

KERALA ECONOMY

January 2021

Vol.2 No. 1

**Kerala budget 2021-22: More a vision document
than a conventional budget**

The deceleration and decline of GDP

**Is the level of government spending enough
to revive growth?**

A study of union government and southern states

Whither Kerala in GST collection?

**Taming the prices during the pandemic:
Further exploration**

**The story of social spending - A Revisit to the
Kerala model of development - Part II**

All is not well that lights not well

KERALA ECONOMY

A PUBLICATION OF GULATI INSTITUTE OF FINANCE AND TAXATION

Editorial Board

Chairman

T M Thomas Isaac

Editor-in-Chief

K J Joseph

Editorial Advisors

A V Jose

D Narayana

K N Harilal

K Ravi Raman

N Ramalingam

L Anithakumary

Consulting Editors

George Joseph

Pyaralal Raghavan

Editing Assistant

U P Anilkumar

Address

Gulati Institute of Finance and Taxation,
GIFT Campus, Chavadimukku,
Sreekariyam, Thiruvananthapuram, Kerala - 695017.
Phone : 0471 2596970, 2596980, 2590880, 2593960.

Email : keralaeconomy@gift.res.in

Contents

	Page No
Editorial	
Blueprint for a great leap forward	3
1. Kerala budget 2021-22: More a vision document than a conventional budget	5
M A Oommen	
2. The deceleration and decline of GDP	8
Shagishna K & D Narayana	
3. State of state finances	
Is the level of government spending enough to revive growth?	
A study of union government and southern states	12
Parma Chakravartti and Anitha Kumary L	
4. Tax monitor	
Whither Kerala in GST collection?	20
N. Ramalingam and Santosh Kumar Dash	
5. Price monitor	
Taming the price during the pandemic: Further exploration	24
P S Renjith and Kiran Kumar Kakarlapudi	
6. Labour and employment	
The story of social spending - A revisit to the Kerala model of development - Part II	29
A V Jose	
7. Sectoral focus	
All is not well that lights not well	33
Vijayamohan Pillai N	
8. New studies on Kerala	40
Young scholars' forum, GIFT, led by Suha A M	
9. What is new(s) from GIFT	44

Editorial

Blueprint for a great leap forward

Kerala's unique development experience of achieving a remarkably high human development at a relatively low per-capita income has by now being touted as the Kerala model of development. While the claim of being a model is questionable, there is much in Kerala's development trajectory for others to learn from. This includes, but is not limited to, extensive social sector innovations at the instance of social reformers that laid the foundation of Kerala's development and innovations in governance like decentralized development. Above all is the competition between the two leading political coalitions of Kerala to support a progressive agenda and to protect the less privileged by various public actions. The question, however, arises; has Kerala exploited its potential fully? The answer, unfortunately appears to be not in the affirmative.

In this context, the blueprint for development presented by Dr T M Thomas Isaac, in his latest budget could help Kerala exploit its potential and become yet another contribution for others to emulate. The blueprint is the manifestation of a realistic understanding of one of the core issues of Kerala's development problem - growing unemployment of the educated manpower, especially women. At the core of the budget is the most innovative strategy of transforming Kerala to an inclusive knowledge economy as a conduit for creating employment opportunities for the educated unemployed including women, by harnessing modern technology. This strategy is also a reflection of the perspective that the government holds towards the fourth industrial revolution and its commitment towards making use of the new opportunities offered by it in a manner that excludes none.

The knowledge economy, as envisaged by the Finance Minister, stands on three key pillars. The first one is the IT Infrastructure -including hardware, software and communication network. Kerala, being a state that set the model for other states to emulate by establishing a state level electronic development corporation in early 1970s (KELTRON) and established the first technopark in the country, is visualizing the reemergence of an electronic system design and manufacturing sector in the country when the electronics production base in India is totally eroded, thanks to "Globalization, not in our terms and not in our pace". With innovations associated with Artificial Intelligence, Machine Learning, Robotics and others those segments of software industry surviving on the labor arbitrage will have to redefine and reposition themselves and the

budget underlines the need for such a transformation. The State's attempt to build its own communication network- Kerala Fiber Optic Network (K- FON), deserves appreciation in the current context wherein competition is becoming a fact of history as the telecommunication services is becoming monopolized. This is also essential to ensure that the knowledge economy envisaged is devoid of digital divide.

The second pillar and perhaps, the central one of the knowledge economy is a vibrant innovation system. The budget recognizes that the key resource in the modern economy is knowledge and if knowledge is the key resource, learning is the key process. It is in this context that various initiatives are being laid down in the budget towards building an innovation system at the regional and sectoral level at the instance of the Kerala Development and Innovation Strategic Council (K-DISC). While linking knowledge to development, especially inclusive development, the Science Technology and Innovation Policy, 2013 has clearly stated that all forms of knowledge are equally important. Hence the budget aims at harnessing both science based and experience-based knowledge from different sectors of the economy and society indicating the inclusive approach towards transforming Kerala to a knowledge economy.

The third pillar is the human capital. Though the State is known for its commitment towards human capital formation and the investment in higher education, there is reason to believe that the public returns to such investment has been limited on account of migration of the skilled man power out of the state. It is in this context that the budget envisages a revamp of the higher education system in the state and to re-skill and up-skill the labor force for the new economy. Here the budget has a global perspective and the highly innovative network of institutions in the form of inter- university centres could be considered as the right step long overdue. In this process much is expected to be accomplished with the involvement of eminent non-resident scholars of Kerala.

Needless to say, whether the blueprint will lead to a great leap forward depends on a number of supplementary factors. The most important one being the bureaucratic readiness, transition to a knowledge economy may be difficult with the current bureaucracy, accustomed to the brick and motor economy. Hence appropriate administrative reforms are needed. It is also high time to search for innovative measures to enlist the constructive cooperation of the opposition parties. Wish such innovations that keep the welfare of people upfront will also emerge from Kerala!

K J Joseph

Kerala budget 2021-22: More a vision document than a conventional budget

M A Oommen

In a way, Finance Minister, Dr Thomas Isaac in his Budget Speech for 2021-22 has set aside several conventions of budget presentations that date from the 'Thirattu' of Marthanda Varma of Travancore (which really predates Sir Robert Walpole's 'bougette' of 1733) to the present. In these hard times of corona pandemic, the Finance Minister looks to the starry sky rather than to the muddy boots, bringing good tidings to nearly 6 million poor pensioners, the COVID-weary ASHA and Anganawadi workers, CDS functionaries, elected representatives of local governments and the list is far wider to envelope non-resident Malayalees as well. Although Aladdin's wonder lamp exists only in Arabian fairy tales, Kerala people would wish him to have one particularly because he provides for over 5 lakh livelihood jobs besides nearly 6-7 million employment during the next five years. This note is a brief account showing the major salience of the budget.

First, the Budget is a signpost to a welfare state which assumes operational meaning within a social democratic paradigm. Two foundational characteristics of a welfare state are (1) to provide for the mischances of life like old age, unemployment,

disability, diseases and ensure social security net, along with equality of opportunity in access to education and (2) eradication of absolute poverty. (part 4 is exclusively devoted to it). The welfare state paradigm is buttressed further because the Budget seeks to prime the economy to a higher level of employment: livelihood jobs, skilled and unskilled works, educated employment and the spectrum is wider. Even so, I am aware of the fact that in a society where the rate of increase in the income of the top deciles is higher than the bottom deciles, inequality in income will rise and social well-being will suffer grievously. Kerala admittedly is a growing unequal society (see Oommen 2014). While increasing the pensions of the poor by Rs.100 is a great gesture, but when the public resources that flow into the bureaucracy, technocracy and the upper echelons of society far exceed relatively poor strata welfare state can lose its sheen and significance.

Second, to be sure, the most outstanding salience of the Budget is the concerted programme to build a knowledge-based economy and innovative society and the generous allocations provided for

universities and centres of research and excellence. K-FON and K-DISC are bold initiatives; the proof of the pudding of course is in its eating. Indeed, there is a great challenge in a society that fosters mediocrity and decries merit and where a higher education happily welcomes a linear expansion of the existing rot system. Do we have the ambience and nursing ground for the knowledge economy to take firm root? Five hundred Nava Kerala post-doctoral fellowship (appealing name cannot turn and into gold) or 30 or more centres of excellence cannot change a decadent system. I was a teacher who had the feel of the well-entrenched vested interests. You cannot create a plant ecosystem by manuring the green shoots as a Malayalam proverb aptly puts it.

Third, the Budget is avowedly women-friendly, although the road to gender justice is rough and long. Even so the allocation of Rs.5 crore for transgender is a significant step towards gender equity.

Fourth, in the present time of expanding needs and heavy debt-financing, prudence is the keyword. When corruption, consultancy and commission are said to maraud the public finance system, some accountability mechanism or leakage prevention antidotes would have added greater credibility and acceptance.

Annual financial statement: Some caveats

The annual financial statement statutorily mandated by the Indian constitution (see Articles 112 and 202) to be laid before the legislature (the term budget is not recognised by the Indian constitution) is

the real kernel of the public finance system. The Budget speech quite often marginalises this core, the details of which one will have to look for in the Budget-in-Brief document and several others that make the fiscal domain.

The total revenue receipts for 2021-22 is estimated to be around Rs.1,28,375.88 crore and including borrowings and other capital receipts, total receipts will add up to Rs. 1,59,427.24 crore. As the revenue expenditure far exceeds the revenue receipts, there is an estimated revenue deficit of Rs. 16,910.12 crore which is way below the revised estimate of Rs.24206.44 crore for the current year. These numbers are not realistic. The budget for 2021-22 expects a lower Union tax share of Rs. 16,760.30 crore as against the actual of Rs. 19,038.17 crore in 2018-19 obviously because of the lower buoyancy of 0.82 in the current year. The budget hopes to compensate the shortfall by a generous grant in the COVID -19 context. Even so the capital expenditure is sought to be maintained at Rs. 14,141.21 crore which in fact is lower than the budgeted amount for 2020-21 but 28% higher than the revised estimate.

With the state's own tax revenue nosediving to Rs.45,272.15 crore in the revised estimate of current year a quantum jumps to Rs. 73,120.63 crore in 2021-22 which is nearly 62% higher is not easily attainable. The additional resource mobilisation is only a paltry sum of Rs. 200 crore. The revenue deficit of Rs. 16,910.12 crore for the budget year is subdued also because the salary and pensions and several contingent liabilities remain to be fully

provided for. The revenue deficit target of 1.93% of GSDP cannot be easily accepted. The slippage in fiscal target does not speak highly of the fiscal management, because the budgeted target for 2020-21 was 1.55% while the revised estimate shot up to 2.94% of the GSDP. A quantum jump off the fiscal marksmanship by a high margin of 90% is also undoubtedly unrealisable. The numbers relating to fiscal deficit are also equally unconvincing.

The derailment in fiscal marksmanship in revenue and fiscal deficits will have a snowball impact on the public debt. Public debt management is a highly subtle and responsible act, because this involves inter-generational equity. Obviously if the borrowed money is spent to finance revenue expenditure, you are accumulating unsustainable debt. This has happened for several years now. The media and the Kerala public are apprehensive of the mounting debt although the per capita burden is sometimes blown out of proportion. The growth rate interest rate matching is a long run dictum when as Keynes famously said, 'In the long run we are all dead'. The repayment burden in the short run cannot be wished away. The total outstanding debt as a percentage of GSDP for 2021-22 works out to 37.39% as against 29.82% in 2018-19 just three years back. The debt and fiscal framework recommended by the FRBM Review committee (2017) which is pending as a Bill before parliament may come up with ceilings (for states it is 20% of GDP) and may pose a threat sooner than later. The Damocles sword of central intervention is a possible threat.

In this context the state has to be concerned about KIIFB on which Kerala state leans heavily for the delivery of promises and expansion of infrastructure. The special purpose vehicle KIIFB the outcome of a 1999 ACT is adroitly adapted to meet the growing needs of Kerala's expanding economy. Nearly 25% of the total KIIFB investment is earmarked for the needs provided in this Budget. Dr. Thomas Isaac has attracted brick bats and bouquets for this launch into the deep. If 80% investments prove to be self-liquidating, history will honour him. To be sure an expanding economy cannot be tied down to the arithmetic of the FRBM Act. Risk-taking is inescapable. While Budget speech is part of politics, public investment is a social choice to be done with wisdom, prudence and faithfulness. The key variable is tax-payers money.

To conclude, the observations are impromptu but done in good faith. The budget speech has created a record for its length. The gate should be appropriate for the house. The speech is well punctuated with poems by tiny tots and beautified by their surreal paintings. When the promises are kept, the Finance Minister becomes a promising leader par excellence.

■
(Prof. M A Ommen is the honorary professor, GIFT)

The deceleration and decline of GDP

Shagishna K & D Narayana

The National Statistical Office (NSO) has released the First Advance Estimates (FAE) of National Income for the year 2020 -21 on 7 January 2021 as per the release calendar. There are no surprises in the numbers of the aggregates. GDP growth estimate of -7.7 per cent is broadly in agreement with the real GDP growth projected by Reserve Bank of India (RBI) at -7.5 per cent in its recent Monetary Policy Committee meeting 2 - 4 December 2020. The RBI expects inflation to remain elevated but the implicit GDP deflator shown in the FAE is only 3.5 per cent.

NSO estimates the GDP to contract by 7.7 per cent in 2020-21 compared to 2019-20, a year which showed one of the lowest GDP growth rates of only 4.2 per cent. As GDP is GVA plus Net Taxes on Products, half a percentage point of the contraction in GDP is contributed by the 13 per cent fall in Net Taxes on Products. This is in sharp contrast to the 0.3 percentage point addition to GVA growth contributed by Net Taxes in 2019-20 (Table 1).

Expenditure components of GDP

The National Income identity suggests that Total Income is equal to Total Expenditure. Taking the expenditure

components, it is seen that the largest contribution to the contraction of GDP is by Private Final Consumption Expenditure at 70 per cent followed by Gross Fixed Capital Formation (Investment) at 56 per cent. The Government Final Consumption Expenditure continued to increase but contributed only 8 per cent towards GDP growth. The rest of the items such as Exports, Imports, Valuables, Discrepancies etc. account for another 18 per cent. Thus, the contraction of the economy is largely contributed by the large fall in Private Final Consumption Expenditure and Investment (Table 1).

Sectoral growth performance

The year 2019-20 recorded one of the worst growth performances over a long period with GVA growing at 3.9 per cent (Table 2). It would have been worse if Agriculture and Public Administration had not shown creditable growth. Already, Manufacturing and Construction were stagnating and Trade, Hotels, and Financial and Real Estate sectors were growing at historically low rates. In 2020-21, Agriculture continued its stellar performance but surprisingly,

The Gross Domestic Product in 2020-21 is estimated to contract by 7.7 per cent which is comparable to -7.5 per cent projected by the Reserve Bank of India. The Net Taxes on Products contributed 0.5 percentage point to this contraction.

Public Administration reported negative growth. All other sectors, except Electricity, Gas,,,,, showed large de-growth. In particular, Manufacturing, Construction and Trade, Hotels,,,,, showed negative growth of 9 to 13 per cent. The overall growth is influenced by these large sectors of the economy.

Focusing on growth rates may create illusions. So, it may be worth looking at the levels of value added. It may be noted that GVA in 2020-21 is about 3 per cent lower than that in 2018-19 (Table 2). Except for Agriculture, Public Administration, Electricity, Gas,,,,, and Financial, Real Estate & Professional Services, the levels of GVA in 2020-21 are lower than that in 2018-19. If the economy

were to grow at 3.5 per cent in 2021-22 then the economy will only reach the level of 2018-19. At 7.5 per cent growth in 2021-22 the level of 2019-20 will be breached. Surpassing 2019-20 GVA level would require a growth rate of over 8 per cent not seen in the last five years.

GDP deflator and inflation rate

In 2019-20, GDP growth at current prices was at 7.2 per cent compared to the GDP growth at constant prices. This was 3 percentage points higher indicating that the GDP deflator was 3 per cent giving a sense of the price rise in the economy. The deflator was almost in agreement with the CPI inflation rate reported for the year at 3.7 per cent. Surprisingly, the GDP

Table 1. Advance estimates of GDP 2020-21 at constant 2011 -12 prices (Rs crore)

Item	2019-20(PE)	2020-21(1 st AE)	% Change
Gross Value Added (GVA) at Basic Prices	1,33,01,120	1,23,39,175	-7.2
Net Taxes on Products	12,64,831	11,00,487	-13.0
Gross Domestic Product (GDP)	1,45,65,951	1,34,39,662	-7.7
Contribution to Contraction of GDP			11,26,289 (100)
Private Final Consumption Expenditure (PFCE)	83,25,907	75,37,315	7,88,592 (70.01)
Government Final Consumption Expenditure (GFCE)	16,52,367	17,47,876	-95,509 (-8.47)
Gross Fixed Capital Formation (GFCF)	43,34,091	37,07,516	6,26,575 (55.63)

Source: *mospi.nic.in*

Note: PE – Provisional Estimates; AE – Advance Estimates

deflator for 2020-21 at 3.5 per cent - the difference between GDP growth at current prices (-7.7%) and constant prices (-4.2%) - is far lower than the CPI inflation rate of 6.9 per cent. This is difficult to understand as many other agencies which have forecast GDP growth rate for 2020-21 have indicated that inflation would be 5 to 6 per cent (Asian Development Bank, Fitch Ratings).

Growth prognosis

The Press Note by NSO provides useful information on some of the main indicators in an Annexure. Using some of the data a growth prognosis is provided. Taking index of sales of

commercial vehicles in 2018-19 at 100, the numbers fell to 77 in 2019-20 and 33 in 2020-21. They will have to rise three-fold in 2021-22 to reach the 2018-19 level. As regards private vehicles, the numbers fell to 84 in 2019-20 and further to 63 in 2020-21. They will have to increase by 60 per cent in 2021-22 to reach the level of 2018-19. In the construction sector, a growth of over 25 per cent will be taking the value added to the level of 2018-19. These numbers are almost impossible to achieve looking at the current growth trends in various sectors. Thus, it seems incomes in 2021-22 will be lower than that in 2018-19. They would cross the levels of 2018-19 if the growth in 2022-23 rises

Table 2. Sectoral growth rates of advance estimates, 2020-21 at constant prices (Rs crore)

Industry	2018 - 19	2019 - 20 (PE)	2020 - 21 (1 st AE)	% Change Over Previous Year		% Change Over 2018 - 19
				2019-20	2020-21	2020-21
Agriculture, Forestry & Fishing	18,72,339	19,48,110	20,13,927	4.0	3.4	7.6
Mining & Quarrying	3,45,069	3,55,680	3,11,621	3.1	-12.4	-9.7
Manufacturing	23,16,643	23,17,280	20,98,912	0.03	-9.4	-9.4
Electricity, Gas, Water Supply & Other Utility Services	2,96,560	3,08,832	3,17,125	4.1	2.7	6.9
Construction	10,20,314	10,33,276	9,03,243	1.3	-12.6	-11.5
Trade, Hotels, Transport, Communication etc.	24,88,049	25,77,945	20,26,128	3.6	-21.4	-18.6
Financial, Real Estate & Professional Services	27,86,855	29,15,680	28,91,811	4.6	-0.8	3.8
Public Administration, Defence & Other Services	16,77,298	18,44,316	17,76,408	10.0	-3.7	5.9
GVA at Basic Prices	1,28,03,128	1,33,01,120	1,23,39,175	3.9	-7.2	-3.4

Source: *mospi.nic.in*

Note: PE – Provisional Estimates; AE – Advance Estimates

Agriculture continued to grow at a credible 3.4 per cent in 2020-21 compared to 4 per cent in 2019-20. The sectors worst hit, however, are Manufacturing, Construction and Trade, Hotels, Transport, Communication etc. that have contracted between 13 to 9 per cent.

sharply. But the historical experience of growth after a pandemic suggests that growth fell after a sharp rise the year after the pandemic. Also, the NSO's Press Note on Index of Industrial Production (IIP) released on 12 January 2021 suggests that the nascent industrial recovery begun in September retreated in November as

industrial output shrank 1.9 per cent. So, even the sharp recovery expected in 2021-22 seems to be a mirage.

■
(Professor D Narayana is the former Director of GIFT and Ms Shaghisna K is an independent researcher)

State of state finances

Is the level of government spending enough to revive growth? : A study of Union Government and Southern States

Parma Chakravarti and Anitha Kumary L

The government of India adopted a counter-cyclical fiscal policy which included tax cuts and increases in expenditures during the global financial crisis of 2008 (De, 2012; 14th FC Report). The government undertook such policy to revive the economy from a downturn. The impact of global financial crisis was almost negligible on the economic growth in India but it deteriorated the fiscal parameters of the Union government as a result of expansionary policies. The fiscal

A recent study by RBI (2020) shows that the general tendency of the fiscal policy of the state governments is dependent on the actual output and the debt level of the states. The fiscal rules compel the state fiscal policies to be pro-cyclical. A pro-cyclical fiscal policy means an expansionary policy during upturn and a contractionary policy during downturn. When the States' revenue falls due to a fall in output, they need to cut back their expenditure to follow the FRL,

The positive growth in grants-in-aids in the states are not enough to compensate for the revenue loss accounted from own tax revenue, own non-tax revenue and share in central taxes of the states except for Andhra Pradesh

deficit of the Union government which met the fiscal targets of Fiscal Responsibility and Budget Management (FRBM) during 2007-08 (2.5 %), exceeded the 3 per cent limit of GDP and reached 6 per cent in 2008-09 which further increased to 6.5 per cent in 2009-10. The fiscal path of the Union government shows that the FRBM target was achieved only in 2007-08 and it remained above the target level since then. On the other hand, the state finances were not much affected by the crisis and the states continued to follow the fiscal discipline path set by fiscal responsibility legislation (FRL).

which indicates a pro-cyclical policy. In short, pro-cyclical fiscal policy reflects the co-movement of government's revenues and expenditures in the same direction as the output and vice-a versa for a counter-cyclical policy. However, the economic recovery policies are generally based on counter-cyclical policies, which demands for an expansionary fiscal policy.

The unprecedented COVID-19 pandemic has affected the pre-existing declining growth path of the country, further leading to a negative growth. The Gross Domestic

Product (GDP) growth has been declining since 2017-18. It declined from 8.3 per cent in 2016-17 to 7 per cent in 2017-18 to 6.1 per cent in 2018-19 to 4.2 per cent during 2019-20 Provisional Estimate (PE) and to -7.8 per cent in 2020-21 Advance Estimate (AE) (MOSPI). The first advance estimates of Gross Value Added (GVA) at basic prices during 2020-21 by economic activity shows a positive growth only in agriculture, forestry, fishing (3.4 %) and electricity, gas and other utility services (2.7%) with negative growth being observed in rest of the economic activities¹ vis-à-vis 2019-20(PE).

COVID-19 has been affecting the financial resources of both Union and State government. Following the affected revenue and the demand of the state government, the borrowing limit of the state government was increased from 3 per cent to 5 per cent of GSDP for 2020-21 (MoF, 2020). Although the borrowing limit has been extended beyond 3 per cent of GSDP, it is conditional

upon various factors like, state governments need to implement one nation one ration card system, ease of doing business reform, urban local body/utility reforms and power sector reforms. The weightage for carrying out these reforms are 0.25 per cent of GSDP for each component, totalling to 1 per cent of GSDP. "The remaining borrowing limit of 1 per cent will be released in two installments of 0.50 percent each - first immediately to all the States as untied, and the second on undertaking at least 3 out of the above named reforms"(MoF, 2020).

Given the revenue loss faced by the states due to COVID-19 pandemic and the conditional borrowing of the states, this article review the fiscal stance of southern states and union government during Apr-Oct 2020 and compares it with the previous period.

Revenue receipts

The pre-dominant feature of Union and state finances during the pandemic has been

Table 1. Growth in revenue receipts (%)

Description	Revenue Receipts	Tax Revenue	Own Tax Revenue	Non-Tax Revenue	State's share of Union Taxes	Grants-in-aid and Contributions
Telangana	-9.8	-12.0	-8.4	-27.0	-33.1	16.9
Andhra Pradesh	1.8	-9.9	-9.0	1.7	-13.2	55.0
Karnataka	-22.5	-22.3	-18.6	-12.2	-40.9	-25.2
Tamil Nadu	-12.1	-19.6	-20.6	-31.1	-15.7	38.0
Kerala	-4.1	-26.7	-25.8	-60.5	-31.3	254.0
Union Government	-23.8	-15.8		-48.2		

Source: Computed from monthly indicators, C&AG and Monthly Accounts, CGA

¹Mining and quarrying (-12.4%), Manufacturing (-9.4%), construction (-12.6%), Trade, hotels and communication (-21.4%), Financial, real estate and professional services (-0.8%) and public administration, defense and other services (-3.7%).

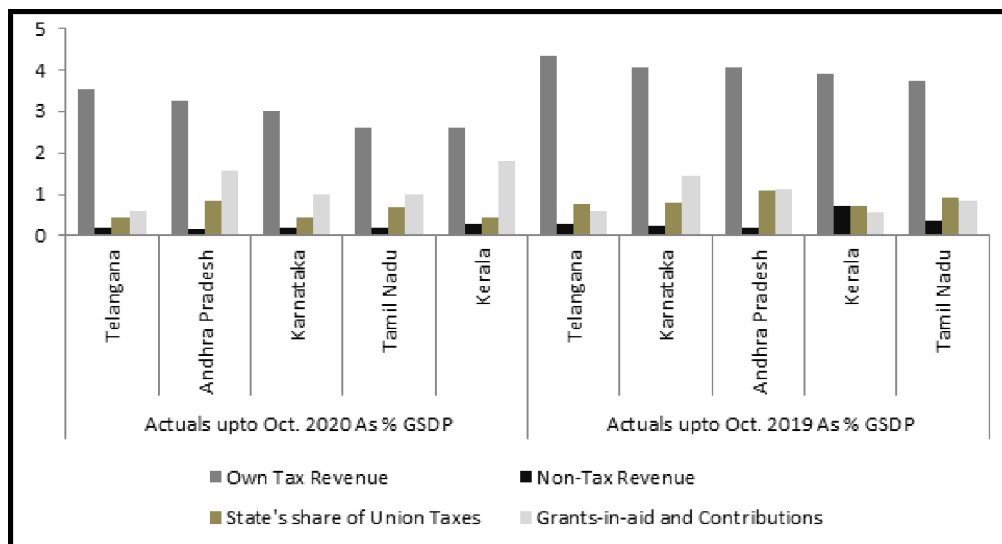
The share in central taxes has been showing a negative growth for all the southern states with highest decline in Karnataka (40.9 %) followed by Telangana (33.1 %), Kerala (31.3 %), Tamil Nadu (15.7 %) and Andhra Pradesh (13.2 %)

a continuous negative growth in both tax and non-tax revenue. The figures up to October 2020 shows the persistent negative growth in tax revenue for all the southern states as well as for Union government with Kerala (26.7%), Karnataka(22.3 %) and Tamil Nadu (19.6 %) having a higher negative growth compared to that of Union government (15.8 %). The share in central taxes has been showing an alarming negative growth for all the states with highest decline in Karnataka (40.9 %), Telangana (33.1 %), Kerala (31.3 %), Tamil Nadu (15.7 %) and Andhra Pradesh (13.2 %). Even the positive growth in grants-in-

aids in the states is not allowing the states to have a positive growth in the revenue receipts ² except for Andhra Pradesh (Table 1).

Kerala registered the highest negative growth in own tax revenue of 25.8 per cent, followed by Tamil Nadu (20.6%), Karnataka (18.6%), Andhra Pradesh (9 %) and Telangana (8.4%). The components of revenue receipts show almost a similar picture when analysed as per cent of GSDP (Fig.1). The loss in own tax revenue as per cent of GSDP has been highest in Kerala (-1.31 %) followed by Tamil Nadu (1.11 %), Karnataka (1.05 %), Telangana (0.81%) and

Fig 1. Comparison of the revenue receipts components % GSDP between 2019 and 2020



Source: Computed from monthly indicators, C&AG

² Revenue receipts consists of own tax revenue, own non-tax revenue, share in central taxes and grants-in-aids and contributions.

Andhra Pradesh (0.78%) during 2020 vis-à-vis 2019 (Fig.1).

Government expenditure

The growth in total expenditure of the union government of 0.4 per cent shows a growth less than the southern states like, Andhra Pradesh (54.4%), Telangana (7.4%) and Kerala (6.8%). This gets reflected in the growth rate of revenue expenditure of the Union government which amounts to 0.7 per cent, is less than that in Andhra Pradesh (45.6 %), Telangana (10.1%) and Kerala (6.1%). Rest of the southern states, Karnataka and Tamil Nadu, experienced a negative growth in both total as well as in revenue expenditure of the state government (Table 2).

The data up to October 2020 vis-à-vis 2019 shows that the growth in subsidy

expenditure of Kerala has been remarkable (217.5%) and unparalleled to other southern states including the Central government's spending on subsidies which is observed to be negative (-18.2%) when it should have been the highest. The highest spending on subsidies in Kerala shows its timely response on addressing the distressing effects of the pandemic by providing required social security benefits for protecting the livelihood of the people. The growth in interest payment expenditure shows a lowest growth in Tamil Nadu (-5.2%) and Kerala (9.4%) compared to the highest growth in Telangana (38.5%) and Andhra Pradesh (36.3%).

The fall in government final consumption expenditure in India can also be observed from table A1 given in the appendix. It decreased from 11.8 per cent in 2019-20 to

The growth in subsidy expenditure of Kerala has been remarkable (217.5%) and unparalleled to other southern states including the Central government's spending on subsidies which is observed to be negative (-18.2%) when it should have been the highest

Table 2. Growth in expenditure (%)

Description	Andhra Pradesh	Karnataka	Kerala	Tamil Nadu	Telangana	Union Government
Revenue Expenditure of which	45.6	-6.7	6.1	-6.4	10.1	0.7
i) Expenditure on Interest payment	36.3	19.8	9.4	-5.2	38.5	15.2
ii) Expenditure on Subsidy	14.0	NA	217.5	NA	49.0	-18.2
Capital Expenditure	214.1	4.5	15.0	-2.4	-9.4	-1.9
Total Expenditure	54.4	-5.1	6.8	-6.1	7.4	0.4

Source: Computed from monthly indicators, C&AG and Monthly Accounts, CGA

Note: NA represents not available

The growth in total expenditure of the union government of 0.4 per cent shows a growth less than the southern states like, Andhra Pradesh (54.4%), Telangana (7.4%) and Kerala (6.8%)

5.8 per cent in 2020-21. This is a matter of serious concern and needs special attention. The exports, imports which were previously following a negative growth during 2019-20 have deteriorated further during 2020-21 (Table A1).

The deficit and borrowing positions

Fiscal deficit shows an alarming increase in Karnataka (24291.08%) followed by Andhra

Pradesh (140.2 %) during April-Oct 2020 over 2019. The growth rate of fiscal deficit is 57.8 per cent in Telangana, 34.4 per cent in Kerala and it is 18.8 per cent in Tamil Nadu during 2020 over 2019. It is observed that the rate of growth of fiscal deficit is relatively low in Tamil Nadu and Kerala. (Table 3)

Revenue deficit shows a positive growth during April to October 2020 in all the

Even if the borrowing limits are increased to 5% of GSDP, it does not get reflected in the current borrowing positions of the southern states except for Andhra Pradesh (6.3%)

Table 3. Growth rate of deficits in southern states in 2020 from 2019 (Apr-Oct) (%)

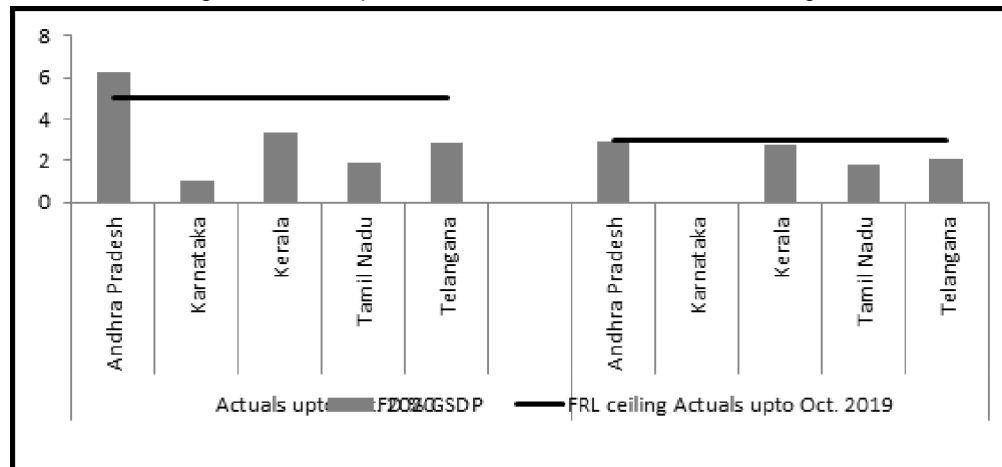
Description	Andhra Pradesh	Karnataka	Kerala	Tamil Nadu	Telangana
Revenue Deficit	194.6	-111.1	35.4	20.7	230.3
Fiscal Deficit	140.2	24291.1	34.4	18.8	57.2
Primary Deficit	187.1	-174.6	52.7	43.6	69.5

Source: Computed from C&AG and RBI, State Finances: A Study of Budget, 202

Table 4. Deficit and borrowing as percentage of GSDP

As % GSDP	Actuals upto Oct. 2020					Actuals upto Oct. 2019				
	Andhra Pradesh	Karnataka	Kerala	Tamil Nadu	Telangana	Andhra Pradesh	Karnataka	Kerala	Tamil Nadu	Telangana
Borrowings & Other Liabilities	6.3	1.0	3.4	1.9	2.8	2.9	0.0	2.8	1.8	2.0
Revenue Deficit	-5.0	-0.1	-2.5	-1.3	-1.6	-1.9	1.0	-2.1	-1.2	-0.5
Fiscal Deficit	-6.3	-1.0	-3.4	-1.9	-2.8	-2.9	0.0	-2.8	-1.8	-2.0
Primary Deficit	-5.1	-0.4	-2.2	-1.1	-1.9	-2.0	0.6	-1.6	-0.9	-1.3

Source: Computed from C&AG and RBI, State Finances: A Study of Budget, 2020

Figure 2. Comparison of fiscal deficits and fiscal targets

Source: Computed from monthly indicators, C&AG

Tamil Nadu and Karnataka is reflecting upon a pro-cyclical policy, fall in state government expenditure is accompanied with a fall in own tax revenue of the states. Other Southern States, Kerala, Andhra Pradesh and Telangana are indicating a counter-cyclical fiscal policy.

southern states. Kerala (34.5%) and Tamil Nadu (20.7%) registered a lowest growth in revenue deficit. In Andhra Pradesh and Telangana, the revenue deficit growth are 194.6 per cent and 230.1 per cent, respectively (Table 3). During 2019, Karnataka registered a revenue surplus of Rs 15336.9 crores, which transformed to a revenue deficit of Rs 1704.1 crores in 2020 (April to October).

Prior the pandemic, the fiscal deficit of all the southern states were meeting the FRL target of 3% of GSDP (Table 4 and Figure2). Kerala and Andhra Pradesh were having the fiscal deficit as per cent of GSDP closely nearing the targets of 2.8 and 2.9 per cent respectively. Other southern states were having deficits much below the target. States, like Karnataka,

Tamil Nadu and Telangana did not even exhaust the available fiscal space.

The recent scenario from April-October 2020 shows a similar picture as April-October 2019. Even if the borrowing limits are increased to 5 per cent of GSDP, it does not get reflected in the current borrowing positions of the southern states except for Andhra Pradesh (6.3%). This probably is the effect of conditionality being put in the borrowing limits of the state governments. Also it may be noted that Tamil Nadu and Karnataka is reflecting upon a pro-cyclical policy, fall in state government expenditure is accompanied with a fall in own tax revenue of the states. Nonetheless, the central government finances reflect not a different fiscal policy. A fall in central

government final consumption expenditure from 11.8 per cent in 2019-20 to 5.8 per cent in 2020-21 along with a fall in tax revenue calls for an immediate counter-cyclical policy to revive the economy.



(Parma Chakravartti, Assistant Professor, GIFT and Ms Anitha Kumary L, Associate Professor GIFT)

References

Comptroller and Auditor General of India (2019 to 2020). 'State Accounts: Monthly Key Indicators': <https://cag.gov.in/en/state-accounts-report>

Controller General of Accounts (2019 to 2020). 'Monthly accounts', Ministry of Finance, Government of India: <http://www.cga.nic.in/>

De, S. (2012), 'Fiscal Policy in India: Trends and Trajectory'. Department of Economic Affairs, Government of India, January 2012.

Government of India (2021). 'Press Note on First Advance Estimates of National Income 2020-21', Ministry of Statistics & Programme Implementation, January 2021.

Government of India, (various years). 'National Accounts Statistics', Ministry of Statistics & Programme Implementation.

Government of India (2020), 'Public Finance State Division', DoE, Ministry of Finance, May 2020.

Reserve Bank of India (2020). 'State Finances: A Study of State Budgets', RBI, Oct 2020: <https://www.rbi.org.in/Scripts/AnnualPublications.aspx?head=State%20Finances%20:%20A%20Study%20of%20Budgets>

Reserve Bank of India (RBI) (Various years). 'Handbook of Statistics on Indian Economy'.

Appendix

TableA1. First advance estimates of GDP, 2020-21 and growth rates (at 2011- 12 Prices)

SL. No	Item	(Rs. Crore)			Percentage Change Over Previous Year	
		2018-19 (A/C)Actuals	2019-20 PE	2020-21 AE	2019-20	2020-21
Domestic Product						
1	GVA at Basic Prices	12803128	13301120	12339175	3.9	-7.2
2	Net Taxes on Products	1178298	1264831	1100487	7.3	-13
3	GDP (1+2)	13981426	14565951	13439662	4.2	-7.7
4	NDP	12372051	12893977	11888607	4.2	-7.8
Final Expenditures						
5	Private Final Consumption Expenditure (PFCE)	7908057	8325907	7537315	5.3	-9.5
6	Government Final Consumption Expenditure (GFCE)	1478565	1652367	1747876	11.8	5.8
7	Gross Fixed Capital Formation(GFCF)	4460967	4334091	3707516	-2.8	-14.5
8	Change in Stocks (CIS)	264415	269489	258023	1.9	-4.3
9	Valuables	169734	192629	99082	13.5	-48.6
10	Discrepancies	119923	89196	-18195	-25.6	120.4
11	Exports	2922543	2817660	2584918	-3.6	-8.3
12	Imports	3342777	3115388	2476873	-6.8	-20.5
13	GDP	13981426	14565951	13439662	4.2	-7.7
Rates to GDP						
14	Private Final Consumption Expenditure (PFCE)	56.6	57.2	56.1		
15	Government Final Consumption Expenditure (GFCE)	10.6	11.30	13		
16	Gross Fixed Capital Formation(GFCF)	31.9	29.80	27.6		
17	Change in Stocks (CIS)	1.9	1.90	1.9		
18	Valuables	1.2	1.30	0.7		
19	Discrepancies	20.9	19.30	19.2		
20	Exports	23.9	21.4	18.4		
21	Imports	0.9	0.6	-0.1		
22	GDP	100	100	100		
Per capita income						
23	Per Capita GDP (Rs)	105361	108620	99155	3.1	-8.7

Source: MOSPI, 2021

Tax monitor

Whither Kerala in GST collection?

N. Ramalingam and Santosh Kumar Dash

The need for shifting from erstwhile VAT to Goods and Service Tax (GST) regime was felt because VAT continued to be complicated, had low compliance, cascading, and found to be inefficient. Many have hailed this move as a game-changer and bold reform since GST has overhauled the indirect tax system of the country. It was expected that GST may increase the tax revenue of the states by improving

GST revenue collection. This is done by dividing the eight months GST revenue collection by eight and then multiplied by twelve. Twenty-nine states are categorized into twenty general category states (GCS) and nine special category states (SCS). The erstwhile Jammu and Kashmir, a special category state, is dropped from the analysis since the former state was divided into two union territories, namely Jammu and

Kerala's total GST has grown at 6 percent in 2018-19 and 2019-20 compared to the all-state average of 12.4 percent.

compliance, widening the tax net, and adopting better technology such as e-invoicing matching. In this background, this piece looks at the trend in GST revenue collection and the GST-GSDP ratio of states since the implementation of GST.

This analysis covers 29 states for the period 2017-18 to 2019-20. Since the financial year 2020-21 was affected by the COVID-19 pandemic, this year is not included in the analysis. Hence, an analysis of GST revenues of Indian sub-nations is carried out for normal years only. Since GST was not exactly implemented at the beginning of a financial year, the data for 2017-18 has been annualized to get a full financial year

Kashmir, and Ladakh in October 2019.

First, the trend in the growth rate of GST collection is compared among states. Then tax collection to GSDP ratio of states is compared. It is calculated as the ratio of GST collection as a share of gross state domestic product (GSDP) to assess the level of collection effort of a state. Gross state domestic product (GSDP) is the total value added of all the finished goods and services produced within the boundaries of the state in a specific time period whereas GST is the tax on consumption of all such finished goods and services. Since GSDP at current prices data for the financial year 2018-19 was not available for all states, data

Kerala's GST-GSDP ratio based on three year's GST collection is 2.48 percent, at par with the all-states average.

is taken for two years, namely 2016-17 and 2017-18. The GST-GSDP ratio is calculated as the ratio of the average of GST collection during three years normal period to the average of GSDP for two years, 2016-17 and 2017-18. GST revenue for a state is the aggregate value of the State GST and remittance of Integrated GST to States for the value of inter-state inward supply goods and services and consumed in state boundaries.

Trends in revenue collection and growth

There are 20 states listed in the general category states. The average GST collection of states indicates that while Maharashtra, Uttar Pradesh, Karnataka, Tamil Nadu, and Gujarat are the top five states in terms of GST revenue collection, Odisha, Assam, Jharkhand, Chhattisgarh, and Goa are the bottom five states over the three years (See Table 1). Kerala with an average collection of Rs 18375 crores occupies 10th position in terms of GST collection. In terms of growth in GST revenue collection in 2018-19 and 2019-20, Bihar, Assam, Jharkhand, Odisha, and Madhya Pradesh have recorded the highest growth, while Maharashtra, Gujarat, Tamil Nadu, Kerala, and Delhi are positioned in the bottom of the table. Kerala's growth rate hovers around 6 percent. It can be observed that while the poor states recorded the highest growth, the richer states have lower GST revenue growth. The higher growth rate of these poor states is partly driven by higher growth in IGST remittance revenue. For

example, the average growth in IGST remittance of Bihar, Assam, Jharkhand, Odisha, and Madhya Pradesh for the period 2018-19 and 2019-20 stand at 29.0%, 22.2%, 19.0%, 18.9%, and 17.1% respectively.

Among the nine special category states, Tripura, Himachal Pradesh, and Uttarakhand stand in the top three positions whereas states with the lowest collection are Nagaland, Mizoram, and Sikkim (See Table 1). In terms of the growth rate of the GST collection, while Arunachal Pradesh, Nagaland, and Mizoram registered highest growth, Tripura, Himachal Pradesh, and Uttarakhand have experienced lowest growth.

GST-GSDP ratio

General category states

As there is no ideal GST-GSDP ratio, a relative comparison will give a position of a state among other States. Table 1 shows divergence and an interesting picture. The GST-GSDP ratio for 20 states ranges from 2.2% (Madhya Pradesh) to 3.1% (Goa) with an average of 2.5%. While Maharashtra ranked first in GST revenue collection, and second in GST-GSDP ratio, Goa stands first in GST-GSDP ratio but ranks 20 in average GST collection. Table 1 shows that eight States have depicted more or less equal ranks in both GST collection and GST-GSDP ratio (with a rank difference ranging from 1 to 3). They are Kerala, Uttar Pradesh, Punjab, Delhi, Haryana, Karnataka, Odisha, and Telangana.

Though Kerala's per capita consumption is highest in India, its average yearly GST collection (Rs. 18274 crores) is lower than the average of all states in India.

Special category states

Among the nine Special Category States, the GST-GSDP ratio ranges from 1.4 percent (Sikkim) to 2.4 percent (Manipur and Arunachal Pradesh) with an average of 1.96 percent. Meghalaya and Nagaland show more or less the same ranks for their averages tax collection and ratios. Whereas Uttarakhand has the first rank in GST collection it ranks only 7th in the share of GST collection in GSDP.

Where does Kerala stand?

Kerala belongs to the general category states. Kerala's GST collection rank (10th rank) is similar to the GST-GSDP ratio (9th rank). Importantly, its GST-GSDP ratio exactly matches with the average of 20 states (2.48 percent). Though Kerala is first among all states in terms of per capita consumption (NSS 68th round), the average three-year collection Rs. 18374.8 crore is lower than 20 general category states average (Rs. 21881.2 crores). Kerala's GST collection was Rs. 17348.7 crore in 2017-18 (annualized), Rs. 18385.2 crore in 2018-19, and Rs. 19390.1 crore in 2019-20. A closer look at the components of total GST, namely SGST and IGST remittance reveals that 54 percent of total GST comes from IGST revenue. As a share of SGST revenue in total GST collection, Kerala stands 19th position among the 20 general category states, while its position is 2nd in terms of share of IGST remittance in total GST. In SGST as a percent of GSDP, Kerala's share is much lower (1.17 %) than the twenty-states average (1.49%).

On the other hand, the share of IGST remittance in GSDP of Kerala is much higher (1.31 percent) than the twenty-states' average (0.99 percent). While Kerala ranks 16th among the 20 states in the SGST-GSDP ratio, it stands 3rd in the SGST-GSDP ratio among the 20 general category states.

The state needs to step up its effort in increasing both SGST and IGST revenue collection. The government of Kerala in its 'Medium-Term Fiscal Policy and Strategy' statement with medium terms fiscal Plan for Kerala 2021-22 to 2023-24 formulated a roadmap for better GST governance in terms of scrutiny of GST returns, audit, enforcement activities such as vehicle checking, test purchase verification of evasion, E-way bill checking, shop inspection, and even arrest of major evaders during the next three years. Similarly, the full-fledged operationalization of the e-invoicing system will be a big boon for Kerala which depends substantially on IGST revenues that have to be collected from other states. With the firm pursuit of these initiatives, Kerala could attain the protected revenue as envisaged in the GST compensation to States Act 2017 and come out smoothly from the compensation net by 2023-24.

■

(Dr N Ramalingam, Associate Professor, GIFT and Dr Santosh Kumar Dash, Assistant Professor, GIFT)

Table 1. Total GST revenue collection, growth, and GST-GSDP ratio

State	(Rs Crores)			Average	AR**	(Rs Crores)		Rank	(Percent Change)		RD***
	2017-18*	2018-19	2019-20			GSDP	GST/GSDP		2018-19	2019-20	
<i>General category states</i>											
Bihar	9292	13240	15301	12611	14	499555	2.52	6	42.5	15.6	8
Assam	5724	7428	8521	7225	17	299523	2.41	12	29.8	14.7	5
Jharkhand	5766	7159	8153	7026	18	283510	2.48	8	24.2	13.9	10
Odisha	9220	10588	13008	10938	16	466373	2.35	14	14.8	22.9	2
Madhya Pradesh	13721	16965	18768	16484	13	767160	2.15	20	23.6	10.6	-7
Andhra Pradesh	15353	18559	19780	17898	11	828072	2.16	19	20.9	6.6	-8
Uttar Pradesh	35992	41183	46407	41194	2	1564336	2.63	3	14.4	12.7	-1
Rajasthan	17158	20552	21619	19777	8	888878	2.22	18	19.8	5.2	-10
Telangana	18553	21412	23411	21126	7	807079	2.62	4	15.4	9.3	3
West Bengal	21450	24104	26884	24146	6	1032299	2.34	15	12.4	11.5	-9
Chhattisgarh	6096	7023	7625	6914	19	289052	2.39	13	15.2	8.6	6
Karnataka	34099	37017	42175	37764	3	1450989	2.60	5	8.6	13.9	-2
Haryana	15274	16567	18855	16899	12	691877	2.44	10	8.5	13.8	2
Punjab	10902	11218	12699	11606	15	498605	2.33	16	2.9	13.2	-1
Goa	2053	2202	2393	2216	20	71261	3.11	1	7.3	8.7	19
Maharashtra	72357	76004	82966	77109	1	2507681	3.07	2	5.0	9.2	-1
Gujarat	30480	32030	34721	32410	5	1415997	2.29	17	5.1	8.4	-12
Tamil Nadu	35406	36925	40142	37491	4	1547629	2.42	11	4.3	8.7	-7
Kerala	17349	18385	19390	18375	10	741615	2.48	9	6.0	5.5	1
Delhi	19336	16718	19193	18416	9	730847	2.52	7	-13.5	14.8	2
Average				21881		869117	2.48		13.4	11.4	
<i>Special category states</i>											
Arunachal Pradesh	319	559	792	557	6	23518	2.37	2	74.9	41.8	4
Nagaland	265	428	603	432	7	25887	1.67	8	61.5	40.9	-1
Mizoram	243	424	524	397	8	19130	2.07	4	74.6	23.8	4
Manipur	430	638	839	636	5	26829	2.37	1	48.3	31.4	4
Sikkim	273	367	472	371	9	27347	1.36	9	34.6	28.4	0
Meghalaya	522	702	883	702	4	31494	2.23	3	34.5	25.9	1
Tripura	667	849	994	837	3	46781	1.79	6	27.3	17.1	-3
Himachal Pradesh	2511	2844	3483	2946	2	146098	2.02	5	13.2	22.5	-3
Uttarakhand	3591	4074	4795	4153	1	234365	1.77	7	13.4	17.7	-6
Average				1226		64606	1.96		42.5	27.7	4

Notes: *2017-18 is annualized. **AR: Average Rank. *** RD: Rank Difference: Difference between the rank of average GSDP and rank of GST-GSDP ratio.

Price monitor

Taming the price during the pandemic: Further exploration

P S Renjith and Kiran Kumar Kakarlapudi

Globally food prices have been increasing since the outbreak of COVID-19. FAO's food price index, which measures monthly changes for a basket of cereals, oilseeds, dairy products, meat, and sugar shows a steep rise in global food prices for seven months consecutively till December 2020 which turned out to be a record since 2014 (The Hindu, 2021). In countries like India,

changes in food prices before and during the pandemic at a disaggregate level to identify the commodities that experienced major changes in prices during the pandemic. Further, this article breaks up commodities into largely produced (domestically) and largely imported and analyses the price variation as the COVID-induced restrictions disrupted the supply

During the pre-pandemic period, eight out of twelve commodities showed higher price growth in Kerala as compared to All India average. There is a trend reversal in prices during the pandemic as eight out of twelve commodities showed lower price growth in Kerala.

access to nutrient-rich food to all is a challenge even in normal times. The steep rise in food prices as a result of COVID-19 pandemic could further accentuate the nutrition deficiency which will have long-run implications on mental and physical health (Headey et al, 2020). However, Kakarlapudi and Renjith, (2020) showed that Kerala has been successful in maintaining the food prices lower than the rest of India and all other South Indian states during the pandemic through active policy intervention. Going beyond the aggregate trends, this study compares the

chain and production.

The monthly Consumer Price Index (CPI) data published by MOSPI for 12 food and beverage items has been used for the analysis. The CPI data is available till November 2020. Due to COVID restrictions, the data at the disaggregate state level is not available from March to July 2020. Hence, pre-pandemic analysis is based on the average price growth of August to November 2019 and compares the average price growth for the same months in 2020. A more disaggregate

commodity level price data has been accessed from the Kerala price bulletin, published by the Department of Economics and Statistics and spices data has been accessed from the respective commodity boards.

Food prices before the pandemic

As noted by Kakarlapudi and Renjith (2020), the price of food and beverages before the pandemic were higher in Kerala as compared to all India average and all other south Indian states except Tamil Nadu. The average increase in the price of food and beverages during four months (August-November) in 2019 was 6.9 percent in Kerala as compared to 5.8 percent for All India. In all Southern states, except Tamil Nadu (7.8 percent), the price increase has been higher than Kerala. The disaggregate analysis for 12 food items indicates that the price rise is higher in Kerala as compared to all India trends in eight out of twelve commodities. However, commodities such as eggs, fruits, oil and fats, and non-alcoholic beverages showed a lower price rise than the rest of India and other southern states (Table 1). Karnataka shows higher inflation in cereals and products (4.7 percent) than Kerala (3.1 percent) while Andhra Pradesh and Telangana shows the lowest price change. Among all the commodities, vegetables show highest increase in prices followed by meat and fish, and pulses and products. Though Kerala shows marginally higher inflation in vegetables (22.1 percent) as compared to the national average (21.1 percent), it is lower than Andhra Pradesh, Karnataka and Tamil Nadu. In case of meat and fish and spices, price difference

between Kerala and All India was as high as 6 percentage points. The consumption expenditure round of NSS shows that Kerala has highest per-capita meat and fish consumption.

Food prices during the pandemic

Food prices increased significantly during the pandemic when compared with pre-pandemic trends. At all India level growth of food and beverage prices increased from 5.8 percent during the pre-pandemic period to 9.2 percent during the pandemic. For all India, most of the commodities except fruits showed higher growth in prices during the pandemic. Inflation is found to be highest in vegetables (17.5 percent) followed by meat and fish (17.3 percent), eggs, pulses and products (around 16 percent), and oil products (14.7 percent) (see Table 2). Kerala depicts a completely different pattern. First, while eight out of twelve products show higher inflation in Kerala as compared all India before the pandemic, the trend reversed during the pandemic. Secondly, unlike what was observed for all India trends, there is no significant increase in prices of food and beverages in Kerala. Inflation is lower during the pandemic than pre-pandemic in case of cereals, fruits and vegetables while for all other commodities it is just the opposite. During the pandemic, Kerala shows lowest inflation in cereals and products in comparison with all other southern states. It is important to note that inflation in vegetables declined drastically (2.3 percent) during the pandemic as compared to pre-pandemic trends (22.1 percent). Kerala's exemplary initiatives such as provision of food kits and

Both largely domestically produced and largely imported commodities showed lower price rise during the pandemic because of timely policy intervention. However, some commodities show significant price rise in each category due to the supply chain disruptions during lockdown.

encouraging home production of vegetables could be the reasons for the observed trend. Among all other commodities, pulses and eggs showed a very high price growth in Kerala during the pandemic.

Behind the price rise: Largely imported versus largely produced

It is well known that Kerala is an import-dependent economy. The state imports many of the food products from other states. Since the pandemic disrupted supply chains and even production, higher food prices on select items in Kerala could be due to its dependence on imports. In

this regard, this study divides the commodities into largely domestically produced and largely imported to analyze the price variation between the two categories (see Figure 1). For the latter, we considered those goods which have more than 10000 metric tonnes of production within the state. The price change has been computed considering the data available for the latest 3 months (August, September, and October) with respect to the corresponding months of the previous year.

The analysis reveals a slightly increasing trend for the price of heavily imported rice

Table 1. Consumer price changes in Kerala and the other southern states before the pandemic (August to November 2019 in %)

	Kerala	Andhra Pradesh	Karnataka	Tamil Nadu	Telangan	All India
Cereals and products	3.1	-0.7	4.7	2.1	0.6	2.2
Egg	1.2	10.0	5.3	8.5	3.6	4.0
Fruits	-3.4	-0.2	2.0	4.3	-0.1	1.8
Meat and fish	16.8	12.0	10.2	10.0	11.1	9.5
Milk and products	3.5	-0.9	0.1	7.0	-0.6	2.4
Non-alcoholic beverages	1.8	-0.4	3.4	5.2	2.8	2.5
Oils and fats	0.9	4.1	3.2	3.5	2.1	1.6
Prepared meals; snacks; sweets etc.	3.7	-2.6	1.6	3.0	2.1	2.1
Pulses and products	12.7	16.0	15.5	13.4	5.6	10.3
Spices	9.2	1.7	4.5	2.7	1.2	3.4
Sugar and confectionery	2.0	-0.7	0.9	-0.9	-8.8	0.1
Vegetables	22.1	29.8	29.0	29.5	12.3	21.1
Food and beverages	6.9	5.0	6.6	7.8	3.8	5.8

Source: Author's construction using CPI data available at <http://164.100.34.62:8080/Default1.aspx>

varieties except for Andhra-vella. Interestingly, red matta, a largely domestically produced rice variety showed a negative price trend during the pandemic period. The price of pulses that are heavily imported soared during the pandemic. Except for gingelly oil, the price of all oil varieties showed an increase during the pandemic. A notable variation (about 12%) is in the price of coconut, which accounts for around 30 per cent of the gross cropped area of the state, while a lower growth is seen in the case of coconut oil. Concerning livestock products, the trend was positive for all four products viz. milk, egg, chicken, and mutton that are largely produced as well as largely imported.

Of the four largely produced crops, namely pepper, cardamom, tea and coffee, which accounts for almost 12 per cent of the

state's net cropped area, cardamom and pepper prices witnessed an almost 46 percent and 8 percent fall respectively during the pandemic period (Narayana and Shagishna, 2020). Among spices, significant growth in the price during the period was observed in the case of small onion, chillies dry and tamarind. In case of vegetables, the trend turned negative for heavily consumed items like banana green, cucumber, onion big, and plantain green. Of these, banana green and plantain green are largely produced in the state. For fruits, the trend registered negative for all items except apple and watermelon, whereas the largely domestically produced fruit items like banana (ethan) and mango showed a slightly positive trend during the period. While the price of largely imported tubers like potato and carrot shot up during the pandemic, no much variation was seen in

Table 2. Consumer price changes in Kerala and the other southern states during the pandemic (August to November 2020 in %)

	Kerala	Andhra Pradesh	Karnataka	Tamil Nadu	Telangan	All India
Cereals and products	2.0	4.3	2.6	4.5	3.2	4.1
Egg	18.6	24.2	16.1	20.6	19.0	16.9
Fruits	-0.2	0.1	1.5	4.7	0.1	1.2
Meat and fish	11.5	34.6	21.6	24.6	28.5	17.3
Milk and products	6.3	9.4	4.1	7.2	12.3	5.5
Non-alcoholic beverages	3.6	5.2	5.3	5.3	6.8	7.7
Oils and fats	4.4	20.4	12.6	15.2	21.6	14.7
Prepared meals; snacks; sweets etc.	4.1	3.7	2.0	5.7	4.2	4.2
Pulses and products	20.1	13.1	15.1	20.0	17.2	16.3
Spices	11.3	17.7	13.3	14.3	19.6	11.5
Sugar and confectionery	3.5	9.0	1.6	2.6	6.8	2.2
Vegetables	2.3	9.8	6.5	7.3	13.7	17.5
Food and beverages	5.7	11.2	6.8	9.7	12.3	9.2

Source: same as Table 1

the price of the largely domestically produced tuber, tapioca.

However, the variation in the largely produced commodities of the state have different implications. The pandemic period has witnessed a pro-consumer trend in the case of cardamom, pepper, tea and coffee. However, the major consumption goods (Coconut and Coconut Oil), for which a large market lies within the state did not see a fall in prices could be because of fall in production induced by the lockdown restrictions. A major spike in the prices of livestock products and vegetables could be accounted to increase in prices of the neighboring states in the post lockdown period as many of these products are largely imported too.



(Dr. Renjith P S and Dr. Kiran Kumar Kakarlapudi are Assistant Professors in GIFT)

References

- Headey, Derek and Marie Ruel (2020). The COVID-19 nutrition crisis: What to expect and how to protect, IFPRI Blog Post, April 23, 2020; available at <https://www.ifpri.org/blog/covid-19-nutrition-crisis-what-expect-and-how-protect>
- Kakarlapudi, K K, and Renjith, P S (2020) Taming the Prices During the Pandemic, Kerala Economy, 1(4), pp 31-35
- Narayana D and Shagishna (2020) COVID takes the flavour out of Cardamom, brews up tea Kerala Economy, 1(3), pp 27-32.
- The Hindu (2021), World food price index rises for seventh straight month in Dec. accessed on 25/01/2021 from <https://www.thehindu.com/business/world-food-price-index-rises-for-seventh-straight-month-in-december/article33523068.ece>

Labour and employment

The story of social spending - A revisit to the Kerala model of development - Part II

A V Jose

Decline of labour-intensive industries

From the 1930s onwards, the labour-intensive industries of Kerala have been facing strong headwinds after a worldwide fall in commodity prices. They triggered a shift of the coir industry from factory towns towards rural areas in search of cheap labour. Reduction of wages and subcontracting of production to smaller units in the countryside became increasingly common. An inevitable outcome was the rise of labour unrest and militancy.

A spate of interventions which sought to regulate wages, working conditions, processing techniques, and prices of coir products and raw materials followed (Indu, 2015). These interventions delayed attempts to modernize the industry and raise productivity and wages therein. Over the past fifty years, total employment in the coir industry of Kerala declined from half a million to just over 50,000. Remnants of the workforce, mostly women, were engaged in spinning coir yarn only (Isaac et al. 1992, p 92).

The state and the social actors responded to the shrinkage of labour markets with positive policy interventions. A lengthy period of industrial turbulence necessitated impressive conduct of social engineering. The practice of electoral democracy called for accommodating the concerns of all workers, traumatized by the transition in markets.

By the mid-1960s, many large factories of the coir industry had closed. They culminated in a regression of production from factories that derived economies of scale towards petty production units in the countryside, using ancient techniques of production. The unrest and labour militancy that simmered in the coir industry was a compelling reason for subsequent state interventions.

Similar developments were underway in other labour-intensive industries such as cashew, textiles and plantations. They too necessitated state interventions, leading to take-overs of many large establishments, which were either dysfunctional or abandoned after the spread of industrial unrest. The government tried to promote a reorganization of production through

The redistributive social spending and the creation of special institutional safeguards for workers at the lower end of markets were the manifestation of a political consensus for an inclusive society, premised on equal opportunities for all in terms of employment and income mobility. The state-initiated transfers helped to set a "minimum reserve price" of labour in relation to a basket of entitlements needed for a dignified life by all people.

state-owned enterprises and workers' cooperatives. There was a proliferation of industrial establishments in the public sector as critical providers of employment in the aftermath of state interventions to protect the jobs and wages.

The situation in plantations too deteriorated. Despite the presence of well-meaning protectionist legislation, wages and working conditions therein have been withering under the impact of forces beyond the control of the state or the social actors. The number of workers entitled to protection under the Plantation Act declined over the years, as employers tried to minimize the fixed cost of hiring regular workers. Increasingly, they sourced work from contractors or piece-rate workers. Much of the area under plantations got fragmented and pushed down to the domain of smallholdings with a lesser reliance on hired labour. This development was especially true of rubber cultivation (Ramesh, 2010).

As the traditional industries went into decline, many workers got pushed into less remunerative and irregular jobs in the informal sector. The state and the social actors responded to the shrinkage of labour markets with positive policy interventions. A lengthy period of industrial

turbulence necessitated impressive conduct of social engineering. The practice of electoral democracy called for accommodating the concerns of all workers, traumatized by the transition in markets.

Empowerment through income transfers

The decline of labour-intensive industries prompted the unions and other social actors to mobilize political support for a "welfare dispensation" towards all workers, adversely affected in the sunset industries. The state demonstrated its concern through mobilizing resources for in critical social sectors such as the public distribution of consumer goods, notably food grains, healthcare, and education. Such spending gathered momentum from the 1970s onwards, as the state government took on a significant share of the budgetary expenditure required for extending primary health and education to the people. Social spending has maintained an upward trend through the subsequent years, though with ups and downs in between (Tsujiya 2005, Gayitri 2005, Ramakumar 2008).

A new era of redistributive transfers was in the making, and we already discussed its impact in the preceding columns of this journal. The state interventions through increased public spending on a basket of

social services proved to be an essential input to the democratization of services, as they facilitated equitable access to health and education within the state. We discussed some comparative evidence on population growth, sex ratio, birth rate, infant mortality rate, life expectancy and total fertility rate and access to education, human development and quality of life. Kerala occupies top slots in the league tables on social indicators in India. The state's prescience has also had a benign influence on the cost of education and health care both in the public and private sectors. We also took note of the comparatively higher reserve price of labour in Kerala and suggested that higher wages could be indicative of the income mobility acquired by workers. New entrants to the workforce are better endowed to navigate their way into remunerative employment within and outside the state.

A demographic dividend in the state has arrived in two sequential stages of outward migratory flows. The first stage marked a massive outflow of semi-skilled labour to the rest of India and the Gulf countries. Eventually, this flow gave way to a second wave of out-migration by skilled workers. More and more new entrants to the workforce, irrespective of their gender or social status, availed themselves of higher education and were positioned at vantage points on global value chains. In the process, Kerala emerged as a significant source of international skilled labour migration. More than three million workers have acquired mobility into the white-collar service occupations all over the world (Rajan and Zacharia 2019 Annex 1). The

remittances they send home are primarily responsible for the high levels of per-capita consumption expenditure, and they contribute to generating a range of economic activities, notably in construction, processing industries and services.

Particular emphasis on institutional safeguards

The welfare dispensation and social spending, as they influenced human development and living standards of Kerala, were underpinned by some institutional safeguards, put in place for the governance of labour markets. Two such institutions deserve special mention: i) A system for prescribing and administering minimum wages, and ii) Welfare funds for channelizing benefits to the workers of traditional industries. The Wage Boards of Kerala prescribe minimum wages in 80 domains of employment, both in agriculture and non-farm sectors, which together account for almost the entire workforce of the state. As a result, there is more uniformity in wages across industries and regions of Kerala. The actual daily wages of workers at the lower end of markets tend to be higher than the minimum wages prescribed for that category (Jose 2018; Usami 2011).

The Welfare Funds, 28 in number, have a total membership of 4.72 million workers. They provide an array of benefits to members including limited retirement pensions, ex-gratia payments on death or disability, support for education and medical care, contingency payments on marriage and maternity, unemployment

benefits, and support for housing (Government of Kerala 2019, Vol 2, Appendix 6.4). Perhaps the most commendable expenditure component of the state government is the allocation for monthly pension amounting to Rs 1400 or more per person paid to a total of 6 million recipients. It comes to a sum of 150 billion rupees a year, also the largest slice of welfare spending by the state (Isaac, 2020).

It bears repetition that the redistributive social spending and the creation of special institutional safeguards for workers at the lower end of markets were the manifestation of a political consensus for an inclusive society, premised on equal opportunities for all in terms of employment and income mobility. The state-initiated transfers helped to set a "minimum reserve price" of labour in relation to a basket of entitlements needed for a dignified life by all people. Such reservation wages have empowered the poor and the disadvantaged to transcend the barriers to their entry into labour markets and to acquire mobility as partners on global value chains. That in itself is a precious achievement the state has derived entirely from social spending.



(Author is former Director, GIFT)

References

Gayitri, K. (2005), "Government financing of social sector during the reform phase: some insights from southern states", Karanth, G. K. (ed.): Dimensions of social development: status, challenges and prospects, Social and Economic Change Monographs 8 (Bangalore, Institute for Social and Economic Change

Government of Kerala (2019) Economic Review 2019, Kerala State Planning Board, Thiruvananthapuram

Indu, G. (2015) Institutional Change in the Coir Industry: Identifying Path Dependence and Causes, Ph D thesis, Centre for Development Studies, Thiruvananthapuram

Isaac T.M. Thomas, P. A.; Van Stuijvenberg; K. N. Nair (1992), Modernization and Employment: The Coir Industry in Kerala, Sage Publications, New Delhi

Isaac T.M. Thomas (2020) Statement in a pre-budget conference online of the Finance Minister, Government of Kerala, 7 December

Jose A.V. (2018a) "Agricultural Wages in Indian States", Indian Journal of Labour Economics, ISLE-Springer, June

Rajan, Irudaya S. and K. C. Zacharia (2019), "Emigration and Remittances: New Evidence from the Kerala Migration Survey, 2018", Working Paper Number 483, Centre for Development Studies, Thiruvananthapuram

Ramakumar, R. (2008), "Level and Composition of Public Social and Economic Expenditures in India, 1950-51 to 2005-06", Working Paper, Institute of South Asian Studies, National University of Singapore

Ramesh, Babu P. (2010), Dynamics of Rural Labour, A study of smallholding rubber tappers in Kerala", Concept Publishing Company, New Delhi

Tsujita, Y. (2005) "Economic reform and social sector expenditures: A study of fifteen Indian states, 1980/81-1999/2000", Discussion Paper Number 31, Institute of Developing Economies. Tokyo

Usami, Yoshifumi (2011) "A Note on Recent Trends in Wage Rates in Rural India", Review of Agrarian Studies, Vol. 1, No. 1

Sectoral focus

All is not well that lights not well

Vijayamohanan Pillai N

The first electric bulb glowed in Kerala in 1906 when its first hydroelectric generator of 200 kilo Watt (kW) ran in a private tea estate (the Kannan Devan Hill produce Company) at Munnar in the High Ranges in the then Travancore area. However, it took more than two decades after that for the Government to come to the scene by commissioning (on February 25, 1929) a 5 mega Watt (MW) thermal station in

and 1986 (II Stage) is the largest hydro-power station in Kerala. These two stations together constitute about 54.4 per cent of the total State sector hydropower IC of 38 plants (2058.76 MW in 2018-19) in Kerala even today. Along with a few diesel (2), wind (1) and solar (22) small power projects, KSEBL now owns an IC of just 2237.2 MW and draws in power from different external sources such that the total IC of the Kerala

The first electric bulb glowed in Kerala in 1906 when its first hydroelectric generator of 200 kilo Watt (kW) ran in a private tea estate (the Kannan Devan Hill produce Company) at Munnar in the High Ranges in the then Travancore area.

Thiruvananthapuram, exclusively for the royal and administrative uses. The first public sector power project, designed on a large scale for commercial uses, in Kerala came on line in March 1940 with the first unit of 5 MW of Pallivasal hydro-electric power station. Within the next decade, five more units were added to the project to increase its installed capacity (IC) to 37.5 MW. Sabarigiri hydro-power station of 340 MW of IC, commissioned in 1966-67, was the first (of the two) major power project in Kerala. Idukki, with 780 MW of IC and commissioned in 1976 (I Stage) and in 1985

power system is now 2999.93 MW (as in 2018-19: Table 1).

The Kerala State Electricity Board Limited (KSEBL), the second SEB to be set up on 31.03.1957 under the Electricity (Supply) Act, 1948, with the prime objective of rationalisation of power development at the State level, inherited an IC of 93.5 MW, that rose to 1995 MW by 1999-2000, as against an estimated requirement of about 3160 MW as per the 14th Annual Power Survey (APS). This huge demand-supply gap further widened such that in 2017-18, the system was able to meet only 87% of the

Table 1. Installed capacity (MW) of Kerala power system

		2013-14	2014-15	2015-16	2016-17	2017-18	2018-19
KSEBL	Hydro	2008.6	2024.15	2046.15	2049.76	2055.76	2058.76
	Thermal	234.6	159.96	159.96	159.96	159.96	159.96
	Wind	2.03	2.03	2.03	2.03	2.03	2.03
	Solar			1.16	8.83	14.71	16.419
	Total (KSEBL)	2245.23	2186.14	2209.29	2220.57	2232.46	2237.169
Central sector	NTPC	359.58	359.58	359.58	359.58	359.58	359.58
IPP and others	Thermal	198.93	198.93	198.9	198.9	157	157
	Hydro	55.11	58.16	58.16	58.16	66.16	70.66
	Wind	32.85	32.85	41.25	57.25	58.25	58.25
	Solar			13.7	72.78	97.46	117.267
	Total (IPP and Others)	286.89	289.94	312.01	387.09	378.87	403.177
	Grand total	2891.72	2835.68	2880.9	2967.31	2970.92	2999.926

Source: KSEBL Annual administration report, various years

energy requirement of 23850 million units (MU; 1 unit = 1kWh). Sadly, Kerala's own energy generation accounted for only 22.4% of this energy requirement. The remaining vast deficit had to be covered with the cushioning energy import to the tune of about 80% in the recent years (Table 2). Still worse, even though own energy and import together exceeded the energy requirement (by about 2%), technical losses in transit burnt away as much as 546 MU, leaving 13% of the energy requirement still unmet! Of course, technical losses are inevitable in a power system, but its minimization is not at all impossible. This in turn can mean that the very costly energy import could well be reduced to some extent.

Energy losses

Energy transmission and distribution (T&D) losses are of two types: technical and

commercial losses (for example, energy theft). The technical losses occur as energy dissipation in the conductors and equipment used for transmission, transformation, sub-transmission and distribution of energy and are inherent in a system but reducible to an optimum level. Ideally, these losses in a power system are expected to be around 3 to 6%. Reducing the T&D losses to, say, 10% could have resulted in immense savings in costly power purchase. For example, in 2017-18, with an own generation of 5460 MU of energy and a purchase of 19427 MU, the quantum of energy available was 24887 MU; accounting for 10% T&D loss would leave 22398 MU of energy available for sale, whereas the actual energy sale including export was 21277 MU only. This simply means that achieving 10% T&D loss would have saved a quantum of energy to the tune of 1121.67 MU in that

Table 2. Physical performance of the Kerala power system

	Unit	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
Annual energy requirement (Unrestricted)	MU	13567.99	14695.17	15442.73	16357.16	17350.02	17807.77	19521.41	20736.19	21264.51	22040.04	22944.45	23849.54	24432.96
Own generation	MU	7554.08	7695.11	8647.69	6440.44	7189.51	7359.97	8289.91	5334.27	8163.03	7286.90	6739.25	4325.08	5460.34
(Own generation)/(Energy requirement)	%	55.68	52.36	56.00	39.37	41.44	41.33	42.47	25.72	38.39	33.06	29.37	18.13	22.35
Power purchase (gross)	MU	6700.50	8149.84	8074.62	9628.87	10204.21	10512.27	11263.21	14908.82	14070.42	15031.71	16448.36	19734.93	19426.74
(Power import)/(Energy requirement)	%	49.38	55.46	52.29	58.87	58.81	59.03	57.70	71.90	66.17	68.20	71.69	82.75	79.51
Energy available for sale	MU	13331.03	14427.96	15065.15	15293.41	16982.29	17340.27	18938.80	19877.21	20542.49	21573.16	22727.34	23763.53	24340.79
(Available energy)/(Energy requirement)	%	98.25	98.18	97.55	93.50	97.88	97.37	97.02	95.86	96.60	97.88	99.05	99.64	99.62
Total sale including export	MU	10905.71	12377.89	13396.61	12877.65	14024.99	14678.14	16181.63	16839.26	18885.46	18788.82	19513.80	20502.21	21276.70
(Energy sale)/(Energy requirement)	%	80.38	84.23	86.75	78.73	80.84	82.43	82.89	81.21	88.81	85.25	85.05	85.96	87.08

Source: KSEBL (2018) and own estimations.

Facts do corroborate that the system growth in Kerala has never been up to the mark of potential requirement.

single year! This in turn means that energy purchase could have been reduced by this much (to 18305MU) in 2017-18, with a significant financial implication. That is, in 2017-18, KSEBL incurred an expenditure of Rs. 7526.03 crores for the purchase of 19427 MU, the per unit cost being Rs. 3.87. Thus, the potential energy saving of 1121.67 MU in turn implies a potential financial saving of Rs. 434.54 crores in one year, 2017-18! Five-year potential savings from 2013-14 in this respect come to a massive amount of Rs 2541.3 crores (Table 3).

There is another dimension to this potential savings: instead of reducing the import (as in the above scenario), the KSEBL could have sold out the potential energy saving to meet the entire energy requirement and earned an additional sales revenue, for example, of Rs. 644 crores in 2017-18, and earned a good surplus over the import cost. For the five years from 2013-14, such potential

additional sales revenue could add up to Rs. 3287.3 crores (Table 3).

Failures in planning

Facts do corroborate that the system growth in Kerala has never been up to the mark of potential requirement. Till 1966, the Board had been restricting new connections. The low accessibility (the system being open to the few rich only) along with these restrictions had rendered the system a much smaller one involving in turn slow and low growth. In fact, at the start of the Third Five Year Plan (FYP, 1961-66), Kerala system, even though small, experienced a shortage of 6 MW in firm power capacity (FPC), and at the end of the period, as much as 75 MW, resulting in major power cuts, despite energy import from Tamil Nadu (Government of Kerala 1984: 22). Planning per se has been absent for the long run also. What is technically

Table 3. Potential savings of T&D loss reduction to 10%

	2013-14	2014-15	2015-16	2016-17	2017-18
Own energy + Purchase (MU)	22233.45	22318.61	23187.61	24060.01	24887.08
Energy available (MU) after 10% T&D loss	20010.105	20086.749	20868.849	21654.01	22398.37
Actual sale, incl. export (MU)	18885.46	18788.82	19513.80	20502.21	21276.70
Potential energy saving (MU)	1124.65	1297.93	1355.05	1151.80	1121.67
Purchase cost per unit (Rs)	4.91	4.51	3.85	3.88	3.87
Potential purchase cost saving (Rs. Crores)	551.73	585.66	522.04	447.32	434.54
Average revenue (Rs.)	5.29	5.26	5.41	5.49	5.74
Potential sales revenue from energy savings (Rs. Crores)	594.50	682.62	733.35	632.79	644.06

Sources: KSEBL (2018) and own estimations.

The price paid by Kerala for such failure or absence itself of a perspective planning mechanism has been immense in terms of power shortage for quite a long time.

more relevant and essentially significant for a hydropower system is its firm power capacity (FPC), not just its IC. Then comparing the demand to be met by the system with the FPC would be more reasonably and reliably appropriate. Wide gap between IC and FPC is sheer waste of investment, unless timely FPC augmentation is carried out, and sadly this is the Kerala experience. By 1976 (with the commissioning of the Idukki Stage I project), FPC was 425 MW (42 per cent of the IC) only, equivalent to 3723 MU of energy generation potential. On the other hand, the total storage capacity of all the commissioned hydel reservoirs was equivalent to only 3365 MU, the difference being accounted for by the run-of-the-river-flow of water during the monsoons. The average generation potential was just enough, *ceteris paribus*, for at the most two normal years against a State (internal) average load growing at 10 per cent per annum. Inordinate investment inertia reigned not only in IC expansion programs, but also in FPC augmentation programs, such that the wasteful wide gap between the two persisted (See, for more details, Pillai 2004).

The hydropower potential of Kerala is estimated at 2301 MW at 60 per cent load factor. That about 92 per cent of this has already been harnessed might be taken as a surprising feat. But wait and consider the case of Tamil Nadu with a hydropower potential of a mere 1918 MW (at 60 per cent load factor) against an actual hydropower

IC of nearly 2283.55 MW (<https://www.electricalindia.in/hydro-power-scenario-in-tamilnadu/>) While Kerala has remained utterly apathetic to the wasteful flowing away of hydro resources, Tamil Nadu has successfully managed to make full use even of the inter-State hydro-resources available to it.

The price paid by Kerala for such failure or absence itself of a perspective planning mechanism has been immense in terms of power shortage for quite a long time. Most distressing is the fact that even during this pinching period of power famine, both the Board and the Government have continued to be negligent, and the public at large indifferent. During the 20 years since 1976-77 (when Idukki Stage I was commissioned), Kerala had added to her IC only a meagre 482 MW. And in the 10 years after commissioning Idukki II Stage and Idamalayar in 1986-87, a paltry 17 MW! Since the commissioning of the Idukki project, Kerala has been too unfortunate to launch another major power project, may be except for the 180 MW Lower Periyar project, commissioned in 1997. Moreover, a large number of (about 16) power projects, with a generation potential of nearly 2000 MU (i.e., about 353 MW, at 60 per cent load factor, roughly equivalent to the State's then power deficit), remained locked in at various points of unwarranted time overrun due mainly to labour militancy and contractual corruption; such situation still continues. Thus, during the six-year period ending 2018-19, the Kerala

power system (both public and private sectors) added just 108 MW to its IC.

A Shrinking coffer

Thus, both investment inertia and prolonged lag in investment fruition have come to stay, standing in the way of the timely required capacity expansion. Funds scarcity in financing power development has been explicitly recognised as responsible for this sorry state of affairs. The unwarranted drying up of the conventional source of funds, viz., the State, is generally accused of having led in part to the crisis. Though the plan outlay for power development was on the rise in money terms, from Rs. 118.5 million in First Five Year Plan (FYP) to Rs. 26,710 million in Ninth FYP, its share in total outlay was on the decline, from 39.5 per cent to 26.5 per cent respectively. In the third year of the 13th FYP (2019-20) the plan outlay of Rs. 178145 lakhs earmarked for the energy sector in Kerala was only 4.48% of the gross plan outlay. However, there is another facet in this regard that merits serious account, but has been left unaccounted for - that is, even this allegedly inadequate outlay was not utilised fully for most of the years. This specifically shows that funds scarcity was not the exclusive cause of the problem, though it was a significant one.

A cash-strapped KSEBL

While on the one hand, the Government has been consistently shirking its power development obligations on the excuse of an apparently shrinking coffer, the only alternative (or contributing) source of funds available, viz., the internal resources of the Board itself, on the other hand, has

remained weak. For most of the years of its existence, the Board experienced deficit, expenses exceeding its revenue.

The financial morbidity of the Board, like most of other SEBs, has often called for huge sums of subventions from the Government even for financing its normal activities. Informed opinions in pursuit of the culprits behind the financial sickness of the SEBs have unanimously converged onto a single point of inadequate tariff levels, and required continuously monitored upward revisions of the tariff. For example, during the 6 years from 2013-14, tariff income of the KSEBL registered an annual growth of 6.4%, and the total income, about 6% (with non-tariff income falling over the years). Even though total cost was growing only at an annual rate of about 5%, deficit still persisted, but with an overall fall at an annual rate of about 16%. Table 4 shows the disheartening trend in the energy generation cost: steep drastic fall! On the other hand, the energy purchase cost was increasing at an annual rate of 3.4% during this period and accounted for about 57% of the total expenses! The highest growth was in administration and general expenses (19.5%), closely followed by interest charges (19.4%). These two items along with employee cost (growing at 4.3% per annum) accounted for nearly 40% of the total expenses in the recent years.

An earlier study by the present author had thrown light on some obvious scopes for efficiency improvement at various points of operation in the power system that could potentially reduce the supply cost substantially (Kannan and Pillai 2002). Thus, for instance, it had been shown that

Table 4. Financial performance of the Kerala power system

	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19
Revenue Income (Rs. Crores)						
Non-Tariff Income	571.97	533.52	759.44	550.09	608.19	481.74
Revenue from tariff	9978.88	9879.35	10487.71	11036.78	12057.26	13521.20
Total Income	10550.85	10412.87	11247.15	11586.87	12665.45	14002.94
Revenue Expenses (Rs. Crores)						
Energy Generation	240.45	209.91	104.26	23.45	2.08	3.29
Energy Purchase	6902.65	6782.76	6336.82	7664.40	7526.03	7869.32
Interest Charges	834.81	906.90	909.14	922.93	1881.08	1859.76
Depreciation	516.28	459.70	491.22	520.66	803.70	805.02
Employee Cost	2579.99	2893.71	3292.82	3373.76	3038.40	3354.62
Repairs & Maintenance	227.04	244.44	259.76	266.90	277.35	303.75
Administration & General Expenses	253.50	287.05	344.09	378.72	530.39	598.56
Other Expenses	-155.58	-98.68	-177.65	88.50	-609.49	-501.33
Total Expenses	11399.14	11685.79	11560.46	13239.32	13449.54	14292.99
Deficit (Rs. Crores)	(-)848.29	(-)1272.90	(-)313.29	(-)1652.45	(-)784.09	(-)290.00

Source: KSEBL (2019)

with some, quite reasonably achievable, improvement in the operational, T & D, and manpower deployment efficiencies, as well as with 1:1 debt-equity capital structure, the KSEB's unit cost of electricity supply in 1997-98 could have been reduced by about 43.3 per cent. This along with the given average revenue realised in that year would have yielded a unit commercial profit of about 16 Paise per unit of energy sold, instead of the reported loss of about 68 Paise per unit! And still there remain resourceful rooms for efficiency improvement at all other levels of functioning. This plainly points to the poignant fact that if the power system had performed efficiently, it could have, along with a scientific tariff structure, generated internal resources sufficient for financing capacity expansion programs, thus also dispensing with the avoidable leaning on the State exchequer.

(The author is the visiting faculty, GIFT)

References

- Kannan K.P. and Pillai, N. Vijayamohan (2002). The Plight of the Power Sector in India: Inefficiency, Reform and Political Economy, May 2002, Centre for Development Studies, Thiruvananthapuram.
- KSEBL (2019) Annual Administration Report: 2018-19. Vydhyuthi Bhavan, Thiruvananthapuram, Kerala.
- KSEBL (2018) Power System Statistics 2017-18. Vydhyuthi Bhavan, Thiruvananthapuram, Kerala.
- Pillai, N. Vijayamohan (2004) "The Power Crisis in Kerala" in BA Prakash (Ed.) Kerala's Economic Development: Performance and Problems in the Post-Liberalisation Period, Sage Publications, New Delhi: 244-265.
- State Planning Board (2019) Economic Review 2019. Thiruvananthapuram, Kerala.

New studies on Kerala

Young Scholars' Forum, GIFT
Led by Suha A M

Economics

Scopus indexed journal articles

1. Bhandari, A.K., & Sreelakshmi, P. (2020). Kerala State Road Transport Corporation: A Relook at Its Efficiency and Potential. *Economic and Political Weekly* 55 (48), 7-8. <https://www.epw.in/journal/2020/48/special-articles/kerala-state-road-transport-corporation.html>

This paper attempts a depot-wise efficiency analysis of the Kerala State Road Transport Corporation and its regional variations for the period 1988-97 using the data envelopment analysis methodology. It then links the findings to the KSRTC's overall financial position for the subsequent period from 2003-04 to 2014-15. The study concludes that the day-to-day operational position of the KSRTC can be substantially bettered if it can utilise its prevailing efficiency improvement potentials to some extent.

2. Kavya Lekshmi, R.S., & Mallick, H. (2020). Contribution of International Tourism to Economic Growth of Kerala: A Subnational-Level Analysis in India. *Journal of Policy Research in Tourism, Leisure and Events*. Advance Online Publication. <https://doi.org/10.1080/19407963.2020.1854275>

The study attempts to understand the contribution of international tourism on economic growth at a sub-national level (i.e. for Kerala) of the Indian economy. By exercising the Johansen cointegration test and Vector Error

Correction Model on the annual data from 1980 to 2017, it reveals the existence of a positive long-run association between tourism and economic growth

3. Reja, M.S., & Das, B. (2020). Remittance arrangements within India and Covid-19: Kerala's Migrant Construction workers from West Bengal. *South Asia Research*, 41(1), 22-34. <https://doi.org/10.1177%2F0262728020966099>

This article highlights emerging patterns of domestic remittance arrangements among migrant construction workers from West Bengal in Kerala that have now become defunct because of COVID-19.

Books

1. Romanis, F. (2020). *The Indo-Roman Pepper Trade and the Muziris Papyrus*. Oxford University Press. <https://global.oup.com/academic/product/the-indo-roman-pepper-trade-and-the-muziris-papyrus-9780198842347>

This volume presents a systematic and fresh interpretation of a mid-second-century A.D. papyrus-the so-called Muziris papyrus-which preserves on its two sides fragments of a unique pair of documents: on one side, a loan agreement to finance a commercial enterprise to south India and, on the other, an assessment of the fiscal value of a south Indian cargo imported on a ship named the Hermapollon. This study also considers imperial fiscal policy as it related to

the south Indian trade, the overall evolution of Rome's trade relations with south India, the structure and organization of south Indian trade stakeholders, and the role played by private tax-collectors.

Chapter in edited books

1. Bathla, S., Jee, S. (2021). Temporal and Spatial Patterns in Employment and Productivity Growth in the Organised Food Industry. In S.Bathla & E. Kannan (Eds.), *Agro and Food Processing Industry in India* (pp. 127-152). Springer. https://doi.org/10.1007/978-981-15-9468-7_6

In the recent decades in India, the improvement in infrastructure and fiscal incentives has led to a favourable business environment, readily available markets, the availability of sufficient raw material for value addition and rising per capita income

History and culture

Scopus indexed journal articles

1. Joseph, I.A., Peter, S., & Anandkumar, V. (2020). Development of a Typology of Tourists Based on Pre-Trip Use of Social Media. *International Journal of Hospitality & Tourism Administration*. Advance Online Publication. <https://doi.org/10.1080/15256480.2020.1842837>

Four hundred domestic and international tourists visiting Kerala were typologised using cluster and discriminant analysis into three clusters - 'Enthusiastic Travellers,' 'Information Seekers,' and 'Planners' based on their pre-trip usage of social media. Association between the clusters and external variables were used to characterise the typologies. Findings indicate that domestic tourists and international tourists differ in their usage of social media. Domestic tourists use social media for gathering information, and international tourists use social media for trip planning and online travel booking in addition

to gathering information.

2. Mandakathingal, A. (2020). Gender Roles in Martial Art: A Comparative Analysis of Kalaripayattu Practices in India. *Women's Studies*. Advance Online Publication. <https://doi.org/10.1080/00497878.2020.1843039>

This paper is a comparative analysis of the gender differentiation seen in Kalaripayattu in the Kerala society and the metropolitan spaces of Bengaluru and Chennai. It seeks to demonstrate how gender differentiation in Kalaripayattu is related not merely to the nature of the practices of that institution but is rather the result of the continuing influence of social and geographical spaces on masculine and feminine roles.

Other journal articles

1. Mini, D. S. (2020). Transnational Ethical Screens: Empathetic Networks in Malayalam Short Films from the Gulf. *Film History*, 32(3), 141-69. <https://doi.org/10.2979/filmhistory.32.3.06>

This paper explores the emergence of ethical and empathetic modes of transnationality in the specific context of Malayali diasporic media in the Middle Eastern Gulf. Through a combined analysis of short films, literature, advertisements, bureaucratic policies, and ethnographic vignettes, this paper looks at the figure of the migrant labourer as both a social force and a media object around which ideas of justice and empathy cohere

Chapter in edited books

1. Brussel, N. V. (2020). Bhadrak???: Slaying the Demon in the Backwaters. In M. Slouber (Ed.), *A Garland of Forgotten Goddesses: Tales of the Feminine Divine from India and Beyond* (pp.19-41). University of California Press. <https://doi.org/10.2307/j.ctv1b742rd.7>

The narrative consists of two chapters translated from *The Glorification of Bhadrak???*

(Bhadrak??? M?h?tmya), a Sanskrit text of the 'regional Pur??a' type, which mixes local narratives and perspectives with transregional myths and themes. It tells the tale of the demon D?rika and his destined death at the hands of the fierce goddess Bhadrak???. In this way, it is part of an enduring motif in Hindu myth and art: that of demons being slain by fearsome goddesses.

Books

1. Bajpai, L.M. (2020). India, Sri Lanka and the SAARC Region: History, Popular Culture and Heritage. Routledge. <https://doi.org/10.4324/9780429320514>

The connection between Kerala in India and Sri Lanka can be traced across history, folklore and oral traditions, rites, rituals and festivals, architecture and lifestyle, and also the palate and food. The connection can be traced to ancient times when a Sri Lankan king visited the Chera country in Kerala during the Pattani festival at Vanchi in the Kerala region; was perhaps the contemporary of Senguttuvan Chera, according to the Sangam poems, and can be dated to either the first or last quarter of the 2nd century CE (depending on whether he was the earlier or the later Gajabahu). The Pattani cult (of the deity) is said to have been brought to Sri Lanka by Gajabahu.

Health

Scopus indexed journal articles

1. Sheldon, V. (2020). To Do Nothing: Revising Good Aging and Reviving Pre-Toxic Past at a Kerala Nature Cure Home. *Asian Medicine*, 15(1), 133-60. <https://doi.org/10.1163/15734218-12341464>

This article narrates how two ageing patients internalise their naturopathic doctors' advice to detoxify and 'do nothing' rather than strive for biomedical cure. By naturally revitalising their

bodies, they cultivate feelings of intense independence and ecological attachment that reconfigure experiences of migrated-kin isolation. In counterpoint to literature that frames biopolitical and medical discourses as causally producing moral subjectivities, this article demonstrates how persons agentively craft counter normative, vitalistic models of ageing and health, contributing to broader localist imaginaries of reviving pre-toxic lifeways.

Sociology

Scopus indexed journal articles

1. Chathukulam, J., & Tharamangalam, J. (2021). The Kerala model in the time of COVID19: Rethinking state, society and democracy. *World Development*, 137. <https://doi.org/10.1016/j.worlddev.2020.105207>

The objective of this paper is to examine Kerala's trajectory in achieving the success and then confronting the unanticipated reversal. It will examine the legacy of the Kerala model such as robust and decentralized institutions and provisions for healthcare, welfare and safety nets, and especially the capacity of a democratic state working in synergy with civil society and enjoying a high degree of consensus and public trust. It will then examine the new surge of the virus and attempts to establish if this was due to any mistakes made by the state or some deficits in its model of "public action" that includes adversarial politics having a disruptive tenor about it.

2. Sheeja, K. P., Arunmozhi, A., & Francis, N. M. (2020). Study On The Effect Of Stress Management And Life Satisfaction On Marital Adjustment Among Couples In Kerala. *European Journal of Molecular & Clinical Medicine*, 7(8), 2154-2161.

The purpose of this study was to find out the impact of stress management and marital

adjustment on Life Satisfaction among couples in Kerala. The existing literature regarding stress management, marital adjustment and life satisfaction is to recognize the need to consider contextual factors. The simple random sampling technique was used to select samples from different areas of Thrissur District in Kerala. A sample of the study comprised of 400 couples (n=800) including 400 male and 400 female participants of age group 20 to 60 years.

Books

1. Vaddiraju, A.K. (2020). *Urban Governance and Local Democracy in South India*, Routledge, <https://doi.org/10.4324/9780429281907>

Abstract: This chapter presents the trends of urbanization in Kerala and Tamil Nadu. The chapter argues that the urbanization process has been more dispersed in both states than that of Karnataka and Andhra Pradesh. We also argue that the dispersed pattern of urbanization in Kerala and Tamil Nadu makes it a more inclusive development process. After discussing the trends of urbanization in both the states, we present a case study of one city in Tamil Nadu, namely Salem.

What is new(s) from GIFT

A. Webinars

1. Institutional regimes and financial inclusion: Evidence from commercial banking in India by Dr Kiran Kumar Kakarlapudi, Assistant Professor, GIFT on 19-01-2021.

Welcome : Prof K J Joseph, Director, GIFT

Chair: Prof M A Oommen, Honorary Professor, GIFT

Discussant: Dr Zakaria Siddiqui, Associate Professor, GIFT

Seminar Co ordinator: Smt Anitha Kumary L , Associate Professor, GIFT

Abstract: In the context of growing emphasis on fostering financial access to the excluded sections, this paper analyses the effects on two major institutional regimes; bank nationalization and financial sector reforms in shaping the pattern of financial inclusion in India during 1972-2014. Going beyond one-dimensional measure of financial inclusion, this study constructs a measure of financial inclusion index using six dimensions of inclusion representing both access and use indicators. Further, a separate financial inclusion index for rural and urban areas is constructed to explore the differences. The empirical analysis shows positive effects of both the institutional innovations on financial inclusion. However, the first institutional intervention with its objective of social banking contributed to the growth of banking in rural areas and backward states. The second

institutional regime, reforms, with its objective of efficient banking, contributed to the faster growth of banking services in urban and developed regions. The results show unequal effects of reforms on financial inclusion as manifested in increase in inter-state inequalities, rural-urban inequalities, and concentration of banking services. Based on the findings, the study, therefore, calls for increased role of the state to create an institutional architecture for inclusive financial systems in order to foster access to financial services among hitherto excluded areas and sections.

Book launch

GIFT organized online book launch on Basic computational techniques for data analysis: An Exploration in MS Excel held on 1 January 2021 at 3 pm. The book was released by Hon'ble Minister for Finance, Prof T M Thomas Isaac. The book was written by Dr Narayana, former Director, GIFT, Sharad Ranjan, Faculty Department of Economics, Zakir Husain Delhi College Evening, University of Delhi, and Nupur Tyagi, Faculty, Department of Commerce, Gargi College, University of Delhi. The book is published at Sage publications, New Delhi. Sri Rajesh P, Assistant Professor, Govt Engineering College introduced the book and Prof K J Joseph, Director, GIFT welcomed the gathering. Smt Anitha Kumary L, Associate professor, GIFT coordinated the programme.

Abstract: The book is designed to equip students to navigate through MS Excel spreadsheets to compute various statistical and financial

measures for use in data analysis.

Basic Computational Techniques for Data Analysis illustrates the concepts used in economic and financial decision-making in business as well as in day-to-day life, thus enhancing a deeper understanding of the concepts from both theoretical and practical perspectives. After going through the textbook, readers will be able to ascertain the inbuilt capabilities in MS Excel and comprehend basic computations in statistics and finance.

This book is essential as a supportive companion for students of economics, commerce, management and social science subjects in general.

Key Features:

Provides an in-depth and clear understanding of various data analysis techniques

Systemic and stepwise explanation of financial and statistical concepts using MS Excel functions

Prior knowledge of statistics, finance and MS-Excel functions not required to understand the concepts

Simplistic clarification of topics such as Future Value of Money, Loan Amortization and Investment Decision Criteria

B. Teaching and training programmes

PGDGST program : Third batch

Admission for the third batch of the Post Graduate Diploma in Goods and Service Tax (PGDGST) is closed. 120 hours training program started through online mode for the 325 students. 17 more students joined. Total strength of students is 342.

Third set of training for the third batch for 56 hours started on 24 December on online

mode. Examination result for the second batch of PGDGST students was published.

Course Co ordinators: Dr N Ramalingam and L Anitha Kumary

For more details <https://www.gift.res.in/index.php/course/detail/14/PGD-GST>

PhD program

PhD interview for the Third batch of students of GIFT was held on 13th and 14th of January 2020. Eight students are selected for the programme as given below. Course work for the second batch of students is going on.

1. Riju Mohan A, CUSAT
2. Shagishna K, Kerala University
3. Athira Karunakaran, Central University of Kerala
4. Ashkar K, Kannur University
5. Vipasha Ray Hajong, Christ University
6. Anuja V P, Jawaharlal Nehru University
7. Indhu T R, MG University
8. Balaram Roula, Utkal University

C. New faculty in GIFT

Dr Zakaria Siddiqui

Dr Zakaria Siddiqui joined as Associate Professor at GIFT. He is an applied economist. His research and teaching focus on contemporary themes of public policy debates in India. He uses large scale nationally representative surveys such as NSS and NFHS data sets to reconcile policy debates such as malnutrition, Calorie consumption 'puzzle', participation of women in the labour market, the role of scientific diaspora in development, democracy and marginalisation of minorities. He has also been working on understanding emergence of political instability. His research

has found its way in reputed academic journals such as World Development, The Journal of Development Studies, Health Policy and Planning, Public Health and Nutrition, Energy Policy.

Dr Siddiqui has worked with wide range of experts from diverse disciplines and regions including Europe and Australia. He has worked with Sydney based Institute of Economics and Peace, Australian National University, University of South Australia, Institute of Development Studies Kolkata and JPAL -South Asia. He was associated with BITS-Pilani, Hyderabad recently.

His initial learnings in development research were at Centre for Development Studies (CDS), Thiruvananthapuram, Centre for Economic Studies and Planning (CESP), JawaharlalNehru University(JNU), New Delhi and at Center for Operations Research and Econometrics(CORE), Universitécatholique de Louvain(UCL), Belgium.

https://www.gift.res.in/faculty/faculty_details

D. Publications

1.Kerala Tax Reporter (KTR)

November issue of KTR published Online and offline.

<https://www.gift.res.in/ktr>

2.Innovation and Development

A Routledge journal from GIFT, Volume 10, No. 3 published, Editor in chief, K J Joseph.

For details please visit <https://www.tandfonline.com/toc/riad20/current>

3.Weekly update on the Indian economy

This is an attempt by the Young Scholars' Forum in GIFT, led by Smt Shency Mathew to update you on important developments in the national economy. Latest issue 16-22 January, 2021.

https://www.gift.res.in/index.php/publish/publish_list/14/Weekly-Updates-on-Indian-Economy

Soft copies of Kerala Economy (English and Malayalam) are available in GIFT website.
For free download, please visit www.gift.res.in



Gulati Institute of Finance and Taxation (GIFT), Thiruvananthapuram, Kerala, formerly Centre for Taxation Studies, has been conceived as a premier national institute to promote theoretically grounded and empirically based research within an interdisciplinary perspective to aid policy making at the national and sub-national level. Affiliated to Cochin University of Science and Technology, GIFT is also mandated to facilitate research leading to PhD and undertake training programs for capacity building of different stakeholders, including government officials. It also offers a Post Graduate Diploma in Goods and Service Tax. Recently, GIFT joined hands with Kerala Financial Corporation (KFC) in training the new entrepreneurs being promoted under the Chief Minister's Entrepreneurship Development Programme (CMEDP).

The governance of the Institute is entrusted with a Governing Body and an Executive Committee, consisting of scholars of eminence and senior administrators representing both the Central and the State Governments. Dr T M Thomas Isaac, Minister of Finance and Coir, Government of Kerala, is the Chairperson of the Institute.

Gulati Institute of Finance and Taxation,
GIFT Campus, Chavadimukku,
Sreekariyam, Thiruvananthapuram, Kerala - 695017.
Phone : 0471 2596970, 2596980, 2590880, 2593960.
Email : program@gift.res.in www.gift.res.in
