent of GSDP can be availed on fulfilling four sets of conditions, achieving each condition enabling higher borrowing power by a quarter per cent. If three of the

four sets of conditions are achieved, an additional half a per cent can be availed.

The permission to avail additional borrowing space comes as a relief but the Centre has placed reform conditions. Of course, the Constitution allows the Union Government to impose any conditions on borrowing it may find appropriate. Article 293 (3) requires the Union Government to permit the States to borrow when they are indebted to it and Article 293(4) enables that, "A consent to borrow may be granted subject to such conditions, if any, as the Government of India may think it appropriate". However, there is no precedence of putting conditions on market borrowing by the States. Even in 2008, when the Government of India allowed the States to borrow additional 1.5 per cent of GDP in the wake of global financial crisis, there were no conditions stipulated.

Notwithstanding the above, the conditions have been imposed and the State Government may not have any option but to undertake reforms. The conditions specified are:

1. One nation, one ration card which requires linking Aadhar number into ration cards and installing point of sale machines in all fair price shops. It should be possible

to take measures to comply this condition.

2. Improvement in ease of doing business which requires (i) district level assessment of ease of doing business as Department of Promotion for Industry and Internal Trade norms, (ii) automatic renewal of State industrial, commercial licenses to businesses and (iii) making randomised inspections with prior notice and full transparency. The Finance Department of the State should work with the Department of Industry in Tamil Nadu to comply with this condition.
3. Power sector reforms which entail reducing aggregate technical and commercial (AT&C) losses, direct benefit transfers to farmers instead of lower tariffs and reducing the gap between average cost and average revenues. The Government has taken measures to reduce technical losses. However, instead of replacing free power consumption with direct benefit transfers, the Government has taken the alternative measure of reform of encouraging the farmers to solarize farm pumps. The farmers with grid connected pumps are being subsidized to install solar PV capacity up to two times the pump capacity. The subsidy comprises of Central

financial assistance amounting to 30 per cent of the benchmark or tender cost whichever is lower and 30 per cent subsidy by the State Government. For the remaining 40% cost to be borne by the farmer, 10 per cent has to be paid by him up front and bank loan can cover the remaining 30 per cent. The farmer has the advantage that s/he can use the power throughout the day unlike the power supplied through the grid which is limited to certain number of hours and s/he can sell the surplus power generated to the grid at the rate specified by the State Electricity Regulatory Commission. This also would require metering the consumption of electricity by farmers and that will help in properly accounting power consumption. However, the other deleterious of power subsidy on uncontrolled exploitation of underground water will continue. While the Government can do what is feasible, it is important to convince the Ministry of Finance that ensuring efficiency and avoiding losses in TANGEDCO is well on its reform agenda to avail the borrowing space of a quarter per cent of GDP. Also, like various economy measures introduced by the Government of Tamil Nadu, especially reduction of committed expenditure,

SPSUs like TANGEDCO can also explore such measures to reduce expenditure burden.

4. Urban local body reforms require the States to notify property tax floor rates according to circle property values and notify water and sewer charges. This reform is particularly important not only to fulfill the borrowing conditions but also to avail the urban local body grants recommended by the Fifteenth Finance Commission. The Commission has underlined the importance of property tax as a local revenue source and stated, "... to qualify for any grants for urban local bodies in 2021-22, States will have to appropriately notify floor rates and thereafter show consistent improvement in collection in tandem with the growth rate of State's own GSDP". Therefore, property tax reform should be taken on a priority basis by classifying different areas within the city in terms of their land values and differentiating the rates based on the type of construction as was done in Bangalore. In a situation where the tax has been stagnant for a long time, the reform could lead to the high increase of the tax in some cases and to make the reform acceptable, the increase may be capped in the initial

phase. The Bangalore Municipal Corporation capped the increase at 30 per cent of the existing payment when it carried out the reform in 2002 (see, <https://www.financialexpress.com/archive/bangalore-gets-it-right-on-property-taxes/809970/>). It is also to be noted that Property Tax reform suggested has already been recommended by the 5th State Finance Commission and we understand that steps for implementing are being taken. An effective implementation of the recommendations can significantly increase the property tax revenue in the State (See Appendix 1 for detailed recommendations of the Fifth State Finance Commission).

Even when the State Government receives the permission to borrow additional two per cent of GDP, that can cover only a portion of the revenue loss from own tax and non-tax revenues and tax devolution from the Centre. Therefore, considering the need for resources, undertaking the reforms are imperative.

2. Revenue Raising Reforms

I. Increase in Tax Revenues:

As mentioned above, the State Government has already taken steps to increase tax revenues from

excise duty/sales tax on alcoholic products and sales tax on petroleum products and motor vehicles tax. Any additional tax measures can be taken only after the revival of the economy and after observing the market conditions. Nevertheless, the State Government may take decisions on increasing taxes within its ambit depending on the response

i. As this report has to address the medium-term challenges of the Government, it is important to examine the evolution of GST. The expected revenue buoyancy from the tax has not been realized even before the COVID-19 crisis and the revenue collection has fallen much short of even the revised estimate. The reasons for this have to be found in the structure of the tax as well as the inability to stabilize the technology platform with adverse consequences on the compliance of the tax. Even after three years, the technology platform does not permit matching of input tax credit and annual returns are yet to be filed. More importantly, the compensation scheme stops after 2022-23. The State does not have maneuverability in determining the structure of the tax or its administration and is therefore, it is desirable to

make a representation to the Fifteenth Finance Commission that the period of compensating the States for the loss of revenue should be enhanced at least until the terminal year of the award of the Commission.

ii. The decision-making powers in regard to the structure and implementation of GST rests with the GST Council which has the Union Government as well as all the States and Union Territories with legislature. The Centre has one-third voting power and the remaining two-thirds is distributed equally among the States and Union Territories and any proposal for policy change can be carried when it secures 75% of the votes. Most of the smaller States which have low revenue base and depend on Central transfers do not have as much stake in the tax as a large State like Tamil Nadu, Maharashtra or Karnataka. Considering this, the State will have to raise the matter with similarly placed States and make a representation to amend the Constitution to have higher voting rights for the States which have greater stake in the collection of GST in determining the structure and operation of GST.

- iii. The Government classifies liquor into four categories namely Ordinary, Medium, Premium-1 and Premium-2. The Base price for each category is fixed and Excise duty is levied based on a rate affixed per proof litre for each category. In the recent revision of Excise Duty rates, the rates have been revised significantly upwards with differential rates for each category. Considering the need to improve the tax revenues from sale of liquor, the Government may consider creating further slabs within the categories of Medium and Premium brands and levy differential rates per proof litre so that additional revenue commensurate with the premium associated with the category is levied. In addition to this, as part of the Government policy on implementing phased prohibition of liquor, price increase is a way to curb intake of liquor and therefore the revision of rates may be taken up in a timely manner towards achieving this policy goal.
- iv. It is learnt that the specific rates of Motor Vehicles taxes in Tamil Nadu have not been revised for more than 15 years. A number of new models of motor vehicles have come into the market. Premium expensive models are also being sold. The Motor Vehicle Taxes being levied at present has not taken note of the developments. Hence, a revision of the Motor Vehicle Taxes is long overdue and would help raise additional revenue of about Rs.1,000 crore per year. This revision could be implemented early by the State Government.
- v. Rationalisation of Electricity tax rates should be considered by the Government. At present, the rates in Tamil Nadu on electricity tax are one of the lowest among the States in the Country. While 10 percent is the average value of tax levied in other States, it is only 10 paise per unit for consumption and 5 percent of captive consumption charge for sale of electricity in Tamil Nadu. The structure and rate of tax were last examined in 2003. The power and electricity markets have changed substantially in recent years. The tax structure and rates need to be updated to reflect these changes and capture all power transactions and ensure a level playing field. An additional revenue potential of Rs.1,500 to 3000 crore per year exists, based on the removal of certain notified exemptions for domestic

consumption. The Government may expedite the implementation of this reform.

II. Non-Tax Revenues

(i) Revision of Royalty: The Constitution assigns the power to harness major minerals to the Central Government and royalty payments are payable to the States. It is also stated that the royalty on mines and minerals cannot be changed more than once in three years. The last time the revision was made in 01.09.2014 and therefore, the revision is overdue. The State Government should represent to the Government of India to notify the revision at the earliest. In 2019-20, the State Government received the royalty payments of Rs.791.79 crore and this year it is budgeted to receive Rs.820 crore. The revision could substantially increase the State's revenues.

The State Government has the right to exploit the minor minerals and it receives seigniorage fees of Rs.228 crore. The last revision of the fees was made on 28.12.2017. The State Government should prepare

the revised structure of mineral concession fees/seigniorage fees and notify the same in January 2021 to raise additional revenue.

(ii) Regularising unauthorized constructions: Over the years, there have been several encroachments on Government land and unauthorised buildings have come up in various parts of major urban agglomerations in the State. While it is virtually impossible to evict the violators, the Government can at least raise resources from regularizing these violations. The Government of Karnataka, for example, has notified an ordinance for the Bangalore Development Authority to legalise unauthorized buildings in Bangalore that are at least 12 years old. Regularisation is done by asking the violator to pay certain proportion of the guidance value of the land. In Tamil Nadu, while the regularization scheme is already under implementation wherein fee is charged for regularizing constructions before a cut-off date. Regarding the amendment to Section 113-C of the Town and Country Planning Act which aims to regularize buildings

constructed before July 2007, final orders are awaited from the Hon'ble High Court of Madras regarding litigation on the issue. Government may look into alternative models of regularization and explore the possibilities of revenue augmentation through regularization by speedy disposal of legal cases.

- (iii) Hike in Service Charges and fees: Service charges and rates of saleable items in various Departments have to be increased by 25 per cent and thereafter indexed with inflation.
- (iv) Increasing Floor Space Index and raising revenue through transferable development rights: The Government notifies the floor space index (FSI) in metropolitan areas and the built-up space on the land has to adhere to the specified norm. The Government of Tamil Nadu has announced increase in FSI as 2.0 for Non High Rise Buildings and 3.25 for High Rise Buildings as per Tamil Nadu Combined Development and Building Rules (TNCDBR), 2019. This is a tool to bring down the cost of developed flats. Accordingly, the Government has issued orders to enable the Authorities

- to implement the decision of the Government. However, in the environmentally sensitive areas viz. Red Hills catchment Area, Aquifer Recharge Area the FSI restriction is continued as such and the increased FSI is not applicable to these areas. In order to achieve the increased FSI in smaller plots, the planning parameters in respect of setback, height of the building has been modified in the Tamil Nadu Combined Development and Building Rules, 2019 which has been prepared in line with the MBBL enacted by the Government of India. This should be implemented effectively both to garner revenue and to give fillip to the real estate sector.
- (v) The Report of the Comptroller and Auditor General (C&AG) on Tamil Nadu State Finances for 2017-18 draws attention to the low cost recovery in respect of irrigation projects in the State. The financial results of 5 major and 47 medium projects show that the revenue collections from these projects were just Rs.10 crore whereas the maintenance expenditure on these projects was Rs.321 crore and interest payment was Rs.131 crore, thus resulting in the net loss of

Rs.447 crore (Para. 1.8.1). Measures to increase water charges on these irrigation projects to cover higher proportion of the working expenses could bring in much needed additional revenues.

(vi) The C&AG's report also draws attention to the low returns received from large investments in public enterprises in the State (1.8.3). The Government has invested Rs.33579 crore in statutory Corporations, joint stock companies and cooperatives. While the opportunity cost of investments as measured by the average rate of interest on Government borrowings is 8.08 per cent, the average rate of return on the investments works out to a paltry 0.45 per cent. It is important for the Government to divest most of the commercial enterprises and the proceeds from the sale of land can be used to meet the severance pay of the employees and the remaining amount can be used for developmental purposes.

(vii) With increasing budgetary constraints, it has become necessary to identify alternate sources of financing for expanding future road development. The Government of Tamil Nadu has

developed four and six lane roads which have high potential for tolls. National Highways Authority of India (NHAI) already has a framework in place for tolling and is able to realise steady stream of revenue by leasing of tolls. Going one step ahead, Government of Tamil Nadu can look into securitising the tolls to generate additional revenue. A group of roads can be pooled to reduce traffic and other risks. Traffic studies can project the future revenues from tolls on these roads and such future revenues can be securitized through appropriate financial instruments. The proceeds of securitization will be utilized for investments into future road projects. The legal framework for tolling and securitization already exists through the Indian Tolls Act of 1851 which empowers State Governments to levy tolls on roads and bridges.

3. Expenditure Reforms

(i) The largest PSUs of the State Government are those in the power sector. With the overall debt of TANGEDCO and TANTRANSCO having risen to Rs.1.39 lakh crore as on 31.3.2020 and the run of

cash losses persisting, urgent steps are needed to tackle the financial health and the overall performance of the power sector utilities. Unless this is done, the financial difficulties of the power sector could overwhelm the State Government's fiscal health as well. Power tariffs had last been revised in 2014-15. In addition to the steps outlined in the section relating to the reforms in the power sector to be undertaken for availing the enhanced Open Market Borrowing limits, further steps to rationalize the tariff structure are urgently required. Both the State Government subsidy and the implicit cross subsidy for domestic power consumers need to be reduced. The various loopholes currently being exploited to avail higher subsidies as part of the existing billing practices of TANGEDCO particularly for consumers will also have to be plugged. Reduction in subsidy to domestic consumers will obviate the need for cross subsidization by higher charging for power consumed by commercial and industrial consumers. At a time, when the commercial and industrial sectors are facing serious challenges due to repeated lock

downs, this will reduce some burden on them.

- (ii) Similarly, the reduction in subsidy by levying higher charges on water supplied by TWAD and Chennai Metro Corporation will help in more careful utilization of water.
- (iii) The Finance Department of Tamil Nadu Government has taken the initiative of seeking Technical Assistance from the IMF on Modernising Budget Formulation and Managing Fiscal Risks. The IMF has submitted the report in February 2020 and the report makes important recommendations on improving Public Finance Management (PFM) in the State. The Finance Department is seized of the matter and should initiate the steps to improve PFM in the State, once the issue of meeting immediate challenges of COVID-19 recedes to the background.
- (iv) The Government of Tamil Nadu has constituted the Staff Rationalisation Committee to rationalise the staff structure in Government departments to identify non-essential posts in order to reduce the revenue expenditure. The Committee

was mandated to make suitable recommendations on other relevant administrative issues as well. Similarly, a Committee was constituted by the State Government to study the issues regarding the New Pension Scheme for Government servants. It is learnt that these Committees have submitted their reports. The recommendations of these Committees need to be evaluated and implemented at the earliest by the State Government.

4. Other Reforms

(i) Strengthening Infrastructure Financing Institutions:

There are multiple sector-specific Infrastructure financing institutions in Tamil Nadu, in the sectors of Energy, Transport and Urban Infrastructure. They need institutional strengthening and diversification of sectoral exposure to continue to fulfil the evolving prudential norms. Therefore, Tamil Nadu Government may consider merging the Tamil Nadu Power Finance and Infrastructure Development Corporation (TNPFC), the Transport Development Finance Corporation (TDFC)

and the Tamil Nadu Urban Finance and Infrastructure Development Corporation (TUFIDCO) to create a robust institution to spearhead financing of infrastructure projects in Tamil Nadu. Project Appraisal capacity in these institutions can be stepped up and financing of newer infrastructure sectors could also be opened up. Opportunities to tap larger financing from multiple sources including lines of credit could be explored. This can provide a fresh fillip to infrastructure financing while ensuring continued adherence to evolving prudential norms.

(ii) **Debt Swap Scheme:** There is a scope for reducing the average cost of Government debt-which is now at 8-9 per cent per annum. Interest rate on market borrowing now is at around 6.6 to 7.5 per cent. A carefully designed debt swap scheme can help reduce the burden of interest outgo from the State Budget.

(iii) **Streamlining welfare payments:** The State's firm commitment to the poor and vulnerable has resulted in an elaborate social protection

scheme. However, the system as it exists today requires a detailed review and streamlining which could improve the efficiency of utilisation of Government resources without reducing the coverage of the scheme.

(iv) Incomplete Projects: The C&AG's report has drawn attention to the large amount of public investment expenditure locked up due to inability to complete the projects in time (1.8.2). In 2017-18, there were 79 incomplete road projects and 55 building projects. The initial cost of these projects was Rs.1,536 crore and it was revised in 2017 to Rs.1,716.56 crore. So far, the Government has spent Rs.1,271.27 crore. It is important to undertake a detailed review of the projects and complete them sequentially by making adequate allocation of funds to avoid further cost and time over-runs.

(v) Strengthening Database for people on the move: A case has been made for the collection and maintenance of data on migrant workers, monitoring of their habitats and registration

of all non-formal workers, both regular and casual, as potential recipients of welfare support. The changed circumstances demand a presence of the State as the ultimate guarantor of welfare benefits to all people under its watch from "cradle to grave."

(vi) COVID Response Grants: Balancing between committed fiscal space and discretionary fiscal space will be a major challenge to increase allocation for social sector. The committed ones are interest payment, salaries and pension. These three together take away a significant part of the revenue. The discretionary space is small and it will further reduce due to the fall in revenue. The extra borrowing power of 2 per cent of GSDP provided in the stimulus package is not going to cover this gap. This is certainly going to enhance fiscal space but may not be sufficient for increasing allocation for socio-economic response. It can only help in maintain at the existing level of spending. A COVID response grant could provide additional resources to the States for better socio-economic response.

(vii) Resubmission of Memorandum to 15th FC:

The 15th Finance Commission has submitted its report for the year 2020-21. The State of Tamil Nadu may consider submitting a supplementary memorandum highlighting the fiscal shock and its requirement of additional fund.

On Sequencing Fiscal Response: Ensure that responses are sequenced in a manner that policy response help bring the economy back on track, enhance fiscal resources for the Government for public investment in social and economic sector and create a framework for sector specific differentiated response for full recovery. Five specific interventions keeping livelihood and economic recovery as the core of any intervention can be the core of this strategy:

- Enhancing Fiscal Space for Government to respond to COVID-19
- By providing security to life through increased social protection to the poor and marginalized. Enhanced social sector investment as things stabilizes.

- Reprioritization of expenditure: When it comes to revenue and capital expenditure, it has always been argued that capital expenditure is growth promoting. In the context of COVID-19, it is probably time to take a pause and enhance revenue expenditure for life and livelihood response. This would help arresting rapid contraction of fiscal space for redistributive spending especially for, poor, vulnerable, children, women and migrants. These expenditures should focus on social protection and socioeconomic recovery.
- Use of Local self-Government Institutions as the first responder to economic vulnerability at the household level needs to be done for effective response and delivery of services in a cost-effective manner.
- Honorable Chief Minister of Tamil Nadu had written to the Honorable Prime Minister for a COVID Response fund of

Rs.1 lakh crore on 28th March and sought Rs.9,000 crore from this fund for Tamil Nadu. The State should ask to the Union Government for creation of a COVID-Response fund for giving grants to the States of higher amount given the way economic and fiscal scenarios are unfolding. This fund should allow States to access based on schemes and programme for COVID-response developed by the States including schemes for livelihood support instead of "one-size fits all" design.

(viii) Strengthening Local Government Finance for COVID Response: In the context of COVID-19, capability of decentralized response is enormous and local Government can play a very effective role. Availability of finance is critical for that. Local Government finances in India are characterized by low level of fiscal autonomy both in terms of revenue and expenditure. Local Government s are mainly performing agency functions implementing various Central and State schemes.

Though, fiscal autonomy of local Government s cannot be increased across the country overnight, its importance cannot be undermined. One can only reiterate, with 73rd and 74th amendment, enabling framework exists and that should be strengthened. A study by NIPFP for the Tamil Nadu Fifth State Finance Commission revealed that at all India level, the average time taken by SFCs to submit their reports is around 32 months resulting in an average delay of about 16 months in submission of report. Moreover, most States also appear not to have acted promptly on the recommendations of SFCs by not placing the ATRs. before the State legislature in a timely manner. A few southern States including Tamil Nadu were exception to this trend. In the context of pandemic, then from financing point of view, following can be initiated in Tamil Nadu for effective response by the Local Governments:

(1) Strengthen some of the agency functions they are already doing. The most important one is MGNREGA. As it was mentioned "100 days should be strengthened and sustained." A quick analysis done shows that MGNREGA man-days generated at all India level is only 48 % vis-à-vis its potential during the last year.

It needs to be increased with more allocation and by creating demand with all the norms of social distance in place. Since additional Rs.40,000 crore has been allocated for the stimulus package, the Government of Tamil Nadu should use this opportunity to make resources available for the poor through effective implementation of MGNREGA in the State.

(2) The incidence of COVID-19 is mostly concentrated in urban areas. But with reverse migration to villages due to the lockdown, the role of Local self-governments will increase when it comes to quarantine, providing social protection and livelihood security. Adequate fiscal space should be provided for that. This is about claiming the space for local Governments in the context of COVID for life and livelihood.

(3) The Fifteenth Finance Commission has awarded Rs.90,000 crore as grants to local Governments and an additional Rs.4,400 crore to metropolitan areas for improving air quality particularly in winter. The overall grant to local bodies has increased by 8.07 per cent when compared with 2019-20. The Commission has allocated 50 per cent of the funds for

local bodies other than million plus urban agglomerations as tied funds for sanitation and maintenance of open defecation status and supply of drinking water, rainwater harvesting and water recycling. Using the FC transfer for COVID response remain limited as these are in a way tied. COVID Response grants for local Governments can be asked for in the changed context of COVID-19 from the Central Government.

Summary of Recommendations

1. Detailed study on the decline of tax buoyancy needs to be undertaken to understand the underlying reasons for its decline and take measures to improve the buoyancy.
2. State Government should re-prioritise expenditure to ensure priority for emergency COVID related expenditure such as health infrastructure, social security and welfare assistance to the vulnerable and poor in the form of cash and kind, continuance of essential welfare programmes as well as focus on growth-reviving capital expenditure to give impetus to economic recovery.
3. State Government to take necessary steps to fulfil the

conditionalities prescribed by the Government of India so as to avail the additional Open Market Borrowing of 2 percent of GSDP.

4. State Government may make a representation to the Fifteenth Finance Commission that regarding the GST, the period of compensating the States for the loss of revenue should be enhanced at least until the terminal year of the award of the Commission. State may also consider submitting a supplementary memorandum to the Commission, highlighting the fiscal shock and its requirement of additional fund.
5. Raise the issue on amending the Constitution of India to get higher voting rights for States having greater stake in the collection of GST in determining the structure and operation of GST, with the GST Council.
6. Create further slabs within the categories of medium and premium brands of liquor sold through TASMAL and levy differential rates per proof litre so that additional revenue commensurate with the premium of the brand is levied.
7. The Motor Vehicle Taxes should be revised which is likely to earn additional revenue of Rs.1,000 crore per year.
8. State Government to implement Rationalisation of Electricity duty rates at the earliest which will raise an additional revenue of Rs.1,500 crore to Rs.3,000 crore an year.
9. State Government to represent to the Government of India for notifying the revision of rates of major minerals at the earliest so as to enhance the revenue received as royalty from harnessing major minerals.
10. State Government should prepare the revised structure of minor mineral concession fees/ seigniorage fees and notify the same in January 2021 to raise additional revenue.
11. The Indian Tolls Act of 1851 empowers State Governments to levy tolls on roads and bridges and its securitization. Government of Tamil Nadu can look into tolling the four and six lane roads developed by it and securitize those tolls to generate additional revenues.

The proceeds of securitization can be utilized for investment in future road projects.

12. Reduction in State Government energy subsidy and implicit cross subsidy to domestic consumers to be implemented, which will obviate the need for cross subsidization by higher charging for power consumed by commercial and industrial consumers. The loopholes in the existing energy billing practices to avail higher subsidy should be plugged.
13. The recommendations of the Staff Rationalisation Committee and the Committee to study the issues regarding the New Pension Scheme for Government servants should be evaluated and implemented at the earliest by the State Government.
14. Seeking COVID response grant from the Government of India for better socio-economic response.
15. Government to divest most of the commercial Public sector enterprises and use the proceeds from the sale of land to meet the severance pay of the employees and for developmental purposes.
16. Ensure that responses are sequenced in a manner that

help bring the economy back on track, enhance fiscal resources for the Government for public investment in social and economic sector and create a framework for sector specific differentiated response for full recovery. This may be achieved through a six step intervention namely enhancing fiscal space for Government, expanding social safety net, re-prioritisation of expenditure, use of Local self-Government Institutions as the first responder to economic vulnerability at the household level and seeking for a COVID response fund from Government of India.

17. Strengthening Local Government Finance for COVID Response through enhancing existing agency functions like increased allocation for MGNREGS with all the norms of social distance in place. Government of Tamil Nadu should effectively use the additional grants provided by the Government of India under the stimulus package by making the resources available for the poor through effective implementation of MGNREGS. The State Government to request the Government of India for COVID Response grants for local

Government s in the changed context of COVID-19.

18. Initiate steps to improve Public Financial Management in Tamil Nadu based on the recommendations of the IMF Technical Assistance Report 2020, once the immediate challenges of COVID-19 recedes to the background.
19. Government of Tamil Nadu may merge TNPFC, TDFC and TUFIDCO to create a robust institution to spearhead financing of infrastructure projects in the State. This will lead to institutional strengthening, diversification of sectoral exposure and give fillip to infrastructure financing while ensuring continued adherence to evolving prudential norms.
20. Design a debt swap scheme to reduce the burden of interest outgo from the State Budget.
21. Detailed review and streamlining of welfare schemes which to improve the efficiency of utilisation of Government resources without reducing the coverage of the schemes.
22. Undertake detailed review of the pending projects and complete them sequentially by making adequate allocation of funds to avoid further cost and time over-runs.
23. Government may look into alternative models of regularization of unauthorised constructions and explore the possibilities of revenue augmentation through regularisation.
24. Service charges and rates of saleable items in various Departments have to be increased by 25 per cent and thereafter indexed with inflation.
25. The State Government should effectively implement the revised norms of premium Floor Space Index to garner revenue and give fillip to real estate sector.
26. Measures to increase water charges on irrigation projects to cover higher proportion of the working expenses may be implemented to augment revenues.
27. Reduction in subsidy by levying higher charges on water supplied by TWAD and Chennai Metro water Board (CMWSSB) will help in more careful utilization of water.

APPENDIX 1

Recommendations on Property Tax by the Fifth State Finance Commission

- i. The target for Property Tax collection for ULBs should be fixed to reach 0.60 percent of GSDP by the last year of award period i.e., 2021-22.
- ii. The coordination between the Town Planning and Revenue Wings should be structurally strengthened through an automated work flow process with data sharing regarding planning permissions, construction and completion to ensure that properties are brought to taxnet promptly.
- iii. In Chennai, where the powers to permit different types of buildings are with different authorities, ranging from the Corporation to CMDA to the Government, an online link between the databases of CMDA and Corporation of Chennai would ensure a fool proof system of updation of Property Tax registers. This could be done alongside the automation and online process proposed to be introduced for Building Plan clearances in CMDA.
- iv. GIS mapping of all ULBs to bring left out properties to assessment should be completed in all Municipalities and Corporations. A special drive should be launched for Town Panchayats as well to cover all Town Panchayats in a phased manner during the award period.
- v. The Computerisation of the Property Tax system must be speedily completed and online Self Assessment of Property Tax should be implemented with the necessary enabling amendments to the Tamil Nadu District Municipalities Act, 1920 and other City Municipal Corporations Act.
- vi. Property Tax Clearance Certificate may be made mandatory to acquire the Government benefits and to avail the service like electricity connections.
- vii. Greater awareness building through IEC programmes to pay Property Tax can be undertaken, similar to the advertisement campaigns undertaken for Income Tax and Service Tax payment. The expenditure on such campaigns can be shared on a pro rata basis by the ULBs. The IEC programmes could also involve the Residents Welfare Associations, local NGOs and Chambers of Commerce.
- viii. Prompt payment rebates should be offered to encourage payment before time.

- ix. Incentives can be given to Wards and Streets which show the best collection performance, in terms of percentage of collection by implementing small special schemes exclusively in that area.
- x. Penalty should be imposed for belated payments. Tax defaulters list should be published by the ULBs soon after the close of the financial year.
- xi. "Any time anywhere" remittance systems should be enabled for Property Tax in all ULBs.
- xii. A mechanism should be initiated by the Commissioner of Municipal Administration to ensure that Department wise and local body wise demand for Property Tax are consolidated and adequate budgetary provisions sought from the Finance Department under the relevant heads of account to prevent accumulation of arrears on State Government buildings.
- xiii. Government should take up necessary amendments to Article 285 of the Constitution to make Central Government, buildings liable for Property Tax. In the interim, Ministry of Urban Development, Government of India must be impressed upon to make statutory provisions enabling levy of service charges to replace the current executive instructions which have proved ineffective.
- xiv. Strict instructions should be issued to the Urban Local Bodies not to encourage write off of Property Tax quoting invalid reasons since properties are stationary.
- xv. The differences in the methodology of tax calculation between properties belonging to the period prior to 1993 and post 1993 should be done away with and all urban properties should be treated alike.
- xvi. An Area Based Property Assessment System should be introduced for Property Tax. The value of the property should be determined based on the guideline value of the land, the value of the building, the built up area, type and quality of construction, number of floors and its usage. The Government should mandate the adoption of the new methodology during the next revision of Property Tax.
- xvii. As the proposed methodology for Property Tax assessment will enable an automatic calculation of the tax to be paid based on data, some of which, like the

guideline value of the land is already available online and the rest could be provided by the assessee directly, like the type of building, plinth area, etc. The system of self-assessment could then be effectively utilized, with provisions for scrutiny and audit to ensure that the self-assessment has been done correctly. Filing of self-assessment return by the taxpayer was introduced in Tamil Nadu in 1998. The response from the property owners to this system has not been encouraging. The system has to be popularized by simplifying it and making it an on-line automated process, in which the tax payer would be informed about the amount due immediately on filling in the requisite details about the property.

- xviii. The Property Tax Board should be activated and disputes relating to valuation of property referred to the Board for speedy resolution. (para 5.54)
- xix. The list of tax exempted properties under section 81 of the District Municipalities Act 1920 should be reviewed and minimized, specifically self-financing educational institutions should be brought under the Property Tax net by suitably amending the Act. (para 5.57)
- xx. Cell Phone towers and buildings on which such towers are situated should be assessed to Property Tax as commercial buildings with the levy based on the height and capacity of the cell phone towers. (para 5.58)
- xxi. Despite the provisions contained in the ULB Acts, the quinquennial general revision of Property Tax has not been done since 2008 and since 1998 for some ULBs. There should be no further postponement of the general revision. In the event of further postponements of general revision, the Government should compensate the ULBs and CMWSSB for the loss of revenue. (para 5.60)
- xxii. Section 81(A) of the District Municipalities Act, 1920 should be seen as only a safeguard for revenue, whereby the local body is stopped from either doing away with a tax or reducing the rate of levy. Government may issue suitable instructions reiterating the above position and thereby ensure that timely general revision of taxes is carried out by the respective ULBs. (para 5.61).

Annexure-1



ABSTRACT

COVID-19 - High Level Committee to advise on the medium term response - Constituted - Orders – Issued.

FINANCE (OP-M) DEPARTMENT

G.O.(Ms.) No.242.

**Dated: 09.05.2020,
Saarvari, Chithirai 26,
Thiruvalluvar Aandu,2051
Read:**

- 1. G.O.(Ms)No. 238, Public (Special B) Dept., Dated 16.04.2020**
- 2. G.O.(Rt)No. 1235, Public (Special B) Dept., Dated 17.04.2020**

* * * * *

ORDER:

In the Government Orders read above, the Government constituted an Expert Committee headed by Additional Chief Secretary, Finance with 21 officials / non-officials as Members to consult stakeholders, generate suggestions and to submit a report to the Government on the way forward, after 20.4.2020 and the strategies to take measures in the post lockdown period.

2. The lockdown and the social distancing measures required to be taken post lockdown, to limit the spread of the COVID-19 virus are bound to have a medium term impact on the economy of Tamil Nadu including different sectors like Agriculture, Industries, Services including tourism, construction and real estate, retail trade and so on. The impact of the crisis on the finances of the Government of India and the Government of Tamil Nadu will be considerable. The Government of India and the Reserve Bank of India responses to the crisis will also have macro economic consequences. Hence, it is essential to deliberate on and to make recommendations on the policy measures to be undertaken by the State Government to bring the economy back to the

expected growth trajectory, ensuring that the needs and requirements of the poor are addressed, the supply of essential commodities is maintained undisturbed, while limiting the longer term fiscal deterioration.

3. Therefore the Government has decided to constitute a High Level Committee of economists and experts and officials to advise the Government on the medium term policy response. The Committee may also interact and seek views from industry bodies, trade associations, stakeholders, economic and other experts in India and overseas.

4. In the reply to the general discussion on the Budget, on 20th February 2020, the Hon'ble Deputy Chief Minister had announced that an expert committee would be constituted to recommend measures to improve the tax: GSDP ratio of Tamil Nadu. In the present context where the COVID-19 pandemic has posed much more serious economic and fiscal challenges, the above said expert committee may be requested to examine the fiscal challenges facing Tamil Nadu and the way forward to improve the fiscal position including the tax :GSDP ratio as part of the larger brief of suggesting policy measures to improve the economic situation.

5. **Accordingly, that Government hereby constitutes a High Level Committee headed by Dr. C.Rangarajan, former Governor of Reserve Bank of India, former Chairman of the Prime Minister's Economic Advisory Council and currently Chairman, Madras School of Economics with economists, experts & officials as Members annexed in this order.**

6. The terms of reference of the High Level Committee are as follows:

- (i) Assess the overall immediate and medium term impact of the COVID-19 pandemic on different sectors of Tamil Nadu's economy, including the impact of the lockdown; additional costs and implications due to social distancing and other pre-cautionary measures.
- (ii) Assess the opportunities and threats in the short and medium term.
- (iii) Measures required to help the important sectors of the economy to overcome the impact of COVID-19 pandemic.
- (iv) Identify specific reform measures to be taken by the State Government to support and promote the growth of important sectors of the economy.

ANNEXURE

- (v) Assess the impact of the crisis on State Government's fiscal situation and way forward to improve the fiscal position, including increasing the tax : GDP ratio and diversifying revenue sources and re-prioritizing expenditure.
- (vi) The issues, including fiscal issues and economy promotion measures, the State Government should take up with Government of India for necessary action.
- (vii) Identify possible sources of financing and funding for different sectors including infrastructure projects, small businesses and other enterprises.

7. The Additional Chief Secretary to Government, Finance Department shall be the co-ordinator of the High Level Committee constituted in para 5 of above.

8. The committee shall submit its final reports to the Government within 3 months time and also submit interim report as it may deem fit on as required by Government.

9. The High Level Committee constituted in para 5 of above shall be treated as First Class Committee for purpose of payment of TA/DA.

(BY ORDER OF THE GOVERNOR)

**K.SHANMUGAM,
CHIEF SECRETARY TO GOVERNMENT**

To

The Chairman and Members of the High Level Committee.
All Secretaries to Government, Secretariat, Chennai-9.

Copy to

Secretary to Hon'ble Chief Minister.
Special PA to Hon'ble Deputy Chief Minister.
Senior PPS to Chief Secretary.
Public (Special A / Special B) Department, Chennai-9.

Stock file / Spare copy.

-/ Forwarded: By Order /-


9/15/2020
JOINT SECRETARY TO GOVERNMENT

ANNEXURE

(G.O.Ms.No.242, Finance (OP-M) Department, dated: 09.05.2020)

LIST OF MEMBERS OF THE HIGH LEVEL COMMITTEE

S.No.	CHAIRMAN
1.	Dr. C.Rangarajan, Chairman, Madras School of Economics (former Governor, RBI).
	MEMBERS
2.	Thiru N.Narayanan, I.A.S.(Retd), former Chief Secretary.
3.	Dr. P.Duraisamy, Vice Chancellor, University of Madras, Chennai-5.
4.	Dr. N.Kumar, Vice-Chancellor, Tamil Nadu Agriculture University.
5.	Dr. K.R.Shanmugam, Director, Madras School of Economics.
6.	Prof. P.G.Babu, Director, Madras Institute of Development Studies.
7.	Thiru A.Vellayyan, former Chairman, Murugappa Group.
8.	Thiru N.Srinivasan, Vice Chairman & M.D., The India Cements Ltd.,
9.	Thiru Venu Srinivasan, Chairman, TVS Motors Limited
10.	Tmt. Padmaja Chunduru, Managing Director, Indian Bank

ANNEXURE

11.	Thiru P.N.Vasudevan, Managing Director and CEO, Equitas Bank.
12.	Dr. M.Govinda Rao, Member, 14 th Finance Commission / Public Finance Expert.
13.	Prof. M.Suresh Babu, IIT, Madras.
14.	Thiru Pinaki Chakraborty, Co-ordinator, UNICEF, Chennai.

GOVERNMENT OFFICIALS	
15.	Additional Chief Secretary to Government, Finance Department, Secretariat, Chennai-9. (Co-ordinator)
16.	The Principal Secretary to Government, Industries Department, Secretariat, Chennai-600009.
17.	The Principal Secretary to Government, Agriculture Department, Secretariat, Chennai-600009.
18.	The Principal Secretary to Government, Animal Husbandry & Fisheries Department, Secretariat, Chennai-600009.
19.	The Principal Secretary to Government, Housing & Urban Development Department, Secretariat, Chennai-600 009.
20.	The Secretary to Government, Information & Technology Department, Secretariat, Chennai-600009.

ANNEXURE

21.	The Principal Secretary to Government, MS&ME Department, Secretariat, Chennai-600009.
22.	The Addl. Chief Secretary to Government, Tourism & Culture Department, Secretariat, Chennai-600 009.
23.	The Principal Secretary to Government, HHT & K Department, Secretariat, Chennai-600 009.
24.	The Additional Chief Secretary to Government, Labour & Employment Department, Secretariat, Chennai-600 009.

**K.SHANMUGAM,
CHIEF SECRETARY TO GOVERNMENT**

// TRUE COPY //


9/5/2020
JOINT SECRETARY TO GOVERNMENT

ANNEXURE-2

EXPERTS & STAKEHOLDERS WHO GAVE SUGGESTIONS

Industry, Trade and Commerce

Thiru/ Tmt./ Selvi

- 1 K. Balasubramanian,
Hony. Genl. Secretary,
Chennai District Small Scale Industries
Association,
Chennai-600 032.
- 2 V. Lakshminarayananasamy,
President,
The Indian Chamber of Commerce and
Industry,
Coimbatore-641 018.
- 3 Raja M. Shanmugam,
President,
Tiruppur Exporters Association,
Tiruppur-641 607.
- 4 R. Ramamurthy,
President,
CODISSIA,
Coimbatore-641 018.
- 5 R. Selvam, I.A.S.,
Executive Director,
Council for Leather Exports,
Chennai-600 008.
- 6 Shuba Kumar,
Chairman,
Automotive Component Manufacturers
Association of India,
Southern Region, Chennai-600 006.
- 7 A.N. Sujeesh,
President,
Amabattur Industrial Estate
Manufacturers Association,
Chennai-600 058.
- 8 S. Thyagarajan,
President,
SIPCOT,
Irunkattukotai Manufactures Association,
Kancheepuram-602 117.
- 9 K. Selvaraju,
Secretary General,
Southern India Mills Association,
Coimbatore-641 018.

Academician / Subject Experts

- 1 C. Ponnaiyan,
Vice Chairman,
State Development Policy Council,
Chepauk, Chennai-600 005
- 2 Dr. P.Anbalagan,
Associate Professor,
Presidency College,
Chennai-600 005.
- 3 Dr. B.P.Chandra Mohan,
Retired Faculty Member,
Department of Economics,
Presidency College,
Chennai-600 005.
- 4 Dr. A.Duraisamy,
Associate Professor,
XIME , Chennai-602 105.
- 5 Dr. D.Janagam,
Associate Professor,
Periyar University,
Salem-636 016.
- 6 Dr. K.Jayaraman
Associate Professor,
Department of Economics,
Periyar University,
Salem-636 016
- 7 Prof. V.R.Muraleedharan,
Coordinator,
Center for Technology and Policy,
IIT-M, Chennai-600 036.
- 8 Paul P. Appasamy,
Madras School of Economics,
Chennai-600 025.
- 9 Raghuram Rajan,
Former Governor,
Reserve Bank of India,
Professor, University of Chicago.
- 10 Dr. Sugantha Ramamoorthy,
Associate Professor,
Lady Doak College,
Madurai-625 002.
- 11 Dr. S.N. Sugumar,
Professor and Head,
Department of Economics,
VISTAS,
Chennai-600 117.

Academician / Subject Experts

- 12 D. Swaminathan, IES (Retd.)
Director,
Department of Expenditure,
Ministry of Finance,
Government of India.
- 13 Dr. Tharcis Albin,
Associate Professor of Economics,
St.Xavier's College,
Palayamkottai-627 002.
- 14 Dr. S.Theenathayalan,
Head of Department of Economics,
Madura College,
Madurai-625 011.
- 15 Dr. Ulaganathan Sankar,
Honorary Professor,
Madras School of Economics,
Chennai-600 025.
- 16 Dr. D.B.Usharani,
Head of Department of Economics,
Ethiraj College,
Chennai-600 008.
- 17 Dr. X.Vincent Jayakumar,
Assistant Professor of Economics,
Ramakrishna Mission Vivekananda
College,
Chennai-600 004.

Farmers' Associations

- 1 Thiru P.Kalyana Sundaram,
National Organisor,
Self Sufficient Green Villages Foundation,
Cauvery Delta Districts, Tamil Nadu.
- 2 Secretary,
Planters Association of Tamil Nadu,
Coimbatore-641 018.
- 3 Thiru. Venkatapathy,
Head of Tamil Nadu and Puducherry
Sugar Mills Farmers Union,
Cuddalore-607 104.

Economic Editors

- 1 Narasimhan,
Business Standard
- 2 Sangeetha,
Assistant Editor,
Financial Chronicle,
Chennai.

Political Parties & Trade Unions

- 1 K.Balakrishnan,
Secretary, Communist Party of India
(Maxist),
Tamil Nadu State Committee,
Chennai-600 017.
- 2 G.P. Sarathy,
State President,
Nationlist Congress Party,
Chennai-600 106.

Others

- 1 C. Preetha
Managing Director
Sharvas Constructions (India) Private Ltd.
- 2 M.L. Ravi,
President,
Desiya Makkal Sakthi Katchi,
Chennai-600 079.
- 3 R Sudarsan,
Champsoft Consultants Pvt. Ltd.,
Chennai-600 017.
- 4 Thirupuvanam Pattu Kooturavu Sangam,
Thirupuvanam-612 103.

ANNEXURE-3

LIST OF ABBREVIATIONS

S. No.	ABBREVIATION	FULL FORM
1	AALAI	Active Applied Learning And Innovation
2	AED	Agricultural Engineering Department
3	ALAI	Assistance for Learning Acceleration of the Individual
4	APEDA	Agricultural and Processed Food Products Export Development Authority
5	API	Active Pharmaceutical Ingredients
6	APMC	Agricultural Produce Market Committee
7	ARHC	Affordable Rental Housing Complex
8	ASDC	Apex Skill Development Centre
9	ASHAs	Accredited Social Health Activist
10	ATGC	Accelerated Translational Grant for Commercialization
11	AYUSH	Ayurveda, Yoga, Unani, Siddha and Homeopathy
12	B2B	Business to Business
13	BBMP	Bruhat Bengaluru Mahanagara Palike
14	BCG	Bacille Calmette-Guerin
15	BCP	Business Continuity Plan
16	BIRAC	Biotechnology Industry Research Assistance Council
17	BMTPC	Building Material and Technology Promotion Council
18	BOCW	Building and Other Construction Workers
19	BoD	Board of Directors
20	BS	Bharat Stage
21	CAPS	Centre for Advanced Protein Studies
22	CARDS	Centre for Agriculture and Rural Development Studies
23	CBIC	Chennai-Bangalore Industrial Corridor
24	CC/OD	Cash Credit /Over Draft
25	CCMB	Centre for Cellular and Molecular Biology
26	CDBR	Combined Development and Building Rules
27	CEO	Chief Executive Officer
28	CESU	Central Electricity Supply Utility
29	CGS	Credit Guarantee Scheme
30	CGTMSE	Credit Guarantee Fund Trust for Micro and Small Enterprises
31	CHC	Custom Hiring Centre
32	CHCs	Community Health Centres
33	CII	Confederation of Indian Industry
34	CKIC	Chennai-Kanniyakumari Industrial Corridor
35	CLSS	Credit Linked Subsidy Scheme
36	CMCHIS	Chief Minister's Comprehensive Health Insurance Scheme
37	CMIE	Centre for Monitoring Indian Economy
38	CORUS	Covid Relief and Upliftment Scheme
39	CRAMS	Contract Research and Manufacturing Services

ANNEXURE

S. No.	ABBREVIATION	FULL FORM
40	DBT	Department of Bio Technology
41	DCR	Development Control Regulations
42	DDU-GKY	Deen Dayal Upadhyaya Grameen Kaushalya Yojana
43	DIC	District Industries Centre
44	DIDF	Dairy Processing & Infrastructure Development Fund
45	DISCOM	Distribution Companies
46	DISH	Directorate of Industrial Safety and Health
47	DPIIT	Department of Promotion of Industry and Internal Trade
48	ECB	External Commercial Borrowings
49	ECLG	Emergency Credit Linked Guarantee Scheme
50	EDP	Entrepreneurship Development Programme
51	EEZ	Exclusive Economic Zone
52	EFA	Export Finance Advisor
53	EGLG	Emergency Credit Linked Guarantee Scheme
54	ELCOT	Electronic Corporation of Tamil Nadu
55	EMC	Electronic Manufacturing Cluster
56	EPF	Employees' Provident Fund
57	ESDM	Electronics System Design and Manufacturing
58	ESI	Employee State Insurance
59	EWS	Economically Weaker Section
60	F&B	Food and Beverage
61	FAITH	Federation of Associations in Indian Tourism & Hospitality
62	FAO	Food and Agricultural Organization
63	FAR	Floor Area Ratio
64	FDI	Foreign Direct Investment
65	FEE	Foreign Exchange Earnings
66	FICCI	Federation of Indian Chamber of Commerce and Industries
67	FIs	Financial Institutions
68	FMCG	Fast Moving Consumer Goods
69	FPO	Farmers Producer Organization
70	FSI	Floor Space Index
71	FTAs	Foreign Tourist Arrivals
72	GCA	Gross Cropped Area
73	GECL	Guaranteed Emergency Credit Line
74	GECLS	Guaranteed Emergency Credit Claim Scheme
75	GIS	Geographical Information System
76	GLP	Good Laboratory Practice
77	GMP	Good manufacturing practice
78	GoI	Government of India
79	GoTN	Government of Tamil Nadu
80	GPS	Global Positioning System
81	GSDP	Gross State Domestic Product

ANNEXURE

S. No.	ABBREVIATION	FULL FORM
82	GST	Goods and Service Tax
83	GSVA	Gross State Value Added
84	GVA	Gross Value Added
85	HFC	Housing Finance Corporation
86	HLC	High Level Committee
87	HML	Harmonized Master List
88	HR&CE	Hindu Religious and Charitable Endowments
89	HWC	Health and Wellness Centre
90	IATO	Indian Association of Tour Operators
91	IBM	In Board Motors
92	ICDS	Integrated Child Development Services
93	ICRISAT	International Crops Research Institute for the Semi-Arid Tropics
94	ICU	Intensive Care Unit
95	IEC	Import and Export Code
96	IFPRI	International Food Policy Research Institute
97	IGST	Integrated Good and Services
98	ILO	International Labour Organization
99	IMF	International Monetary Fund
100	IMFS	Indian-made Foreign Liquors
101	IMR	Infant Mortality Rate
102	IOL	Intraocular Lens
103	IoMT	Internet of Medical Things
104	IPB	Investment Promotion Bureau
105	ISMW	Inter-State Migrant Workmen
106	ITES	Information Technology Enabled Services
107	IVD	In Vitro Diagnosis
108	JICA	Japan International Cooperation Agency
109	JLG	Joint Liability Group
110	JnNURM & RAY	Jawaharlal Nehru Urban Renewal Mission & Rajiv Awas Yojana
111	KCC	Kissan Credit Card
112	KfW	Kreditanstalt für Wiederaufbau (Credit Institute for Reconstruction)
113	KSMs	Key Starting Materials
114	KVK	Krishi Vigyan Kendra
115	KYC	Know Your Customer
116	LLPD	Lakh Liters Per Day
117	LPI	Logistics Performance Index
118	LTRO	Long Term Repo Operation
119	MBBL	Model Building By Laws
120	MEIS	Merchandise Exports from India
121	MFE	Micro Food Enterprises
122	MFI	Micro Finance Institutions

ANNEXURE

S. No.	ABBREVIATION	FULL FORM
123	MFPE	Market Facilitation Programme Enrollment
124	MGNREGS	Mahatma Gandhi National Rural Employment Guarantee Scheme
125	MICE	Meetings, Incentives, Conferences & Exhibitions
126	MLALAD	Member of Legislative Assembly Local Area Development
127	MLHP	Middle Level Health Care Provider
128	MOD	Memoranda of Deposit
129	MoHUA	Ministry of Housing and Urban Affairs
130	MSDA	Mission on Sustainable Dryland Agriculture
131	MSE	Micro and Small
132	MSME	Micro, Small and Medium Enterprises
133	MSP	Minimum Support Price
134	M-TIPB	MSME - Trade and Investment Promotion Bureau
135	NADP	National Agriculture Development Programme
136	NBFC	Non-Banking Finance Companies
137	NCAER	National Council of Applied Economic Research
138	NCBS	National Center For Biological Sciences
139	NCCS	National Centre For Cell Science
140	NCDs	Non Communicable Diseases
141	NCR	National Capital Region
142	NEEDS	New Entrepreneur Cum Enterprise Development Scheme
143	NEET	National Eligibility cum Entrance Test
144	NEP	National Education Policy
145	NER	National Enrollment Ratio
146	NIDA	NABARD Infrastructure Development Assistance
147	NIPFP	National Institute of Public Finance & Policy
148	NIPHM	National Institute of Plant Health Management
149	NMSA	National Mission for Sustainable Agriculture
150	NPAR	Northern Port Access Road
151	NPCI	National Payments Corporation of India
152	NPTTEL	National Programme on Technology Enhanced Learning
153	NSE	National Stock Exchange
154	N-SIPI	State Investment Potential Index
155	NWR	Negotiable Warehouse Receipt
156	OBM	Out Board Motors
157	OEM	Original Equipment Manufacturer
158	PE Funds	Private Equity Funds
159	PHCs	Primary Health Centres
160	PKVY	Paramparagat Krishi Vikas Yojana
161	PLI	Production Linked Incentive
162	PM-AASHA	Pradhan Mantri – Annadata Aya Sanrakshan Abhiyan
163	PMAY	Pradhan Mantri Awas Yojana

ANNEXURE

S. No.	ABBREVIATION	FULL FORM
164	PMFBY	Pradhan Mantri Fasal Bima Yojana
165	PMGKP	Pradhan Mantri Garib Kalyan Yojana
166	PMKSY	Pradhan Mantri Krishi Sinchayee Yojana
167	PMMSY	Pradhan Mantri Matsya Sampada Yojana
168	PPP	Public Private Partnership
169	PSB	Public Sector Bank
170	PSL	Priority Sector Lending
171	QR	Quick Read
172	RE & CS Act	Regulation of Employment and Conditions of Service Act
173	RERA	Real Estate Regulatory Authority
174	RLF	Revolving Loan Fund
175	ROI	Rate of Interest
176	RRB	Regional Rural Bank
177	RSETI	Rural Self Employment Training Institutions
178	SAAS	Software As A Service
179	SBGF	State Balanced Growth Fund
180	SCERT	State Council of Education Research and Training
181	SDG	Sustainable Development Goal
182	SFI	State Financial Institution
183	SHG	Self Help Group
184	SIDCO	Small Industries Development Corporation
185	SIPCOT	State Industries Promotion Corporation of Tamil Nadu
186	SLBC	State Lever Banker's Committee
187	SMA	Special Mention Account
188	SME	Small & Medium Enterprise
189	SMP	Skimmed Milk Powder
190	SPF	Specific Pathogen Free
191	SPV	Special Purpose Vehicle
192	SRO	Stamp and Registration Office
193	SSEPERS-ATMA	Support to State Extension Programmes for Extension Reforms - Agricultural Technology Management Agency
194	TA	Tentative Actuals
195	TACTV	Tamil Nadu Cable Television
196	TANGEDCO	Tamil Nadu Generation and Distribution Corporation
197	TANSEDA	Tamil Nadu State Seed Development Agency
198	TANTRANSCO	The Tamil Nadu Transmission Corporation
199	TFC	Technology Facilitation Centre
200	TIDCO	Tamil Nadu Industrial Development Corporation
201	TIFAC	Technology Information, Forecasting and Assessment Council
202	TIG	Technology Innovation Grant
203	TIIC	Tamil Nadu Industrial Investment Corporation
204	TLTRO	Targeted Long Term Repo Operation

ANNEXURE

S. No.	ABBREVIATION	FULL FORM
205	TMT	Thermo Mechanical Treatment
206	TNAU	Tamil Nadu Agricultural University
207	TNBFA	Tamil Nadu Business Facilitation Act
208	TNCEA	Tamil Nadu Clinical Establishment
209	TNeGA	Tamil Nadu e-Governance Agency
210	TNEMIS	Tamil Nadu Education Management Information System
211	TNGIM	Tamil Nadu Global Investors Meet
212	TNIF	Tamil Nadu Infrastructure Fund
213	TNIFMC	Tamil Nadu Infrastructure Fund Management Corporation
214	TNOCD	Tamil Nadu Organic Certification Department
215	TNPCB	Tamil Nadu Pollution Control Board
216	TNSAMB	Tamil Nadu State Agricultural Marketing Board
217	TNSCB	Tamil Nadu Slum Clearance Board
218	TNSDC	Tamil Nadu Skill Development Corporation
219	TNSFAC	Tamil Nadu Small Farmers Agri-business Consortium
220	TNSWAN	Tamil Nadu State Wide Area Network
221	TOP	Tamil Nadu Organic Produce
222	ToR	Terms of Reference
223	ToT	Training of Trainers
224	TReDS	Trade Receivables electronic Discount System
225	TRIPS	Trade Related Intellectual Property Rights
226	TSP	Telecom Service Providers
227	UAM	Udyog Aadhaar Memorandum
228	UCB	Urban Co Operative Bank
229	UDI	Unified Digital Infrastructure
230	UDS	Undivided Share of Land
231	UGC	University Grants Commission
232	UHT	Ultra-High Temperature
233	ULBs	Urban Local Bodies
234	UPHCs	Urban Primary Health Centres
235	UYEGP	Unemployed Youth Employment Generation Programme
236	VAT	Value Added Tax
237	VGf	Viability Gap Funding
238	VHN	Village Health Nurse
239	WFH	Work From Home
240	ZED	Zero Defect Zero Effect