

ECONOMIC AND FISCAL SHOCK OF COVID-19 ON KERALA

SOCIO ECONOMIC RESPONSE AND MACRO ECONOMIC RECOVERY



May 2020



(An Autonomous Institution of Government of Kerala)

GIFT Campus, Thiruvananthapuram, Pin-- 695017, Kerala, India.

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Socio Economic Response and Macroeconomic Recovery

Submitted to
Finance Department
Government of Kerala

MAY 2020



An Autonomous Institution of Government of Kerala
Thiruvananthapuram - 17

Study Team

Dr K J Joseph
Director, GIFT

Dr Pinaki Chakraborty
Chief Social Policy – Unicef Chennai United Nations
Children’s Fund

Dr D Narayana
Honorary Professor , GIFT

Dr A V Jose
Honorary Professor , GIFT

Dr N Ramalingam
Associate Professor, GIFT

Smt L Anitha Kumary
Associate Professor, GIFT

PREFACE

It is by now well known that Kerala's performance in containing the Covid-19 pandemic and saving the lives of people in Kerala has been exemplary. However, the lockdown of the economy executed towards containing the pandemic has had its devastating effect on the economy in general and livelihoods of people in particular. It is in this context that the Government of Kerala entrusted the Gulati Instituted of Finance and Taxation (GIFT) to undertake *a study on the possible impact of COVID-19 pandemic on State finances with a focus on revenues of the State in the current financial year 2020-21*. The GIFT community is delighted that the Hon'ble Chief Minister Shri Pinarayi Vijayan and the Hon'ble Finance Minister Dr T M Thomas Isaac have placed their confidence in GIFT for undertaking this study.

This report conceptualises finances in terms of revenue, expenditure, deficits and debt. Given our concern with the state of the economy we have made an attempt to go beyond this mandate within the constraints set by time and resources. In this report analysis have been made with respect to the loss of state output attributable to lock down, shortfall in revenue receipts of the Government and the corresponding increase in deficits and outstanding debt. It also undertakes a preliminary analysis of the loss for enterprises and workers in different categories, finances required for reviving the economy and highlights the efforts to be made by the Government to offer social protection for the vulnerable. Given our understanding that tough decisions are easily possible in trying times, we have made recommendations for the Central Government and the State Government with respect to raising additional resources and initiating economy measures.

In undertaking this task in a short time we have profited from a number of friends of GIFT who are too many to be listed. Especially important to note here is the insights that we have gathered from the senior politicians, finance ministers of states, eminent academicians, experienced officials and captains of the press who participated in the Webinar on Covid-19 and fiscal federalism in India that we have organised during 27-28 April 2020. We must acknowledge the stakeholders from different sectors of economy who liberally shared their insights and concerns.

The lockdown also affected the speed with which we could work on the report. Hence interim policy inputs were provided which the government took up. It is our hope that the analysis made in this report and recommendations would also help policy makers making appropriate initiatives such that our record with respect to saving lives from the pandemic will be repeated in case of economy in general and livelihoods in particular.

K.J. Joseph

ACKNOWLEDGMENTS

- **Shri Rajesh Kumar Singh IAS**
Additional Chief Secretary (Finance)
- **Prof Jairam Ramesh**
Honorary Professor , GIFT & Member of Parliament, Rajya Sabha
- **Prof M Govinda Rao**
Honorary Professor , GIFT & Member of the 14th Finance Commission
- **Prof M.A. Oommen**
Honorary Professor ,GIFT & Former Chairman of the 4th State Finance Commission
- **Prof K N Harilal**
Member , Kerala State Planning Board
- **Dr K Raviraman**
Member , Kerala State Planning Board
- **Shri R Mohan**
Senior Consultant, GIFT
- **Prof G Vijayaraghavan**
Honorary Professor, GIFT & Former Member, Kerala State Planning Board
- **Prof Sebastian Morris**
Professor, IIM, Ahmedabad
- **Prof B Alwin Prakash**
Chairman, Fifth State Finance Commission
- **Dr Mary George**
Former Member, Public Expenditure Review Committee
- **Dr K V Joseph**
Former Member, Public Expenditure Review Committee
- **Shri M Chandra Dhas**
Secretary, Kerala Public Expenditure Review Committee
- **Shri S Anoop**
Additional Secretary, Finance Department, Government of Kerala
- **Dr Tushar K Nandi**
Associate Professor, IISER, Kolkata
- **Dr N Vijayamohanan Pillai**
Visiting Faculty, GIFT
- **Dr Thomas Joseph Thoomkuzhy**
Associate Professor, GIFT
- **Smt Jenny Thekkekara**
Associate Professor, GIFT

- **Shri George Paily**
Research Assistant, GIFT
- **Shri K Chandrasekhar**
Research Assistant, GIFT
- Officials of various Departments, Government of Kerala
Associations of Industries, Trade, Agriculture and Plantations

Project Support Team Members

- **Shri S Anilkumar**
Registrar, GIFT
- **Dr U P Anilkumar**
Research Associate, GIFT
- **Smt N Sheeja**
Data Analyst, GIFT
- **Shri Shaiju Thomas**
Project Associate, GIFT
- **Smt N Sheeba, Smt G Saritha, Smt B L Vrintha**
(Data Entry Operators, GIFT)

CONTENTS

		Page No
Study Team		
Preface		
Acknowledgement		
Contents		
List of Tables		
List of Figures		
Executive Summary and Recommendations		13
1	1. INTRODUCTION	21
2	PART 2 THE APPROACH	24
3	PART 3 IMPACT OF THE LOCKDOWN ON GSDP 2020-21	27
	3.1 Forecasting GSDP for the year 2020-21	27
	3.1.1 Method of estimation	27
	3.1.2 The estimates	28
	3.2 Estimation of GSDP loss on account of the pandemic	29
	3.2.1 Assumptions and scenarios	29
	3.2.2 Loss of GSVA (GSVA) during 2020-21: The estimates	30
4	PART 4 IMPACT ON THE STATE FINANCES	32
	4.1 Overview of State Finances in Kerala	32
	4.2 Goods and Services Tax (GST)	34
	4.3 Sales Tax from Petrol and Diesel	37
	4.4 Excise Duty and Sales Tax from Alcohol	40
	4.5 Stamp duty and Registration	42
	4.6 Revenue from Motor Vehicle Tax	43
	4.7 Non-Tax Revenue of the State	44
	4.8 Share of Central Tax Devolution	46
	4.9 Overall Revenue Shortfall	47
	4.10 Aggregate Fiscal Position after Covid 19	48
5	PART 5 TOWARDS AN IMMEDIATE REVIVAL PLAN	51
	5.1 Sectoral and status-wise distribution of workers	51
	5.2 Workers' earnings across employment categories	52
	5.3 Towards a relief-package for enterprises and workers	54
	5.4 Reaching out to the target groups	56
	5.5 Agriculture holds the key	57
ANNEXURES		59-67

LIST OF TABLES

Table No	Description	Page No
3.1	Estimates of Gross State Value Added (GSVA) at current prices	28
3.2	Estimates of loss in GSVA on account of COVID-19 pandemic during 2020-21 fiscal	30
4.1	State Finances in Kerala: An Overview	33
4.2	Monthly GST Collection	34
4.3	The Revenue Loss from GST	36
4.4	Average Monthly Retail Price of Petrol per Litre (Rs.)	37
4.5	Average Monthly Retail Price of Diesel per Litre (Rs.)	38
4.6	Month-wise Revenue of Sales Tax & Central States Tax from Petrol, Diesel etc. (Non-GST petroleum Goods)	39
4.7	Expected Sales Tax Revenue from Petrol and Diesel during 2020-21	40
4.8	Revenue from Liquor in Kerala - 2017-18 & 2018-19	41
4.9	Revenue from Stamp Duty and Registration	43
4.10	Revenue from Motor Vehicle Tax	44
4.11	Non-Tax Revenue of the State	45
4.12	Gross and Net Receipts of Lotteries	45
4.13	GDP Growth Rates of Indian Economy	46
4.14	Shortfall in Revenue Receipts Compared to Budget Estimates 2020 - 21 (in Crore)	47
4.15	Impact of Covid-19 on State Finance as per Scenario 3	49
4.16	Deficit and Debt position by considering revenue deficit grant as per 15 th Finance Commission	50

LIST OF FIGURES

Fig. No	Description	Page No
Fig-1	COVID-19 and the Economy impact on GSDP, Government Revenue and Expenditure	25

Executive Summary and Recommendations

1. In India, Kerala was the first state to report coronavirus infection on 30 January 2020. The Government of Kerala's exemplary work in containing coronavirus has received global attention. The response of Kerala Government included: protection of life, provisioning of livelihood security for the vulnerable through cash and in-kind transfers and the lockdown as per the national mandate.
2. The lockdown entails loss of output, employment and income on the one hand and severe shortfall in government revenues on the other. Large expenditure has been incurred and to be incurred to support government interventions in protecting lives, livelihoods and economic recovery.
3. Given the mandate *"to conduct a study on the possible impact of COVID-19 pandemic on State finances with a focus on revenues of the State in the current financial year 2020-21"*, the primary focus of this report is to examine the impact of COVID-19 pandemic on the finances of the state government. We take finances to mean revenue, expenditure, deficits and debt. The report also makes a quick assessment of the state of the economy within the time and resource constraints.
4. This report estimates the loss of state output due to lockdown, shortfall in revenue receipts of the government, loss of earnings of the self - employed and workers, finances required for reviving the economy. It also highlights the efforts to be made by the government to offer social protection for the vulnerable.
5. The basic premise is that the finance of the state is crucially dependent on the state's GSDP, which was impacted through supply shock and demand shock. For these shocks there is inter-sectoral, intra-sectoral and inter-temporal dimensions which are contingent on the sectoral characteristics. For the empirical analysis of the loss incurred, given the easier access to data, we focused on the supply side shock.

6. Based on our interaction with various stakeholders operating in the sectors concerned regarding the loss incurred, we have divided the sectors into a) highly affected, b) moderately affected and c) less affected.
7. We considered three scenarios of value added loss; the first scenario considered only the loss during the 47 days of lockdown. The second scenario, in addition to above, considered the loss during three more months with the assumption that most of the sectors will take at least three months to return to normal growth trajectory. The third scenario assumes that in select sectors like tourism, entertainment and travel the adverse effect will be lasting for six months after the lockdown. Since the first scenario is too optimistic with an estimated loss of only Rs. 79,971 Crore we consider the loss in the second and third scenarios
8. In the second scenario, the loss in GSVA is estimated at Rs.1.35 lakhs Crore (15.5% of the GSVA) recording a nominal growth rate - 5.13% and inflation adjusted growth rate of -10.13%.In the third scenario, the total loss in GSVA increases to Rs 1.62 Lakhs Crore (18.5% of GSVA) with a nominal growth rate of -8.56% and real growth rate of -13.56%.
9. Based on the available data and reasonable assumptions we have estimated the loss in own tax revenue and non-tax revenue along with devolution from the centre for the fiscal 2020-21.
10. As a result of the pandemic the total revenue declines to Rs. 81180.5 Crore from the budget estimate of Rs 1,14,636 for 2020-21 (BE) leading to a short fall of Rs. 33,455.5 Crore. Out of which Rs 19,816 is the shortfall in GST and Rs 7451 is in central tax devolution. Three other important items with shortfall in revenue are sales tax on alcohol (Rs 1657 Crore), sales tax on petrol & diesel (Rs 1517 Crore) and Stamp duty and registration (1292 Crore).
11. Assuming that budgeted expenditure for the fiscal remaining intact, given the revenue shortfall, budgeted revenue deficit increases from 1.55 per cent to 5.88 per cent in scenario 2 and 6.11% in loss scenario 3. When it comes to fiscal deficits the budgeted deficit increases from 3 per cent to 7.59 per cent in scenario2 and 7.8 per cent in scenario 3. The outstanding debt increases from the budgeted amount of Rs.292086.9 Crore (29.9% of GSDP) to Crore in scenario 2 and Rs 325542.4 Crore (40.85% of GSDP) in scenario 3.

12. However after accounting for the revenue deficit grant of Rs.15323 Crore, the revenue deficit, fiscal deficit and outstanding debt will be 4.18 per cent, 5.95 per cent and 38.92 per cent respectively in scenario 2. In the case of scenario 3, the corresponding figures are 6.11 per cent, 7.87 per cent and 40.85 per cent respectively.
13. A sum of Rs 13,641 Crore will be immediately required to support a large number of own-account enterprises and establishments in manufacturing, trade and other services. The assistance for the primary sector in the short run to the tune of Rs.3000 Crore is over and above this amount. With these additional expenditure there would be a further increase in deficits and debt.

Recommendations

The recommendations fall into two categories and a. recommendations to the state government b. recommendations to the Union government to be taken up by the State Government. The former comprises of measures for a. additional resource mobilisation and b. economy measures.

Recommendations to State Government

(a) Additional resource mobilisation

14. **Pension Deferment Scheme:** The main three committed expenditure of the State are salary, pension and debt service (Interest). In the present-day crisis, like most of the states, Government of Kerala has also implemented the Salary deferment scheme. In sync with above, a pension deferment Scheme for those receiving pension above Rs.20000 is proposed. The monthly pension expenditure comes to Rs.1900 Crore for 5,38,313 pensioners .
15. **Debt Swap Scheme:** The annual interest payment comes to Rs.19850 Crore during 2020-21(BE). This commitment is being met with an average interest burden ranging from 8 - 9 per cent. But the present market rate hovers around 5-6 per cent only. As the part of long term Public Expenditure Management (PEM) the Government of Kerala may think of a debt swapping scheme on a regular basis, with the help of professional experts, for reducing the yearly interest burden to a larger size. Government of India had already practiced such schemes during 2002-05. The Debt swapping Scheme capitalizes the current low interest market rates by swapping some of the higher interest bearing outstanding debts with lower interest debts and thereby reduces the interest burden of the State.

16. **Excise or Sales Tax enhancement for Liquor.** During the 2018 flood Government of Kerala enhanced the special rates of excise duty by 10 per cent (in 6 different slabs with minimum burden on the moderately priced liquor brands) leading to an additional revenue of around Rs.310 Crore for the period of 100 days. In the eve of Covid-19, it is suggested that the special rates, may be imposed. In the current context a further increase of 20 per cent Sales tax rate is proposed which could increase additional revenue while discouraging consumption.

(b) Economy Measures

17. **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 save the Government atleast Rs.1,200 Crore in a year without reducing the coverage of the scheme.

18. **Paid Service at Government Hospitals for the Affordable:** It is also possible to explore the possibility of offering paid services for the affordable by the Government Hospitals after the general working time. A specified time can be allotted for paid services of Doctors. The revenue thus generated could be shared between the doctors and meeting the hospital's own expenditure

19. **Revision of Lease Rent:** The high price of land in the state means that the asset value of government land is also high. The lease rent levied on government land need to be revised in line with the market values.

20. **Hike in Service Charges :** Service charges and rates of saleable items in various departments have to be increased by 25 per cent and there after indexed with inflation

21. **Review of Post creation in Aided School:** Around 15000 posts in aided school are created. It is time to review the created posts with the actual work load and any excess post created need to be dispensed with. Necessary amendments need to be made in the Kerala Education Rules.

22. **Review of Post creation in Higher Education Institutions:** Similar to aided school there is also room for reviewing the process of post creation in higher education institutions considering the work load.

23. **Re-deployment of excess Staff:** There are many departments which are having excess staff that needs to be redeployed urgently to the Local Governments especially when the LGs are assuming ever increasing role at present.
24. **Reviewing deputation/work arrangement:** There is the need for reviewing of deputation/work arrangement of various departments through appropriate mechanism.
25. **Streamlining the capital expenditure:** Streamlining of all the capital expenditure like purchase of vehicles, building construction work for various departments, autonomous bodies, public sector undertakings is called for
26. **Reviewing the Non-Plan Expenditure:** Non-plan expenditure such as fuel, travel , foreign tours, hiring of buildings .telephone , mobile phones, internet etc. are to be reviewed and at least 10 to 20 per cent cut need to be done overboard.
27. **Universal short term credit Scheme:** Creating provision for easy credit (on personal security) at low interest rate for self-employed, small business, micro enterprises and lower income groups through co-operative Banks with a provision of interest subsidy by the State.
28. **Strengthening KIIFB:** Considering the relevance of pump priming for the Covid ravaged economy, the KIIFB initiatives need to be strengthened such that the pursuit for economic recovery is not staggered by infrastructure constraints.
29. **Interest on pay revision arrears:** In the last pay revision implementation, arrears were distributed within a period of three years with **interest** rate of 8 per cent. This created additional financial burden to the state. Such practices are to be done away with.
30. **Travel coupons for State employees:** In order to promote domestic tourism in Kerala, employees of government, public sector, and autonomous institutions may encouraged to visit important tourist destinations in Kerala by giving concessional travel coupons by adjustment of the said amount in their salary on optional basis.
31. **Strengthening Database:** 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.

Recommendations to the Union Government

- 32. Welfare of migrant labour:** Kerala has been a major contributor to make India one of the largest remittance receivers in the world (\$82.2 billion to India out of \$707 billion to the world in 2019). As per Article 28 and 81 of the Union List it is the responsibility of the Union government to look after the health and welfare of the migrants – the costs of their transportation, quarantine and treatment. We recommend the Union government to fulfil this responsibility, or compensate the states adequately if it wishes to delegate responsibility.
- 33. Supporting the State’s Revival Packages:** The lockdown till 17 May 2020 and the prolonged shutdown of establishments in many sectors would call for a massive stimulus package. Our conservative estimate calls for an immediate stimulus package of Rs 17,000 Crore to revive the Kerala economy. The Union Government may either transfer the money directly to the producers of goods and services and the workers, or give it to the state government for onward transfer to the establishments.
- 34. Subsidised Credit Scheme:** In addition, the credit limits of the producers may be raised and interest may be paid for the first six months fully and at the rate of 50 per cent for the next six months by the Union Government.
- 35. Flexibility in FRBM:** The additional fiscal deficit to be raised by the state governments have to be allowed by the Union Government or the FRBM limits may be kept in abeyance for the next three years and states be allowed to raise money from the market to cover the fiscal deficit.
- 36. Resubmission of Memorandum to 15th FC:** The 15th Finance Commission has submitted its report covering the year 2020-21. All the states have submitted their memorandum to the 15th FC before the pandemic. Given the new context, the memorandum submitted earlier needs to be revised. The states may be requested to re-submit their memorandum after considering the fiscal shock.

- 37. State GST Revenue Gap Fund:** As per the GST compensation to State Act the shortfall in the State GST collection will be compensated from the fund of GST Cess collected by the Central Government. Inadequate collection and available fund in the GST cess account ended in wider gap and delayed release of GST compensation to States by the Centre. We suggest to the 15th Finance Commission and to the GST Council to recommend for setting up of a “State GST Revenue Gap Fund” at the Central level to settle the State GST revenue gap over and above the compensation cess.

1. INTRODUCTION

The countries across the world are waging an unprecedented war with the Novel Coronavirus 2019 (COVID-19). As on 11 May 2020, the pandemic affected 4.25 millions across 210 countries with a fatality rate of 6.7%. In India, starting with the first case reported in Kerala on 30 January 2020, the total number of cases climbed to 70756 with fatality rate (3.3%) being only half of the global average. Kerala's performance so far in terms of containing the pandemic (only 519 cases till 11 May), recovery rate (over 93%) and fatality rate (0.7%) have been outstanding and has attracted the world acclaim that it deserves¹. It has been argued that the exemplary leadership at state level and a robust health system built overtime coupled with social capital resulting in active involvement of the people through local governments have resulted in Kerala's success (Thomas Isaac and Sadanandan 2020 forthcoming).

As COVID-19 pandemic ravages countries across the world the responses have been varied. One public policy response seen everywhere is lockdown. Though lockdown reduces the possibility of transmission of virus, it affects livelihoods, physical mobility, incomes, and public resource mobilisation thereby weakening government finances. The Government of India too responded by imposing a complete lock down from 25 March 2020 to prevent the spread of the disease. The Government of Kerala had imposed

¹ See for details Vietnam and the Indian state of Kerala curbed covid-19 on the cheap, https://www.economist.com/asia/2020/05/09/vietnam-and-the-indian-state-of-kerala-curbed-covid-19-on-the-cheap?utm_campaign=coronavirus-special-edition&utm_medium=newsletter&utm_source=salesforce-marketing-cloud&utm_term=2020-05-09&utm_content=article-link-3 and

Aggressive testing, contact tracing, cooked meals: How the Indian state of Kerala flattened its coronavirus curve, https://www.washingtonpost.com/world/aggressive-testing-contact-tracing-cooked-meals-how-the-indian-state-of-kerala-flattened-its-coronavirus-curve/2020/04/10/3352e470-783e-11ea-a311-adb1344719a9_story.html

a partial lockdown about three days earlier on 22 March 2020. The Government of India has extended the lockdown until 17 May 2020 with a gradation of districts.² Kerala too has followed the guidelines of the Central government with some modifications. However, the economy had to pay a heavy price.

The primary objective of this report is to arrive at a reasonable fiscal estimates incorporating COVID-19 induced fiscal shock, particularly the impact of shock on own revenues of the State. The perspective here is thus limited and primary focus is on the analysis of fiscal impact. The mandate of Gulati Institute of Finance and Taxation (GIFT) as specified in a government order requesting for this study is reproduced below:

“To conduct a study on the possible impact of COVID-19 pandemic on State finances with a focus on revenues of the State in the current financial year 2020-21” (Government of Kerala order dated 7 May 2020: Appendix-1)

We take finances to mean revenue, expenditure, deficits and debt. As government revenues are dependent on state income and tax effort, the first step in the estimation of revenue is the projection of state income (Gross State Domestic Product, GSDP) for the year 2020-21 and estimate the loss due to COVID-19 and lockdown. On the expenditure side, the base situation is the budget estimates for 2020-21. The additional expenditures are those spent on the economic revival plan, wage compensation, welfare payments and additional expenditure on managing the coronavirus pandemic. These additionalities are discussed in the report with estimation of resource requirement.

² Districts are graded on the basis of the level of covid-19 infection. The most affected ones are categorized as red zone, followed by yellow and green zone.

There is hardly any scope for expenditure reallocation from existing Budget as around 65 per cent of expenditures are on salary, pension and interest payment. The scope for reducing budgeted capital expenditure of 1.4 per cent of GSDP is limited as most of it is part of the Rebuild Kerala post 2018 floods. Any reduction would also accentuate the infrastructure deficits and affect revival of the economy. Thus, the expenditures on revival and on managing the contagion will have to remain as additionalities and by nature will be revenue expenditure.

For the purpose of completeness, our analysis factors in the possibility of the reduction in central resource flow to the States in the form of tax devolution, as central taxes are also likely to decline due to slowdown. The totality of this has been estimated as an input for the state government for appropriate policy response and for higher central resources. It is argued in this report that additional resources in the form of grants will have to be made available to the States to deal with the emerging fiscal crisis and also for the State to provide a fiscal stimulus for response and recovery. The remainder of this report is organised as follows:

Part 2 The approach of the report

Part 3 Analyses the impact of the lockdown on GSDP growth

Part 4 Analyses impact on the Finances of the State

Part 5 Presents the broad contours of stimulus including social protection for reviving the economy

PART 2

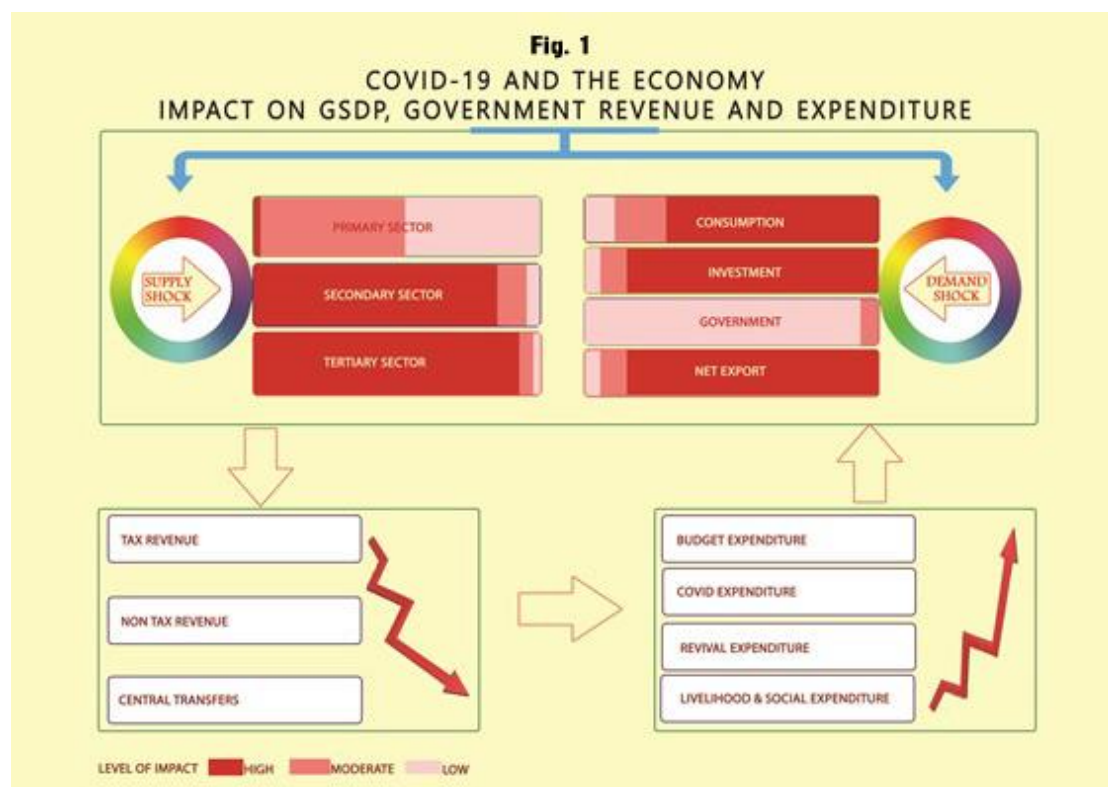
THE APPROACH

The central issue addressed in this report is how the COVID-19 pandemic has impacted the finances of the state understood in terms of revenue, expenditure, deficits and debt. We approach this problem from the basic premise that the finance of the state is crucially dependent on the state of the economy.

As illustrated in Fig-1 the pandemic could have its impact on the GSDP both through supply shock and demand shock. While the supply shock could be understood in terms of reduction in the output of primary, secondary and tertiary sectors of the economy, the demand shock emanates from the drop in all the major components of aggregate demand viz; consumption demand, investment demand, government demand and net export. For both demand and supply shock, there is an inter-sectoral, intra-sectoral and an inter-temporal dimensions which are contingent on the sectoral characteristics. This include, but not limited to, the extent of integration of the sector with the supply chains outside the state and the ease of maintaining social distance, in the sector concerned necessary for containing the spread of the pandemic.

As regards the inter-sectoral dimension of the supply shock, while some sectors are affected severely, the impact is moderate or minimal in others. To illustrate the intensity of impact is said to be higher in case of secondary and tertiary sectors as compared to the primary sector. The intra-sectoral dimension is illustrated by the fact that within the primary sector fisheries is severely affected as compared to crop production. The inter-temporal dimension of the shock that we have indicated is evident from the fact that while sectors like tourism, entertainment industry such as cinema &

television and travel might take a longer time to revert to normal growth trajectory, crop production may take relatively less time.



Based on our interaction with the various stakeholders operating in the sectors concerned, we have made assumptions about approximate economic loss and damage across sectors and divided them into a) highly affected, b) moderately affected and c) less affected (Fig 1).

In the empirical analysis that follows, given the easier access to data, we shall focus on the supply side shock to ascertain the impact of the pandemic on GSDP.

Reduction in GSDP implies shrinking of the tax base. Even if the tax collection effort remains the same, there will be a significant decline in tax and non-tax revenues due to the lockdown induced reduction in economic activity and corresponding reduction in GSDP. Along with the decline in own tax revenue, there could also be a decline in central tax devolution (which is an entitlement to the States) particularly due to the reduction in

central taxes, as the pandemic has impacted on the national economy as well.

The government revenues and ability to borrow determines the fiscal capacity of the government to spend. The government expenditure in the context of pandemic would include, in addition to the committed budgetary expenses, other expenses like (a) expenditure towards the containment of the pandemic (b) expenditure towards reviving the economy, and (c) expenditure towards livelihood and social protection. While the government expenditure has a crucial bearing on the growth of the economy, the gap between the revenue and expenditure will determine the deficit and debt that needs to be financed through appropriate measures on which the report will reflect upon.

PART 3

IMPACT OF THE LOCKDOWN ON GSDP 2020-21

3.1 Forecasting GSDP for the year 2020-21

A first step in the estimation of income loss of the state and revenue loss of the government is to estimate the Gross State Domestic Product (GSDP) for the years 2019-20 and 2020-21. Unlike at the national level, where an advance estimate of Gross Domestic Product (GDP) of the current year would be available just before the presentation of the Budget, at the state level what is available is a quick estimate of GSDP for the year 2018-19. In order to compute income loss, we not only have to arrive at an estimate of the GSDP of 2019-20 but also a forecast of the same for the year 2020-21. The Budget in brief 2021 has presented estimates of GSDP for the year. The GSDP estimate provided in the Budget in brief 2020-21 is compared with our estimates.

3.1.1 Method of estimation

Estimates of Gross State Value Added (GSVA) at current prices for the years 2019-20 and 2020-21 have been made by adopting three different methods, a) namely principal component analysis, b) trend line projection method, and c) based on past growth rates. In the last approach two scenarios have been constructed. In the first scenario (could be termed as optimistic growth scenario) uses the average growth rate of top three performing years as the projected growth rate to estimate future GSVA series. In the second scenario (could be termed as pessimistic growth scenario) uses the average growth rate of three worst performing years as the projected growth rate to estimate future GSVA series.

3.1.2 The estimates

The estimated values of GSVA for the years using different methods are presented in Table.3.1. Out of the different estimates obtained, we are inclined to consider the GSVA values obtained under Growth Scenario A of the third method. This is because the three years preceding 2019-20 have been showing best growth performance of the Kerala economy since 2010-11 even higher than the national growth rate. Further, unlike in the past, the growth was led by a revival of the manufacturing sector even when the external environment was not conducive for manufacturing growth and this estimate is very close to the estimate of GSDP provided in the Budget in brief 2020-21.

Table 3.1 Estimates of Gross State Value Added (GSVA) at current prices (Rs. In Crore)		
Methods	Gross State Value Added (GSVA)	
	2019-20	2020-21
Principal Component Analysis (PCA)	7,72,270.5	8,54,274.6
Trend line Projection	7,65,660.7	8,38,430.7
Using Past growth Rates	a). 7,88,835.8	8,86,294.5
	b). 7,66,572.2	8,40,374.6
GSDP quoted in Budget 2020-21	871534.84	978064

Source: Estimates by GIFT

Adding product taxes net of subsidies of the year 2018-19 (Rs 81,341.84 Crore) to the GSVA values gives GSDP at current prices for the year 2020-21 at Rs 9,67,636.36 Crore. Since these figures are found broadly in sync with the figures used in budget in brief 2020-21, we have made use of the budget figures in our analysis.

3.2 Estimation of GSDP loss on account of the pandemic

3.2.1 Assumptions and scenarios

Any attempt at projecting the loss on account of an external shock to an economy necessarily involves certain assumptions. The basic assumption of our estimate is that there is an inter-sectoral, intra-sectoral and inter-temporal variation in the impact of supply and demand shock. This will depend on the nature of the sector concerned. For example, the extent of supply shock in agriculture is likely to be different from tourism. Similarly, the supply shock on sectors heavily dependent on other states is likely to be harder and more prolonged than those with supply chains within the state. Hence we need to have an idea about the extent of shock across different sectors and the time required to return to normal production, that we gathered from interaction with various stakeholders of the sector concerned. Accordingly, we have created following three scenarios³:

Scenario1: Takes into account only the loss incurred during 47 days of lock down announced by the central government since 1 April 2020. It implicitly assumes that the economy may turnaround immediately after the lockdown. In reality this is unlikely to happen.

Scenario2: In addition to the above, three months as the recovery period with the assumption that most of the sectors will take at least 3 months to return to normal growth trajectory.

Scenario 3: Considers that the adverse effect of the pandemic will be lasting for a longer period of six months after the lockdown. This will be the case of sectors like tourism, entertainment, travel and those sub sectors in the secondary sector, which are integrated with the supply chains linked to regions outside the state afflicted more intensively by the pandemic.

³ Considering the mandate of the study to analyze the finances during the fiscal 2020-21 we have not taken into account the loss on account of the lockdown during the last week on March 2019-20.

3.2.2 Loss of GSVA (GSVA) during 2020-21: The Estimates

In Table 3.2 we present the likely loss in GSVA. As per the first scenario, which is very restrictive and too optimistic, the estimated loss of GSVA accounts for 9.0% of GSVA at current prices that amounts to Rs 79350.2 Crore. This leads to a low nominal annual growth rate of 2.06% and the real growth rate will be -2.94%, after accounting for an inflation rate of 5%.

Table 3.2 Estimates of loss in GSVA on account of COVID-19 pandemic during 2020-21 fiscal			
Scenarios	Loss in GSVA in (Crore)	Revised GSVA (Crore)	Revised Growth rate in 2020-21(%)
Scenario1	79350	796973	2.06
Scenario2	135523	740800	-5.13
Scenario3	162254	714069	-8.56

Source: Estimates by GIFT

In the second scenario, which also considers loss during the recovery period of 3 months, (till 17 August) the loss in GSVA increases to Rs.1.35 lakhs Crore (15.5% of the GSVA) recording an annual growth rate -5.13%. Assuming an inflation rate of 5% the growth in real terms will be -10.13%. This is in sync with estimates for the national economy by the Economic Intelligence Unit.

In the third scenario, which considers a recovery period three more months from 17 August (till 17 November), the total loss in GSVA increases to Rs 1.62 Lakhs Crore (18.5% of GSVA). The resultant GSVA growth rate will be -8.56% and the growth adjusted for inflation (5%) will be -13.56%.⁴

The committee is inclined to go by scenario 2 and scenario 3 implying a loss in the range of Rs 1.35 lakh Crore to Rs 1.62 lakh Crore accounting for

⁴ The estimate of loss by the State Planning Board (2020) was only Rs 80,000 Crore because the lockdown period considered was only from 25 March 2020 to 3 May 2020.

about 15.5 % to 18.5% of value added on account of the supply shock emanating from the pandemic.

Turning to remittances, as argued in Appendix 2, remittances received by Kerala (in Rupees) may not be very different from what was there in 2018 due to the weakening of rupee. Even if we take an extreme case of a 20 per cent fall, it will only result in a reduction of Rs 21,273 Crore translating into a reduction of Rs 10,000 Crore in expenditure on goods and services. Ignoring the expenditure multiplier, it could be taken as an equivalent fall in GSVA.

PART 4

IMPACT ON THE STATE FINANCES

This part of the study deals with the concern of the enquiry- to assess the possible impact of Covid 19 pandemic on the state finances with a focus on revenues of the state in the current financial year 2020-21. We conceptualise finances in terms of revenue, expenditure, deficit and debt.

4.1 Overview of State Finances in Kerala

The aggregate revenue receipts of Kerala are expected to be 11.72 per cent of GSDP in 2020-21 (Refer Table 4.1). The own tax revenue to GSDP ratio is budgeted at 6.89 per cent of GSDP. In absolute terms, the own tax revenue target is Rs. 67420 Crore. Out of this, Rs. 55,651 Crore is expected to come from State GST including IGST plus non-GST items, namely, Sales Tax on Petrol and Diesel and Alcohol. The other items of own tax revenue are Excise duty collection to the tune of Rs. 2800 Crore, Stamp and Registration duty to the tune of Rs. 4306 Crore and motor vehicle tax of Rs. 3968 Crore and also other minor taxes to the tune of Rs. 693 Crore.

Own non-tax revenue is budgeted at Rs. 14587 Crore. The central transfers to the States to the tune of Rs. 32628 Crore budgeted are a combination of tax devolution and grants. Tax devolution is budgeted at Rs. 20934 Crore whereas the grants are expected to be Rs. 11694 Crore. The estimated revenue loss of various components of revenue receipts in the context of Covid- 19 lockdown is analysed by analysing the revenue shortfall of major taxes at a disaggregated level based on the early trend of monthly collection after lockdown. While making sense of the revenue for the entire year, we make assumptions about the reduction in tax base and time path of recovery on a month by month basis.

Table 4.1.
State Finances in Kerala: An Overview

	2020-21 BE (In Rs. Crore)	As a % of GSDP
Revenue Receipts	114636	11.72
Own Tax Revenues	67420.01	6.89
State GST including IGST, Sales tax on Petrol, Diesel & Liquor	55651	5.69
Excise Duty	2800.67	0.29
Stamp and Registration	4306.24	0.44
Motor Vehicle Tax	3968.22	0.41
Other Taxes	693.88	0.07
Non Tax Revenue	14587	1.49
Central Transfers	32628.99	3.34
Share in Taxes	20934.9	2.14
Grants	11694.09	1.20
Revenue Expenditure	129837.4	13.27
General Services (<i>of which</i>)	59712.41	6.11
Interest Payment	19850	2.03
Pension	20970.41	2.14
Other General Services	18892	1.93
Social Services (<i>of which</i>)	42469.84	4.34
Education	20495	2.10
Medical and Public Health	7615.39	0.78
Water Supply and Sanitation, Housing and Urban Development	2665.35	0.27
Social Welfare and Nutrition	7440	0.76
Economic Services (<i>of which</i>)	17896.74	1.83
Rural Development	4809	0.49
Agriculture	6929.57	0.71
Grant-in-aid and other contributions	9758.38	1.00
Capital Expenditure	14427.93	1.48
Revenue Deficit	15201.37	1.55
Fiscal Deficit	29295.28	3.00
Primary Deficit	9445.28	0.97
Outstanding Debt	292086.9	29.86

Source: GIFT Estimates based on the data from State Budget Document 2020-21, Government of Kerala

4.2 Goods and Services Tax (GST)

Revenue from GST in Kerala as per Budgeted Estimate (BE) 2020-21 is Rs. 32388.11 Crore. The Revised Estimate (RE) figure for the year 2019-20 is Rs. 23689.62 Crore. GST revenue comprises of State GST (SGST), IGST against the set-off of SGST and ad-hoc settlement from Government of India for IGST. Hence the total GST revenue mentioned here does not include GST compensation received from Government of India at the rate of 14% per annum as envisaged in the GST Compensation Act 2017. Monthly revenue from GST for the year 2019-20 is presented in Table 4.2. The monthly collection added shows that actual collection for the year 2019-20 is Rs. 20065 Crore, which is lower by more than 3000 Crore for the 2019-20 (RE) figure.

Table 4.2 Monthly GST Collection		
SL. No.	2019-20	Total GST Revenue
1	Apr-19	1952.66
2	May-19	1889.66
3	Jun-19	1731.44
4	Jul-19	1668.18
5	Aug-19	1580.64
6	Sep-19	1520.88
7	Oct-19	1495.83
8	Nov-19	1671.49
9	Dec-19	1531.38
10	Jan-20	1748.24
11	Feb-20	1653.1
12	Mar-20	1622.31
Total		20065.81
<i>Source: State GST Department, Government of Kerala</i>		

GST collection by the taxpayers in the current month is remitted to Government during the subsequent month. In April 2020 (i.e. March 2020 collection), the GST remitted to Government of Kerala was only Rs. 201.14 Crore. This is partly due to the 9 days lock-down during March 2020 (March 23 to 31, 2020) and partly due to official extension of return filing for March, April & May till June 2020 and relief in late fee, interest and penalty. The full impact of GST revenue loss due to lockdown will be known when we get the data of revenue collection for the Month of April, which will be available only by end of May 2020. Since lockdown is near complete collapse of economic activity, it is not unrealistic to assume that April collection (to be reflected in May) will not be any better compared to March 2020. In fact, it may be even lower than Rs. 200 Crore. For our purpose of estimation of revenue loss, we assume for the month of April 2020, the loss will be 90 per cent of the collection of corresponding month of the last year as was the case in March. For subsequent months, our revenue loss estimation, tried to factor in the loss as certain per cent of the last year's monthly GST revenue collections of corresponding month. We assume that, from June onwards there will be a gradual improvement in collection. The assumption made about recovery of revenue loss is presented below in Table 4.3.

Table 4.3					
The Revenue Loss from GST					
SL. No.	2019-20	Total GST Revenue	2020-21	Estimated GST Revenue	Estimated GST Revenue Loss (%)
1	Apr-19	1952.66	Apr-20	201.14	89.7
2	May-19	1889.66	May-20	188.966	90
3	Jun-19	1731.44	Jun-20	259.716	85
4	Jul-19	1668.18	Jul-20	500.454	70
5	Aug-19	1580.64	Aug-20	632.256	60
6	Sep-19	1520.88	Sep-20	1216.704	20
7	Oct-19	1495.83	Oct-20	1346.247	10
8	Nov-19	1671.49	Nov-20	1671.49	0
9	Dec-19	1531.38	Dec-20	1531.38	0
10	Jan-20	1748.24	Jan-21	1748.24	0
11	Feb-20	1653.1	Feb-21	1653.1	0
12	Mar-20	1622.31	Mar-21	1622.31	0
Total		20065.81		12572.00	37.34

Source: GIFT Estimates based on data from State GST Department, Government of Kerala

As evident from Table 4.3, GST revenue for the year 2020-21 is expected to be Rs. 12572 Crore. This estimation is based on the assumption that by November 2020, the GST collection will reach the level achieved in the corresponding month of the previous year. Based on this assumption, the SGST collection will be only 63 per cent of the last year's collection. If we compare with the 2020-21 (BE), the revenue shortfall of GST will be Rs. 19816 Crore or 61.18 per cent of the budget estimates. We don't expect any growth in revenue. We assume that GST collection will be restored to the monthly collection of last year from November. If the Union Government fully compensate for the revenue loss from GST, the burden of State will be reduced to a greater extent. But the past experience reveals that there is huge gap in the release of compensation to states. Hence there is an urgent requirement of a 'revenue gap fund' to meet the shortfall of GST revenue of states over and above the compensation cess.

4.3 Sales Tax from Petrol and Diesel

Table 4.4 depicts the monthly average price of Petrol per litre. While comparing the month-on-month price change i.e., price increase/decrease from 2018-19 to 2019-20, it revealed that except for the months of December, January & February, all other nine months there has been a decrease in the average price of petrol per litre. On an average during 2019-20 there was 3.43 per cent decrease in the price of petrol.

Table 4.5 shows the average price of Diesel per litre. While comparing the month-on-month price change i.e., price increase/decrease from 2018-19 to 2019-20 it revealed that except for the months of December, January & April all other nine months show a decrease in the average price of diesel per litre. On an average during 2019-20 there is 3.30 per cent decrease in the price of Diesel.

Table 4.4			
Average Monthly Retail Price of Petrol per Litre (Rs.)			
Month	2018-19	2019-20	Price Change (%)
April	78.12	76.21	-2.45
May	79.99	75.16	-6.03
June	79.71	73.68	-7.57
July	79.43	75.97	-4.35
August	80.58	75.44	-6.38
September	84.72	76.10	-10.17
October	85.27	76.81	-9.92
November	80.10	77.10	-3.75
December	73.67	78.26	6.23
January	73.23	78.40	7.06
February	74.10	75.64	2.08
March	75.86	73.57	-3.02
Average	78.73	76.03	-3.43

Source: GIFT estimates based on data from Kerala State Civil Supplies Corporation Ltd.

Table 4.5			
Average Monthly Retail Price of Diesel per Litre (Rs.)			
Month	2018-19	2019-20	Price Change (%)
April	70.81	71.26	0.63
May	72.85	71.30	-2.14
June	72.82	69.31	-4.83
July	72.76	70.88	-2.59
August	73.80	70.46	-4.52
September	78.28	70.96	-9.35
October	79.94	71.50	-10.57
November	76.72	70.82	-7.69
December	69.58	71.47	2.72
January	69.11	73.24	5.96
February	70.98	70.08	-1.27
March	72.04	67.76	-5.94
Average	73.31	70.75	-3.30

Source: GIFT estimates based on data from Kerala State Civil Supplies Corporation Ltd.

Table 4.6 shows the month-wise Sales Tax and Central Sales Tax Revenue from Petrol and Diesel. Every year during the month of March the Oil Companies remits advance tax for the months of April also, and hence two months revenue is reflected in the month of March. The Table reveals that the collections show more or less same on month-on-month basis. Around 95 Crore reduction in revenue was seen during 2019-20 when compared to 2018-19 and the Nominal Growth Rate is -1.20. However after considering average price reduction of petrol and Diesel as -3.26, the Real Growth rate is 2.06 $[(-1.20) - (-3.26)]$

Sl. No.	Month	2018-19	2019-20	Growth Rate (%)
1	April	62.39	60.45	-3.11
2	May	666.94	663.64	-0.49
3	June	708.97	700.34	-1.22
4	July	621.45	610.81	-1.71
5	August	616.02	642.56	4.31
6	September	632.8	641.06	1.31
7	October	701.93	648.89	-7.56
8	November	706.21	666.48	-5.63
9	December	677.1	683.94	1.01
10	January	675.66	720.5	6.64
11	February	662.75	742.28	12.00
12	March	1263.75	1119.05	-11.45
Total		7995.97	7900	-1.20

Source: GIFT estimates based on data from State GST Department, Government of Kerala

For estimating the revenue loss on Sales Tax from petrol and Diesel during the period of Lock-down, the actual turnover during the month of March and April 2020 from the 11 petrol bunk outlets of Kerala Civil Supplies corporation in Kerala are taken as sample, and compared with the average monthly turnover for the past 11 months. The average monthly turnover for the past 11 months (i.e., from April 2019 to February 2020) was 20.49 Crore. The turnover during the months of March and April 2020 are Rs. 14.38 Crore and 5.71 Crore respectively. When compared with average 11 months turnover, during March and April 2020 the outlets faced a sales drop of 29.78 per cent and 72.10 per cents respectively. It is estimated that corresponding to the actual sales drop there will be sales tax revenue loss from petrol and Diesel to the tune of 30 per cent and 70 per cents for the lock down period during March and April 2020. It is assumed that the revenue loss during the month of May 2020 will be of 50 per cent and it

may scale down to 30 per cents during June to 20 per cent during July to no revenue loss during August 2020. By considering 2019-20 collection as base for the year 2020-21, the total collection of Sales Tax from Petrol and Diesel is budgeted as Rs. 7900 and average monthly collection will Rs. 658 Crore. The total Sales Tax revenue loss from petrol and Diesel for the year 2020-21 estimated to Rs.1517.4 Crore (Table 4.7)

Table 4.7 Expected Sales Tax Revenue from Petrol and Diesel during 2020-21		
Month	Per cent Loss on Average Collection of Rs. 658 Crore	Expected Revenue (Rs. in Crore)
April	70	197.4
May	50	329
June	30	460.6
July	20	131.6
Aug to March	0	5264
Total		6382.6
<i>Source: GIFT estimates from the Tables 4.4 to 4.6</i>		

4.4 Excise Duty and Sales Tax from Alcohol

Revenue from Alcohol has two components: Sales tax and Excise Duty. These two together constitute around 22% of own tax revenue and 12% of total revenue of government of Kerala. The average sale of liquor per day in Kerala is Rs.43.12 Crore. Total daily tax collection is 36.82 Crore. Out of this Rs.30.7 Crore is Sales tax and Rs. 6.12 Crore is excise duty. With 54 days lockdown, i.e. from 25 March to 17 May, the aggregate revenue loss works out to be Rs. 1988.28 Crore, out of which Rs. 1657.28 will be sales tax and Rs. 330.48 Crore will be excise duty loss. We assume that there will be immediate recovery of demand post the lockdown.

Table 4.8			
Revenue from Liquor in Kerala - 2017-18 & 2018-19			
Particulars	2017-18	2018-19	Growth Rate (%)
Rs. in Lakhs			
Gross Sales	12937.09	14508.21	12.14
Revenue to Excise Department			
Excise Duty	1885.62	2100.48	11.39
Import Fee	9.81	13.04	32.93
Gallonage Fee	0	1.45	
Licence Fee	0.23	.023	
Shop Rental (KIST)	10.8	10.8	
Total revenue to Excise Department (A)	1906.46	2125.77	11.50
Revenue to State GST Department			
Sales Tax	6632.51	9567.48	44.25
Turnover Tax	647.06	732.65	13.23
Surcharges	769.36	0	
Rehabilitation Cess	331.61	0	
Social Security Cess	669.51	0	
Medical Cess	66.31	0	
Total Revenue to State GST Department (B)	9116.36	10300.13	12.99
Total A + B	11369.52	11709.94	2.99
Liquor Sales in Quantity - Cases in Lakhs			
IMFL	208.51	216.34	3.76
BEER	115.42	121.12	4.94
<i>Source: GIFT estimates based on data from Kerala State Beverages (M & M) Corporation Ltd.</i>			

However, the question remains whether an immediate recovery in tax collection is possible after the lockdown? A brief analysis of the trends in revenue collection from liquor will provide important insights. As evident from Table 4.8, the excise and sales tax revenue from Liquor for the year 2017-18 and 2018-19 grew at the rate of 12.14 per cent and 11.39 per cent respectively. This buoyant growth of liquor tax during 2018-19 compared to 2017-18 is due to the following reasons:

- a) The purchase price of liquor by the KSBC (M&M) Ltd from the liquor manufactures on an average has been increased by 7 per cents from the financial year 2018-19 based on a notified rate tender process. There had been no change in purchase price for four years prior to 2018-19.
- b) Post the devastating flood of Kerala, State Government had increased the levy of excise duty rate for 100 days (period 18-08-2018 to 30-11-2018).

The special duty imposed during the 100 days period for funding flood relief garnered around Rs.310 Crore additional resources to the Government of Kerala during 2018-19. In the eve of Covid-19, it is suggested that the same special rates, may be imposed from 15 May 2020 till March 2021 (11months). Additional revenue of minimum Rs. 1100 Crore is expected from this proposal. Continuation of this cess at the existing rate still does not cover the revenue loss arising due to the lockdown. An appropriate enhancement of rate may be necessary to cover the estimated loss due to lockdown. The assumption here is that the full demand will be restored in the post lockdown.

4.5 Stamp duty and Registration

As evident from Table 4.9, Stamp duty and Registration constitute around 7 per cent of own tax revenue of the State. The year on year growth of this tax remained highly volatile between 2013-14 and 2020-21 (BE). It was negative (-11.74 %) in 2013-14 and increased to 14.83 per cent in 2017-18. The year 2016-17 was the year of demonetization and the growth of this tax was 4.48 per cent. In the year 2018-19 it was 6.97 per cent and in 2019-20 (RE) it was expected to grow at the rate of 6 per cent. The 2020-21 (BE) assumes a growth rate of 10 per cent over 2019-20 (RE). The revenue from Stamp Duty and Registration will be severely affected during the first quarter of 2020-21 due to the impact of Covid -19. The revenue loss can also be

sensed throughout the current fiscal year due to the economic impact and postponement of purchase of land and buildings. Given the lockdown and the past trend in the growth of the tax, it is estimated that during 2020-21 a 30% revenue loss on the BE of 2020-21. The expected revenue will be Rs. 3014.36 Crore. The revenue loss will be Rs. 1291.87 Crore when compared with the BE 2020-21.

Table 4.9			
Revenue from Stamp Duty and Registration			
Year	Stamp duty and registration fee collection	Share of Stamp duty and registration fee in state's own tax revenue	Stamp duty and registration fee rate of growth
2013-14	2593.29	8.11	-11.74
2014-15	2659.02	7.55	2.53
2015-16	2877.73	7.38	8.23
2016-17	3006.59	7.13	4.48
2017-18	3452.56	7.43	14.83
2018-19	3693.17	7.29	6.97
2019-20(RE)	3914.76	7.03	6.00
2020-21(BE)	4306.24	6.39	10.00

Source: Budget in Brief, GOK

4.6 Revenue from Motor Vehicle Tax

As evident from Table 4.10, the share of motor vehicle tax is around 6 per cent of own tax revenue of the state. This component of the tax has not shown any growth in the last two years. This is also reflective of the overall trend of subdued demand of automobiles at all India level. This 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 policies/strategies/incentives are in the domain of central government. Thus, a positive growth in this sector may be difficult to achieve. We assume, as most optimistic scenario, maintaining the revenue at

the 2019-20 (RE) level, i.e. at Rs. 3708 Crore. This implies a shortfall of Rs. 260 Crore from 2020-21 (BE).

Year	Tax on Vehicles	Share of tax on vehicles in state's own tax revenue	Tax on vehicles rate of growth
2013-14	2161.09	6.75	12.29
2014-15	2364.95	6.71	9.43
2015-16	2814.30	7.22	19.00
2016-17	3107.23	7.37	10.41
2017-18	3662.85	7.88	17.88
2018-19	3708.61	7.32	1.25
2019-20(RE)	3708.62	6.66	0.00
2020-21(BE)	3968.22	5.89	7.00

Source: Budget in Brief, GOK

4.7 Non-Tax Revenue of the State

The non-tax revenue of State comprises of interest receipts, dividends and profits and contribution from sale of lotteries. Contribution of interest and dividends as per the BE 2020-21 is Rs. 323 Crore. Though contribution of Lotteries is expected to be 14263.46 Crore, this is only a gross amount. The net contribution of lotteries after considering all the expenses is estimated to be Rs. 2096.91 Crore. Given the lockdown and associated economic shock lottery's net contribution will be much lower than the level assumed in 2020-21 (BE). We assume that it will be the level achieved in the year 2018-19, i.e., Rs. 1445.91 Crore. The year 2018-19 was also an abnormal year when Kerala was affected by devastating flood. Thus, the shortfall in net lottery receipts will be Rs. 651.49 Crore. (Refer Table 4.11 & 4.12).

Table 4.11
Non-Tax Revenue of the State

	2018-19	2019-20 RE	2020-21 BE	Growth Rate 2019- 20	Growth Rate 2020-21
1. Interest Receipts	132.38	154.01	165.29	16.34	7.32
2. Dividends and Profits	132.12	144.05	158.25	9.03	9.86
3. Other Non-Tax Revenue	11518.74	12945.76	14263.46	12.39	10.18
3.1. Police	73.03	89.05	99.91	21.94	12.20
3.2. Lotteries	9264.66	10538.92	11569.70	13.75	9.78
3.3. Edu. Sports and Culture	256.73	267.56	294.51	4.22	10.07
3.4. Medical and public Health	335.07	261.78	347.65	-21.87	32.80
3.5. Forestry and Wild Life	287.21	287.72	311.87	0.18	8.39
3.6 Others	1302.04	1500.73	1639.82	15.26	9.27
TOTAL	11783.24	13243.82	14587.00	12.40	10.14

Source: Budget in Brief, GOK

Table 4.12
Gross and Net Receipts of Lotteries

Year	Lotteries Receipt	Lotteries Expenditure	Net Revenue
2009-10	624.07	502.79	121.28
2010-11	571.46	460.24	111.22
2011-12	1282.74	901.73	381.01
2012-13	2673.77	2082.51	591.26
2013-14	3795.70	3202.66	593.04
2014-15	5444.88	4485.22	959.66
2015-16	6271.41	5122.9	1148.51
2016 - 17	7283.29	5992.45	1290.84
2017 - 18	9034.16	7627.64	1406.52
2018-19	9264.66	7819.24	1445.42
2019-20(RE)	10538.92	8736.91	1802.01
2020-21(BE)	11569.70	9472.79	2096.91

Source: Budget in Brief, GOK

4.8 Share of Central Tax Devolution

The central tax devolution for Kerala as per the Kerala Budget 2020-21 (BE) is Rs. 20934.80 Crore. If we examine the central budget 2020-21, allocation of tax devolution to Kerala is Rs. 15,236.64 Crore. This amounts to a shortfall of Rs.5698 Crore. This is due to the decline in the share of Kerala in inter-se allocation of tax devolution as per the recommendation of the Fifteenth Finance Commission. In other words, this shortfall does not include impact of economic shock induced by COVID-19 and corresponding reduction in revenue base and reduction in tax devolution to States. Thus, the 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.784180.87 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 4.13.

Agency	Expected GDP Growth (%)
Asian Development Bank	4
S&P Global Ratings	3.5
Fitch Ratings	2
India Rating and Research	3.6
Moody's Investors Service	2.5/0.02

Source: Respective websites of the Agency

Given all these forecast and in the face of prolonged lockdown, our view is that there will be economic contraction in real terms. Most optimistic scenario will be to assume here that there will be a zero growth of GDP in nominal term compared to 2019-20. This would mean GDP for the year 2020-21 to be Rs. 20442233 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. 695035 Crore. In other words, compared to the Budget Estimates, tax devolution will be reduced by Rs. 89145 Crore. This in turn means reduction to Kerala's tax devolution further to Rs. 13483.7 Crore. All these together will mean a shortfall of Rs. 7451 Crore. However, we assume that given the extent of shortfall in revenue, Central government would require to provide the grants budgeted in Kerala Budget 2020-21 and make additional resources for COVID response and recovery. Without central support, fiscal space of the State for meeting the socio economic response post Covid will be seriously impaired.

4.9 Overall Revenue Shortfall

The revenue shortfall on each category of taxes in Kerala from the BE 2020-21 is presented in a summarized form in Table 4.14. The total revenue shortfall works out to be Rs. 33455.52 Crore compared to the BE 2020-21. If this revenue shortfall is added to the budgeted revenue deficit and fiscal deficit figures, the estimates go up to 6.11 per cent for revenue deficit and the fiscal deficit increases to 7.87 per cent which is depicted in Table 4.15.

GST Revenue	19816
Excise Duty	330.48
Sales Tax on Alcohol	1657.28
Sales Tax on Petrol & Diesel	1517.4
Stamp and Registration	1291.87
Motor Vehicle Tax	740
Non Tax Revenues	651.49
Central Tax Devolution	7451
Total Shortfall	33455.52
<i>GIFT estimate based on the data from State Budget Documents, Government of Kerala</i>	

4.10 Aggregate Fiscal Position after Covid 19

An overview of the likely position of state finances in the current financial year (2020-21) in the aftermath of covid-induced lockdown as per the scenario 3 is presented in table 4.15. The estimated GSDP of the state for the fiscal 2020-21 will be only Rs.7, 96,973 Crore⁵ in place of the budgetary figure of Rs.9,78,064 Crore in the last budget. As a result, in place of the budgeted revenue receipts of Rs 1.14 lakh Crore (11.7% of GSDP) the post covid revenue accrual is likely to be only 0.81 lakh Crore (10.2%) indicating a covid-induced revenue loss of Rs 33, 456 Crore (1.5% of the GSDP). A corresponding decline is also anticipated in own tax revenue (from 6.9% of the GSDP to 5.3%) and the share in central taxes (from 2.1% to 1.7 %). The short fall in absolute terms in own tax revenue will be Rs 26, 005 Crore and Rs.7451 Crore in central taxes.

Assuming that the budgetary expenditure in the Budget 2020-21 remains unchanged, the covid induced reduction in revenue receipts is likely to result in an increase in revenue expenditure to GSDP ratio to 16.3 per cent from the budgeted figure of 13.3 per cent. Further, there will be an increase in revenue deficits from 1.6% to 6.1% and fiscal deficits from 3% to 7.9%. When it comes to outstanding debt the increase will be from Rs 2,92,086 Crore (29.9%) to Rs 3,25,542 Crore (40.9% of GSDP) as per scenario 3.

If we consider scenario 2, revenue deficit and fiscal deficit would be marginally lower at 5.9% and 7.6% respectively. Similarly the increase in outstanding debt also will be marginally lower in scenario2 at 39.4% in place of 40.9% of GSDP in scenario 3. On the whole, based on the analysis made, we are inclined to conclude that the pandemic, with its severe impact on the GSDP, is likely to drive the state finances to a highly precarious condition, which was unprecedented.

⁵ This has been arrived by adding taxes and subtracting subsidies from the estimated GSVVA figures estimated in the previous section.

Table 4.15
Impact of Covid-19 on State Finance as per Scenario 3

Particulars	2020-21			
	Budget Estimate		Budget Estimate (Revised) after Revenue Fall	
	Rupees in Crore	As Per centage of GSDP	Rupees in Crore	As Per centage of GSDP
Revenue Receipts	114636	11.72	81180.48	10.19
Own Tax Revenues	67420.01	6.89	42066.98	5.28
State GST, Liquor, Petrol & Diesel	55651	5.69	32660.3	4.10
Excise Duty	2800.67	0.29	2470.19	0.31
Stamp and Registration	4306.24	0.44	3014.37	0.38
Motor Vehicle Tax	3968.22	0.41	3228.22	0.41
Other Taxes	693.88	0.07	555.11	0.07
Non Tax Revenue	14587	1.49	13935.51	1.75
Central Transfers	32628.99	3.34	25177.99	3.16
Share in Taxes	20934.9	2.14	13483.9	1.69
Grants	11694.09	1.2	11694.09	1.47
Revenue Expenditure	129837.4	13.27	129837.4	16.29
General Services (of which)	59712.41	6.11	59712.41	7.49
Interest Payment	19850	2.03	19850	2.49
Pension	20970.41	2.14	20970.41	2.63
Other General Services	18892	1.93	18892	2.37
Social Services (of which)	42469.84	4.34	42469.84	5.33
Education	20495	2.1	20495	2.57
Medical and Public Health	7615.39	0.78	7615.39	0.96
Water Supply and Sanitation, Housing and Urban Development	2665.35	0.27	2665.35	0.33
Social Welfare and Nutrition	7440	0.76	7440	0.93
Economic Services (of which)	17896.74	1.83	17896.74	2.25
Rural Development	4809	0.49	4809	0.60
Agriculture	6929.57	0.71	6929.57	0.87
Grant-in-aid and other contributions	9758.38	1	9758.38	1.22
Capital Expenditure	14427.93	1.48	14427.93	1.81
Revenue Deficit	15201.37	1.55	48656.89	6.11
Fiscal Deficit	29295.28	3	62750.8	7.87
Primary Deficit	9445.28	0.97	42900.8	5.38
Outstanding Debt	292086.9	29.86	325542.4	40.85
GSDP	978064		796973	

Source: GIFT estimate based on the data from State Budget Documents, Government of Kerala

Items	Amount in Crore considering revenue deficit grant	As a % of Revised GSDP in 2020-21	Amount in Crore without considering revenue deficit grant	As a % of Revised GSDP in 2020-21
Revenue Deficit	33333.89	4.18	48656.89	6.11
Fiscal Deficit	47427.8	5.95	62750.80	7.87
Primary Deficit	27577.8	3.46	42900.80	5.38
Outstanding Debt	310219.42	38.92	325542.42	40.85
<i>GIFT estimate based on the data from State Budget Documents, Government of Kerala</i>				

It is evident from table 4.16 that if we consider the revenue deficit grant of Rs.15323 Crore provided by the 15th finance commission, there will be decline in the estimated revenue deficit in Scenario 3 from 6.11 per cent to 4.18 per cent. The fiscal deficit would decline from 7.87 per cent to 5.95 per cent. In the case of debt outstanding, the decline will be to 38.92 per cent from 40.85 per cent. Corresponding change will be realised in the case of primary deficit from 5.38 per cent to 3.46 per cent. In the case of Scenario 2, there will be marginal reduction in all the fiscal indicators.

Thus far we have not considered any expenditure other than those budgeted in the budget 2020-21. Indeed, there are additional expenditure to be incurred in fiscal 2020-21 itself that include, but not limited to, a) expenditure for containing covid and thus saving the lives b) expenditure for supporting livelihood and offering social protection to those adversely affected including the guest workers and c) expenditure to be incurred to turnaround the derailed economy. An immediate relief cum revival package focussing only those who are severely affected in agriculture, own-account enterprises, and workers employed in establishments involves an expenditure of at least Rs 17,000 Crore (see section 5). If this expenditure is also taken into account the revenue deficit, fiscal deficit and the outstanding borrowing is expected to be much higher than what we have already highlighted. It is in this context that we have made a number of recommendations for the consideration of the central government and the state government, which are expected to be helpful in overcoming the precarious fiscal condition being faced by the state.

PART 5

TOWARDS AN IMMEDIATE REVIVAL PLAN

The policy makers are confronted with the twin challenges. Saving lives and livelihoods. The latter, which is our focus, demands that the commercial agriculture, agro-processing industries, manufacturing, trade, tourism and numerous service industries need to be brought back and enabled to move on their own. That necessarily implies a good deal of liquidity support forthcoming from the state. What would be the scale of resource required for this purpose? How would the state go about dispensing such help, should there be some resources for reviving the economy at its disposal? In what follows, we take a look at this question and offer some practical suggestions.

5.1 Sectoral and status-wise distribution of workers

The Periodic Labour Force Survey (PLFS) of the Government of India in 2017-18 brings out that the primary sector (Agriculture, animal husbandry, and fisheries) holds just about 20 per cent of all men and women employed in the state. (The relevant figures on the sector-wise distribution of workforce in Kerala are in **Table A1**, included in an Appendix Table to this report). The secondary sector is a more important source of employment, where more than two-thirds of all male workers are engaged in construction and the rest in manufacturing activities. The tertiary sector, which consists of both traditional and modern service industries, accounted for the largest share of employment in the state. The sectoral distribution points to a changing profile of jobs in the state with better prospects for value addition by all workers, notably women, in the modern service industries.

5.2 Workers' earnings across employment categories

Towards formulating a revival plan, it is necessary to have the distribution of workers and their earnings in different employment status groups such as self – employed (own-account workers), regular employees, and casual workers on daily wages. Here again, we take recourse to the estimates derived in the PLFS. (The relevant figures are in **Appendix Table A2**). In all, there were 88.4 lakh workers – 65.7 lakh men and 22.8 lakh women – resident in Kerala during the year 2018. Of the total, 34 lakhs were self-employed in the farm and non-farm sectors; another 30.5 lakh were regular workers receiving wages or salaries at fixed intervals, and 25 lakhs were casual labourers depended on daily wage employment. Together they constitute the total earning workforce of the state distributed as follows: 38 per cent in self-employment, 35 per cent regularly paid, and 27 per cent casual workers. Among the regular workers, 12.5 lakh are in the formal sector of both public and private domains. In principle, the regulatory laws of the state protect the formally employed from any loss of income due to the pandemic. The regular, but non-formal workers, came to a total of 18.03 lakhs. The casual workers were 24 lakhs.

We have worked out the yearly earnings of workers in different status groups. (The methodology used for deriving these estimates is in **Appendix 3** of this report). The self-employed earned a total of Rs 56,955 Crore in 2018, distributed almost equally into rural and urban areas. Total earnings of all regularly paid workers came to Rs 71,152 Crore, and excluding the formal sector, the wage earnings were Rs 42,046 Crore. The annual earnings of all casual workers aggregated to Rs 29,400 Crore, of which Rs 19,113 Crore were earned in rural areas. The total earnings of all workers, summing up the incomes of the three different status groups – self-employed, regular wage/salaried, and casual workers – came to Rs 1,56,507 Crore. The sum

has originated almost equally from rural and urban areas. An alternative estimate of total earnings, excluding the formally employed, came to Rs 1,27,401 Crore. When multiplied by the per cent increase of NSVA of 2018-19 over the previous year, the earning of all workers in Kerala came to Rs 1,73,519 Crore. The alternative estimate of earning of non-formal workers, using the same ratio, came Rs 1,41,249 Crore.

Based on the estimates for 2018-19, we can derive the earnings prevalent in 2019-20, and the scale of income decline, which the state's economy and proportionately the workers have suffered in the aftermath of the current pandemic. The estimate for the period March 2020 onwards, depends on how long the economy remains locked down and starts moving afterwards. It also depends on the volume of financial support, which the government can provide towards stimulating economic activities in the state.

It is crucially important to help the entire workforce of the state in all sectors to retrieve the economic ground they have lost in terms of income and living standards, following the pandemic. All countries of the world, rich and poor, are currently working out strategies to compensate for the loss of income sustained by all their partners in national economies. Since such partners in Kerala, especially those in the non-farm sectors, are spread over a broad spectrum of micro, small and medium enterprises across the state, a question arises. What criteria should the government follow, if it were to dispense a package of benefits that can at least partially mitigate the adverse effects of the pandemic? In this regard, a profile of the value added by the workers in different categories of enterprises, either as own-account workers or wage employees can help us arrive at an approximation of their entitlement for support from the state.

5.3 Towards a relief-package for enterprises and workers

Data from a survey of un-incorporated enterprises held in 2015-16 come in handy for this purpose. The average value added by own account enterprises (OAE) and establishments that use hired labour in major industry divisions, can be a proxy for the financial support to be extended by the government. The value-added per OAE in 2019 came to Rs 95,184 in Manufacturing; Rs 1,92,750 in Trade and Rs 182,287 in Other Services. Likewise, value-added per establishment in 2019 came to Rs 8,09,921 in Manufacturing; Rs 10,71,016 in Trade and Rs 12,36,659 in Other Services. These estimates are a useful benchmark for apportioning benefits to OAEs and establishments in major industry divisions of the state. The methodology followed towards deriving the estimates mentioned above comes explained in **Appendix 4 & Appendix Table A3** of this report.

There are two dimensions to the provision of financial support for the revival of enterprises and establishments: one, the amount to be disbursed and two, the mode of disbursement. The Committee is of the view that full value-addition that would have occurred during April, 50 per cent of that of May and 25 per cent of that of June 2020 can be disbursed to the enterprises and establishments. The support to the establishments would cover not only the profits of the owners but also the wages of the workers for April, May and June. Accordingly, in **Appendix Table A4**, we have furnished some estimates of the financial support, needed for reviving the economy of the state. A sum of **Rs 13,641** Crore will be required to support a significantly large number of own-account enterprises and workers employed in establishments, all engaged in manufacturing, trade and other services. The support envisaged for the primary sector is over and above this amount. Without such support, many enterprises in the state will go under, leading to severe disruption in the economy.

Kerala's manufacturing sector during the last few years has been in an upswing. This needs to be further strengthened. Here considering global context, there are enormous opportunities in sectors like food and fibre based products, electronics, medical equipment, oleo-resins, polymers and pharmaceutical products. In an environment where the limits of Global Production Networks are getting exposed, there is scope evolving National Production Networks wherein Kerala could take the lead.

As noted earlier in this report, the coronavirus pandemic has precipitated an economic emergency in the country. Responding in similar circumstances, the industrial economies of the world, in particular, United States, United Kingdom, Germany, France, Italy have come up with schemes to support business and wage payment and to retain jobs. The amounts involved range from 10 to 20 per cent of the GDPs of these countries. In the Indian context, the Committee is of the view that the state government is not in a position to finance such schemes and the Union government ought to announce comprehensive plans at the earliest, lest businesses sink, and jobs disappear accentuating the economic calamity. In the interim, the state government may do the following. Firstly, it can encourage own account enterprises and establishments with the number of workers up to 20 to borrow from banks with an interest subvention of 50 per cent for the first six months and 25 per cent for the next six months. It may also transfer a part of the wages and salaries of the workers so that the establishments retain jobs.

5.4 Reaching out to the target groups

The next question is the modality of transferring this support. We discuss some feasible means of transferring such resources to different target groups, which hopefully will maximize the returns from such transfers. This Committee believes that the most effective manner of reaching out to the entire workforce, including the self-employed, owners of establishments and regular employees is through the trade secretariats of the interest groups concerned, which in most cases are the welfare funds organizations of the state. Besides, there are the organizations representing different categories of traders, MSMEs and professionals in different walks of life. The organizations maintain muster rolls of all their members since specified annual contributions accrue to them on behalf of their members.

Currently, there are 34 Welfare Fund Boards in Kerala with a total registered membership of 73.25 lakh persons. Altogether these Boards represent 80 per cent of all the informal sector workers of Kerala. Ideally, membership in the live registers of these representative organizations can be a useful criterion for awarding benefits to the self-employed, the employees and casual workers. To this end, and the welfare fund boards, functioning under the auspices the state's Labour and Social Welfare Departments can channelize the benefits to specific target groups, listed in their muster rolls.

As for making transfers under the two counts mentioned above, all establishments registered with the civic authorities for GST, and for enrolling their employees in Welfare Funds, Provident Fund, National Pension System, or Employees State Insurance should automatically qualify for support. The payments can be pre-determined as a share of the total value addition and wage payments, declared by the respective establishments. Such procedural formalities can also serve as a powerful

reminder to the general public that tax compliance, as well as welfare payments for all paid employees, are mandatory requirements for any financial support from the state, now and in future.

5.5 Agriculture holds the key

In our discussion thus far, we have dealt with own-account enterprises and workers employed in establishments. It is generally held that the most vulnerable and the poor are in rural areas, engaged in agriculture and allied activities. The available database and time constraint prevent us from dealing with their concerns at length. However, the pandemic has taught us the perils of excessive reliance on comparative advantage and underlined significance of being self-reliant in basic needs like food. Thus viewed, agriculture has to be at the centre stage of any recovery package. We stress the need for mobilising all the individuals and social organisations, including the return migrants, to ensure that the state is fallow free within six months. Interventions in the sphere of production alone, without concomitant initiatives on other parts of the value chain, could be self-defeating. Hence we call for linking the producers directly with the consumers by making effective use of the existing institutional architecture and encouraging new innovative interventions. Kerala's IT sector shall take up harnessing ICT to accomplish this as a challenge.

The pandemic should be seen as a great opportunity for the state's plantation crops, which are known to be merely the "makers of value" NOT "takers of value". Here, we need to see the problem not in terms of individual crops alone; but as one that pertains to the plantation sector as a whole. There is a need for bringing together all the stakeholders in the plantation sector to work towards a revival strategy with focus on making the sector the "makers AND takers of value". Both for agriculture and

plantation crops the role of ICT is of paramount importance, and much could be learned from the Taobao village experiment in China⁶. We call for an appropriate package with an outlay of at least Rs 3000 crore to ensure that agriculture and plantation sector are not left behind, instead, play its due role in taking the economy to a higher level of employment and income.

The way government has dealt with the pandemic, after dealing with the floods and *Oekhi* disaster, has once again shown that the Government is with the people. The role that social organisations have played through their timely interventions in the previous century towards making Kerala where it stands today is well acknowledged. A government, which has demonstrated to be with the people, could induce the social organisations to reflect on their potential role in making Kerala different in 21st century. Viewed thus, there exist a great opportunity for the government by prompting the social organisations to come forward with appropriate initiatives that could act as catalysts for major changes which is the need of hour.

⁶ See in this context, Mazzucato Mariana (2018) *The Value of Everything: Making and Taking in the Global Economy*, Allen Lane, London

Annexures

Appendix 1:

Government of Kerala order requesting GIFT to undertake the study



GOVERNMENT OF KERALA



Abstract

COVID 19 – Pandemic – Impact study on State Finances – Entrusting Gulati Institute of Finance and Taxation (GIFT) to conduct the study – Orders issued.

FINANCE (PLANNING - B) DEPARTMENT

G.O (RI) No.2966/2020/Fin.

Dated, Thiruvananthapuram, 07/05/2020

ORDER

The lockdown imposed due to the outbreak of **COVID-19** pandemic has brought the national as well as states economy to a grinding halt. The **COVID-19** pandemic has severely affected economic activities in almost all sectors of the State's economy. The economic crisis and health care issues triggered by the **COVID-19** pandemic have pushed the State finances to a financial precipice. The unprecedented dip in the State's Own Tax revenue coupled with shortfall in Central transfers compounded the financial crisis of the State. It is, therefore, imperative to assess the possible impact of **COVID-19** pandemic on the State finances with a focus on revenues of the State in the current financial year 2020-21 so as to formulate an effective strategy to drive the State's economy out of this crisis.


Govt after having examined the matter in detail are pleased to entrust Gulati Institute of Finance and Taxation (GIFT) to conduct a study on the possible impact of **COVID-19** pandemic on the State finances with a focus on revenues of the State in the current financial year 2020-21.

(By Order of the Governor)
PREETHA. B S
Additional Secretary (Finance)

To

The Principal Accountant General(A& E), Kerala,Thiruvananthapuram.
The Accountant General(GSSA & ERSA), Kerala,Thiruvananthapuram.
The Director, Gulati Institute of Finance and Taxation (GIFT)
The District Treasury Officer, Thiruvananthapuram
The Nodal Officer, www.finance.kerala.gov.in
Stock file/office copy

Forwarded /By Order


Section Officer

Appendix 2. **COVID-19 and Remittances**

The latest report of the Kerala Migration Survey estimated the number of Keralites working outside the country at 21.2 lakh as of 1 March 2020. The total number had peaked at 24 lakh in 2013 and has been coming down since then. Between 2013 and 2016, the number came down by 1.29 lakh, ie., 43000 a year and between 2016 and 2018 the fall has accelerated to 75,000 a year. If the same rate of fall has continued then the number would not be more than 19.72 lakh in early 2020. Out of this total 89.2 per cent are in the Gulf Cooperation Council (GCC) countries.

Out of the total migrants only 15.8 per cent are women. While 92 per cent of all male migrants are in the GCC countries, only 74.2 per cent of female migrants are in the Gulf. The rest are distributed in the US (5.6%), UK (5.1%), Australia (2.5%) and so on. While around one-third the male migrants are in occupations salesman, vehicle drivers and clerks, 46 per cent of female migrants are nurses. The occupational composition has important implications for both lay off/ retrenchment and remittance flow. Whereas a high proportion of male migrants face the risk of job loss, the remittance flow will be much smaller from the women as nursing occupation in the GCC countries is only a stepping stone for them to move to the advanced countries and settle down.

Kerala Migration Survey estimates the volume of remittances using three methods and considers the NRI Deposit method the most appropriate. KMS estimate of remittances for 2017-18 is Rs 85092 Crore. This needs to be projected to 2020-21. There are four steps to the projection: first, the total number of migrants in 2020; second, the number returning owing to the crisis and job loss; third, depreciation of the Indian rupee; and fourth, salary reduction in the Gulf owing to COVID-19. As regards the first, the total number would have fallen to 19.72 lakh, that is a 10 per cent fall compared to 2018. Till 03 May 2020, 4.13 lakh non-resident Keralites have registered online for returning to Kerala. Among them, only 61009 (93%) have lost their jobs and another 60,000 wish to avail their annual leave. The details of the reduction in salary are still very hazy. The Indian rupee has depreciated by 16.92 per cent during this period; the exchange rate was Rs 65 a dollar in 2017-18 which has fallen to Rs 76 by April 2020. Thus, in the net the total remittances may fall by a whisker compared to the amount in 2018.

Before turning to the use of remittances it may be pertinent to state that KMS 2018 shows that a large proportion of remittance receiving households possess mobile phones (94%), television (89%), and refrigerator (85%).

Over 80 per cent of the houses are good, very good or luxurious. It seems the phase of large purchases of consumer durables by the remittance receiving households is over. As regards spending, only 37.6 per cent of the total is spent on day-to-day household expenses, repair of houses (5.8 per cent), purchase of gold (4.3 per cent) and close to one-third goes for paying back debt or is retained as cash at hand, or banks. Around eight per cent of the total is used for children's education. Unlike in the past, one of the main end-uses of remittances is the purchase of a motor car. The main result of a hit on remittances would then be a lower demand on motor vehicle purchase. One of the implications of the change in the expenditure pattern overall is that the expenditure multiplier must have become small.

Appendix Table A1
Per cent Distribution of Usually Working Persons (ps+ss)
by Industry of Work, Kerala

Industry	Men	Wome n
A: Agriculture, forestry and fishing	20.14	19.04
B: Mining and quarrying	0.35	0.00
C: Manufacturing	10.42	13.73
D: Electricity, gas, steam and air conditioning supply	0.49	0.15
E: Water supply; sewerage, waste management and remediation activities	0.24	0.26
F: Construction	21.93	11.42
G: Wholesale and retail trade; repair of motor vehicles and motorcycles	15.89	8.91
H: Transportation and storage	12.11	1.28
I: Accommodation and Food service activities	3.15	1.64
J: Information and communication	1.45	1.50
K: Financial and insurance activities	1.93	5.83
L: Real estate activities	0.26	0.10
M: Professional, scientific and technical activities	1.24	1.55
N: Administrative and support service activities	1.68	1.70
O: Public administration and defence; compulsory social security	1.93	2.60
P: Education	1.84	13.46
Q: Human health and social work activities	1.15	9.75
R: Arts, entertainment and recreation	0.72	0.27
S: Other service activities	2.74	2.58
T: Activities of households as employers producing goods and services	0.33	4.25
U: Activities of extraterritorial organizations and bodies	0.00	0.00
Total	100.00	100.00

Source: Appendix Table 27, Periodic Labour Force Survey, Annual Report, 2017-18, Govt. of India, 2019. Ps+ss refers to both principal and subsidiary status workers

Appendix Table A2
Workers 15 Years+ and Their Earnings
by Employment Status in Kerala, 2017-18

		Numbers in Thousands			Earnings in Rupees (Crore)		
		Men	Women	Persons	Men	Women	Persons
1	2	3	4	5	6	7	8
1. Number of Self - Employed	Rural	1565	392	1960	23290	2101	25275
	Urban	1168	269	1438	22479	2434	25385
	Total	2735	661	3396	49833	5239	55955
2. Regular Wage/Salaried Workers	Rural	944	591	1537	22200	9993	31606
	Urban	916	604	1522	21690	14897	36641
	Total	1861	1196	3051	43985	27358	71152
2.1 Regular Workers less Formal Sector	Rural	558	349	908	13118	5905	18677
	Urban	542	357	900	12817	8803	21653
	Total	1099	707	1803	25992	16167	42046
3. Casual Wage Workers	Rural	1232	312	1542	16554	2039	19112
	Urban	744	109	855	9367	792	10265
	Total	1979	422	2397	26023	2810	29400
4. Total Workers (Items 1+2+3)	Rural	3744	1295	5039	62043	14133	75994
	Urban	2828	983	3816	53535	18124	72291
	Total	6574	2279	8844	119841	35408	156507
4.1 Total Workers less Formal Sector (Items 1+2.1+3)	Rural	3187	946	4131	52962	10046	63065
	Urban	2287	625	2916	44663	12030	57303
	Total	5475	1572	7041	101848	24216	127401

Source: *Periodic Labour Force Survey, Annual Report for 2017-18*, The estimates are based on weekly status of workers and derived from data given in Tables 2,35,38,42,43, and 46.

Appendix 3

Methodology for deriving the incomes of different status groups in the workforce

As for the self-employed, we used the monthly income of men and women in rural and urban areas during the quarter April to June 2018, estimated in the PLFS, and multiplied them by 12 (months) and the actual number of workers in category to derive the yearly estimates. The self-employed earned a total of Rs 56,955 Crore in 2018, distributed almost equally into rural and urban areas. Likewise, using monthly earnings of regular workers in the same quarter, we worked out the yearly earnings of all regular workers on two counts; first, including the formally employed, and second, excluding them. Total earnings of all regularly paid workers came to Rs 71,152 Crore, and excluding the formal sector, the wage earnings were Rs 42,046 Crore.

We derived the weekly wages of casual workers by multiplying their average daily wages in each category by the corresponding number of days worked per week during the quarter April-June of 2018. The weekly payments, multiplied by the total number of casual workers in each category, and 52 (number of weeks a year) take us to the annual earnings of all casual workers aggregating to Rs 29,400 Crore, of which Rs 19,113 Crore were earned in rural areas.

The total earnings of all workers, derived by summing up the incomes of the three different status groups – self-employed, regular wage/salaried, and casual workers – add to Rs 1,56,507 Crore. The sum has originated almost equally from rural and urban areas. An alternative estimate, excluding the formally employed, came to Rs 1,27,401 Crore

Appendix 4

Value Addition in Own Account Enterprise and Establishments of Kerala

In 2015-16, the average value added by an OAE was Rs 69,117 in Manufacturing, Rs 1,34,356 in Trade and Rs 1,28,365 in Other Services (See Appendix Table 4A). The corresponding value-added per establishment was just about seven-fold in each industry division. When we take into account the sector-wise increase of factor prices between 2015-16 and 2018-19, the value-added per OAE in 2019 came to Rs 95,184 in Manufacturing; Rs 1,92,750 in Trade and Rs 182,287 in Other Services. Likewise, value-added per establishment in 2019 came to Rs 8,09,921 in Manufacturing; Rs 10,71,016 in Trade and Rs 12,36,659 in Other Services. These estimates are useful benchmark for apportioning benefits to OAEs and Establishments in major industry divisions of the state.

Appendix Table A3
Some Features of Enterprises and Workers Employed
in Different Sectors - Kerala - 2015-16

		OA Enterprises	Establish ments	Total
Number of enterprises	Manufacturing	419208	126612	545632
	Trade	502057	240572	742629
	Other Services	863742	227272	1091014
	All	1785007	594456	2379463
Number of Workers	Manufacturing	515076	496498	1011574
	Trade	643635	802809	1446443
	Other Services	96587	1067852	2033724
	All	2124583	2367159	4491741
Value Added/ Enterprises Rs	Manufacturing	69117	588115	189370
	Trade	134356	746547	332673
	Other Services	128364	870826	281558
	All	116131	759835	276363
Value Added/ Worker Rs	Manufacturing	56253	149809	102163
	Trade	104803	223712	170800
	Other Services	115931	186937	153048
	All	98008	191667	147269
Emoluments/ Worker Rs	Manufacturing	94269	112012	111511
	Trade	77199	118257	117978
	Other Services	69996	137692	137047
	All	82674	126163	125616

Source: Economic Characteristics of Unincorporated Non-Agricultural Enterprises. (Excluding Construction) in India, NSS 73rd ROUND, (July 2015 - June 2016), Government of India, Tables T2 to T23 for figures relevant to Kerala.

Appendix Table A4
Financial Support for the Enterprises and Establishments

	OA Enterprises Number	Value Added - 2019 (Rs)	(Value Added/12)x1.75	Financial Support (Rs Crore)
Manufacturing	419208	95184	13881	581.90
Trade	502057	192750	28109	1411.23
Other Services	863742	182287	26584	2296.17
Sub Total				4289.30
	Establishments Number	Value Added - 2019 (Rs)	(Value Added/12)x1.75	Financial Support (Rs Crore)
Manufacturing	126612	809921	118113	1495.45
Trade	240572	1071016	156190	3757.49
Other Services	227272	1236659	180346	4098.76
Sub Total				9351.70
Grand Total				13,641.15

Source: Based on figures in Appendix Table 3A.



GIFT Campus, Chavadimukku, Sreekaryam P.O,
Thiruvananthapuram – 695017, Kerala, India.
Phone: +91-471-2596960, 2596970, 2596980, 2590880
Fax: +91-471-2591490
E-mail: giftkerala@gmail.com
Website: www.gift.res.in