Emerging Development Scenario in Indian Service Sector: A Crisp on Select Sectors with reference to the Telangana Economy

Dr. Gopala Sudarshanam

Associate Professor of Commerce, Government Degree College Siddipet (Autonomous)-Telangana-India

Abstract-Service sector has become lifeline for the social economic growth of any nation across the globe. Service is today the largest and fastest growing sector globally, contributing more to the global output and employing more people than any other sector. In advanced economies the growth in the primary and secondary sectors are directly depend on the growth of services like banking, insurance, trade, commerce, health, education and entertainment. Service sector in India today accounts for more than half of nation's GDP. This vantage of contribution is not an exemption to our country in general and Telangana State in particular. Coverage of wide verity of segments, lion share (55%)in GDP, attraction of 2/3 FDI,s, providing huge employment opportunities, encouraging volume of Government initiatives, witnessing 6% growth in IT and ITES,s and standing as top 10 in WTO members in service providers have been remarkably signifies the Indian Service Sector in the contemporary scenario.

If we look at the quantitative expressions over Indian Service Sector, we will find surprising but successive saga. During 1950-51: Primary Sector stood with 56.5%, Secondary Sector with 13.6% and Tertiary Sector with 29.9% in our nation's GDP. Similarly during 1990-91: 34%, 23.2% and 42.8% respectively. During 2007: P.S-18%, S.S-29% and T.S-53%. Eventually if we look at latest statistics, pertaining to the period of 2020-21: PS-20%, SS-26% and T.S-54%.

With reference to our Telangana State, share of service sector in GDP is 65%, in total workforce 33.3% are in this sector. GVA growth rate is 0.91% in 2020-21 as compared to the negative growth rate at the national level -4.65%. As per the Economy Survey Report (2021), service sector growth rate in 2015-20 was 10.2% with second position (Tripura 10.5%) Therefore based on the above most plausible data, we shall derive concrete inferences that, the service sector in the state too growing multi fold and becoming promising sector for many reasons.

Hence contemplating at the above evidences, the researcher has motivated himself to make more

empirical study on service sector emphasising two subsegments, i.e., Higher Education and Information Technology at national level in cursory form and in detailed with reference to Telangana Economy. Through this short tenured study, it has found that telangana is performing moderately in educational development but dominantly in IT sector. Further it was also witnessed that the innovative and impetus initiatives over two identified sectors by the government, Higher Education and IT & ITES landscape is transforming with remarkable progress. 36% of state GER, 34% employment generation and close to 65% share in GDP are supporting indices of service sector as lion in state economy. Eventually the research has opined that the challenges such as quality in education, lower enrolment, and technology gap between rural and urban and slow in adopting technology are addressed with immediate intensity, this sector flourish with more fragrance in the state.

Key Words—Service Sector, Education, IT and Telangana Economy

I. INTRODUCTION

Service sector has become lifeline for the social economic growth of any nation across the globe. Service is today the largest and fastest growing sector globally, contributing more to the global output and employing more people than any other sector. In advanced economies the growth in the primary and secondary sectors are directly depend on the growth of services like banking, insurance, trade, commerce and entertainment. This vantage is not an exemption to our country. Service sector in India today accounts for more than half of the India's GDP. In alignment with the global trends Indian service sector has witnessed a major boom and is one of the significant contributors to both employment and National income in recent times. The reason for the growth of the service sector may be due to the increase in urbanization, privatization and more demand for intermediate and final consumer services in one hand and supply of infrastructural as well as knowledge aid to other two sector of economy.

Overview of Indian Service Sector:

If we look at the quantitative expressions over Indian Service Sector, we will find surprising but successive saga. During 1950-51: Primary Sector stood with 56.5%, Secondary Sector with 13.6% and Tertiary Sector with 29.9% in our nation's GDP. Similarly during 1990-91: 34%, 23.2% and 42.8% respectively. During 2007: P.S-18%, S.S-29% and T.S-53%. Eventually if we look at latest statistics, pertaining to the period of 2020-21: PS-20%, SS-26% and T.S-54%. Therefore based on the above most plausible data, we shall derive concrete inferences that, the service sector has been growing multi fold.

Significance of Indian Service Sector:

The service sector has a crucial economic role to play in any society. Services create value by providing a bridge between the production and consumption segments of society. This is why the growth of the service sector in modern society is linked with the increased productivity of the manufacturing sector. The value which the service sector provides consumers may be private benefits which are paid for or they may be public benefits which are free or subsidized, like health, information and education. A major characteristic of modern socio-economic development has been the increasingly dominant role of the service sector. An economy develops the relative contributing of the primary and secondary sectors of the country decreases' whereas that of the service sector increases.

Coverage of wide verity of segments, lion share (55%)in GDP, attraction of 2/3 FDI,s, providing huge employment opportunities, encouraging volume of Government initiatives, witnessing 6% growth in IT and ITES,s and standing as top 10 in WTO members in service providers have been remarkably signifies the Indian Service Sector in the contemporary scenario. At this backdrop it is also worth to note the classification services of Indian service sector in a nutshell. Business Services, which comprises further as Banking, IT, Insurance, Transport and warehousing, Social Services of Education, Health and Administration and Personal

Services of Tourism, Recreation and Restaurants are three broad sub- segments of Indian Service Sector.

II. REVIEW OF LITERATURE

Sravan Boini, et.al (2023): have conducted an empirical study and presented a paper titled 'A Study on Outcomes of Economic Dynamics with reference to Telangana Government Initiatives: A Multivariate Analysis' and published it in a reputed UGC Care group 1 Journal ANVESAK (ISSN: 0378-4568). According to their Paper, the economic dynamics of Telangana, focusing on the effects of industrial growth on key economic indicators, including Gross State Domestic Product (GSDP), employment, and per capita income. Spanning from 2014-2015 to 2022-2023. This study offers crucial insights into the state's economic landscape, with a particular emphasis on policy implications. Further through this study they have suggested that the government policies and initiatives aimed to promote industrial growth, increase per capita income, and improving employment levels are essential for sustaining Telangana's economic development. While industrial growth and per capita income have positive impact on GSDP, while the relationship between total employment and GSDP is noteworthy to say that the total employment negatively impacting the state economic growth.

Nib Singh.et.al (2022): Have identified the growth of service sector was necessary in the modern global perspective and development of information technology has made this sector more imperative, in their study titled 'Role of Service Sector in Indian Economy'.

Dr. Vinay Kumar and Freya Simran (2019): Have made an explorative study on 'Telangana Model of Development: An Economic Analysis with Special Reference to IT, Pharmaceuticals & Bio-Technology'. They could find that the Telangana's economy is the eighth-largest state economy in India with Rs. 8.43 lakh crore in GDP and a per capita GDP of Rs.1,80,000. Not long ago, the state emerged as a major focus for robust IT software, industry and the service sector. Despite being India's youngest state, it had an inherent advantage in business. When it was carved out of the erstwhile Andhra Pradesh in June, 2014 after a long struggle with the note-worthy bloodshed, it got Hyderabad as

its capital-and with it, the benefit of its businessfriendly legacy. Eventually they have inferred that Telangana primarily being an agro-based economy, the contribution of the IT, Pharmaceutical, and biotechnology will leave a powerful impact on the sustainable development of the state.

Dr. O. M. Ashtanker.et.al (2019): in their research paper 'Role of Service Sector in The Economic Growth of India' have emphasized that the Indian service sector is an important growth engine of Indian economy. Besides it has also facilitated India's integration with the world economy through trade and investment. Through this paper they were aimed at ascertaining the barriers in growth of service sector in India and provided measures for its removal so that the performance of service sector can improve further. It also discusses about the growth potential of service sector in India.

Dr. Pullaiah Cheepi (2018): In his research paper titled 'An Analysis of Sectoral Economic Development of Telangana State', has examined the various sectors and their contribution to the economic development of Telangana State. Further the author has analyzed the growth rates of the Agriculture, Industrial, and Service sectors besides studying the relationship among the Agriculture, Industrial, and Service sectors. Eventually he found that the state of Telangana State Gross State Value Added of Primary sector register an impressive growth of 17.2% at current prices, this is significantly higher than the all India growth rate of 9.0%. The secondary sector growth at 9.8%, which is also higher than the all India growth of 8.7%, the service sector is obliviously more than the all India growth rate likely 14.6%, to 11.9%. GSDP of state at current prices for the year 2022-23 is estimated at Rs. 8.54 lakh crore, as against Rs. 7.76 lakh crore in the previous year, indicating that the growth rate of 12.8 per cent.

Scope & Need of the Present Study:

For the purpose of present study, out 10 identified sub-segments of Indian Service Sector, deliberately only two, one from business services and another from Social services i.e., Higher Education and Banking have been chosen. During and post scenario of COVID-19, these two segments have been vehemently affected and equally bounced back with inevitable up gradation. Regarding to Telangana State Economy, the role of select service

sector segments is undeniable. State has become education hub by offering varied programs and courses in higher education. DOST an innovative initiative has made students friendly platform in one hand and encouraging them to go for higher education at their choice on other hand. With reference to banking too, it has been catering the needs of multi verity customers by its encouraging and attractive services in consonance with government support. Hence the researcher has motivated himself to make more empirical study over those two sectors, i.e., Higher Education and IT at National Level in cursory form and in detailed with reference to Telangana Economy.

III. OBJECTIVES OF THE STUDY

Following are the main objectives of the present study entitled, "Recent Developments in Indian Service Sector: Crisp on Select Sectors with reference to Telangana Economy"

- 1. To present recent developments in Higher Education and IT sectors in Indian in general and Telangana State in particular.
- 2. To examine and address the challenges of both the sectors in the emerging scenario.
- 3. To offer appropriate suggestions for further strengthening of the sectors.

IV. RESEARCH METHODOLOGY

It is irrefutable that the research methodology is the scientific approach and road map adopted for the preparation of any report, dissertation, thesis or a piece of research paper. Present work is not an exception to that. Hence for the present paper and for the purpose of the study major portion of the data have been collected from secondary sources exclusively. Necessary secondary conceptual frame work and a few previous works are collected from online, offline & open access Journals, News papers, Periodicals, Reference Books, and various other publications. The websites like Google, MHRD, UGC and other official sites of the Government of India and Telangana State have also used for data collection for the information on different legal and statutory aspects of the study. To analyze, summarize and present the quantitative data for easy comprehend, statistical tools such as normal tables, percentages and simple averages were used. Conclusions derived, proposions would be made and suggestions shall be offered are purely on empirical

insights and research inquest of the principal investigator alone.

The Laconic Picture of the Education Sector in Telangana:

Approximately one-third (33.3%) of the total workers in Telangana are employed in the services sector. Among the total workers in the service sector, more than one-third (37.7 per cent) work in the 'trade, hotels and restaurants' sub-sector. The services sector in urban Telangana employs a greater share of persons (68%) than those employed in urban India (61.4 per cent). In rural Telangana, the sector employs a smaller share (15.6%) of persons than rural India (18.4%).

The Telangana government allocated Rs 16, 043 crore to the education sector for 2022 – 23, compared to Rs 15, 608 crore the previous year in the budget early this year to accelerate the growth of the segment. A total of Rs 13, 727 crore has been allocated for school education and Rs 2, 357 crore has been allotted for higher education, with a vision and mission to flow in reforms. Noteworthy to mention that to provide quality education to poor students, 1, 000 gurukulam schools were established across the state. Five lakh students were being provided education by spending Rs 6, 000 crore. Also, Mana Vooru Mana Badi programme was taken up with Rs 7, 200 crore to strengthen schools in the state.

Furthering the efforts, Rs 3.5K cr is also allocated for Mana Ooru Mana Badi scheme where schools across the state will undergo a revamp in three phases at a cost of Rs 7, 289 crore. As detailed by an official communication, almost 9, 123 schools under the scheme will be revamped in the first phase. As part of the scheme, the government will focus on development across 12 points — electrification, drinking water supply, furniture, minor repairs to schools, painting, green chalkboards, retaining walls, construction of kitchen sheds, extra classrooms, dining halls in high schools and toilets Table-1 Budgetary Allocation to Education

with water facilities. The budget had also allocated Rs 100 crore for a women's university that will be established by converting the Koti Women's College into a university. Gajwel constituency have massive educational hub with advanced amenities and sanctioned with Rs 126.28 crore. Under this project there will be two separate educational hubs for boys and girls built on 40 acres and 20 acres. The entire project would have a total built – up area of 4.59 lakh sq ft

It is notable to mention here that the Department of Intermediate Education of Telangana had initiated a slew of measures at the time of the pandemic without losing any academic year. According to official statistics, 5, 300 Junior Lecturers were trained for 15 days by ICT Training Programme under CSR by Cognizant, Adobe & amp; Nirmaan (an NGO) to prepare Digital Lesson Content preparation and Online teaching methods, tools & amp; Apps, in July 2020. The digitised lesson content and all the classes were telecasted through Dooradarshan and T - SAT. 70 % syllabus was telecasted through 3, 181 video lessons in theory & amp; practical during 2020 - 21. Further, 6 new courses started from the academic year 2022 - 23 onwards as per need in the industry and trend. Vocational courses were also introduced at the degree level by the department.

Significant Achievements and Initiatives of Higher Education and IT in TS:

After formation as 29th State of India, Telangana state has been striving with indomitable spirit for its all-round development. Besides primary and secondary sectors, service sector is also identified as more focused one for boosting the state economy. Although every sub-segment of the sector was in good consideration, Higher Education and IT & ITES were in the front row as more integrative sectors of others. The most disappointing element here is government budgetary allocation for education is constantly decreasing. It will be depicted by given table-1

Telangana State Budgetary allocation for Education for last 6 years

Financial Year	Total Budget	Allocation for Education	Percentage in total State GDP
2017-18	Rs 1,49,646 crore	12,709 (12,442)	8.49
2018-19	Rs 1,74,453 crore	13,276 (11,776)	7.61
2019-20	Rs 1,82,017 crore	12,220.75	6.76
2020-21	Rs 1,82,914.42 crore	12,144.27	6.69
2021-22	Rs 2,30,825.96 crore	15,608	6.78

2022-23	Rs 2,56,958 crore	16,042	6.24

Source: Government of Telangana official web Portal However, for the purpose of present study, the researcher has empirically identified following as more Significant Achievements and Initiatives of Higher Education and Information Technology (IT) in Telangana State after its formation in 2014.

Some insights on Telangana Higher Education:

Telangana is making strides in higher education with initiatives focusing on improving student outcomes and aligning curricula with industry needs. The state is also emphasizing skill development and vocational training to enhance employability, particularly for graduates and postgraduates. There's a push for market-driven, student-centric courses in state-run universities, with a focus on phasing out outdated programs and increasing access to quality education for all students. The TGCHE is revising the undergraduate curriculum to align with global trends and industry requirements, ensuring students are equipped with practical skills and industry-relevant knowledge. There's a growing emphasis on aligning education with industry needs, as seen in other states

like Delhi and Gujarat, to enhance job readiness among Telangana's youth.

Telangana is actively promoting skill development and vocational training programs to address skill shortages and improve employability in high-growth sectors. The state has established residential schools (gurukul schools) under the Telangana Social Welfare Residential Educational Institutions Society (TSWREIS) and the Telangana Tribal Welfare Residential Educational Society (TTWREIS) to quality education provide to marginalized communities. Telangana has various schemes, including scholarships for students from diverse socio-economic backgrounds and infrastructure development in public schools, to increase enrolment and improve educational outcomes. Programs like TASK equip students with industry-relevant skills, enhancing employability. The state government is urging staterun universities to adopt a student-centric approach, focusing on market-driven and advanced courses while ensuring students from economically weaker backgrounds have equal access to quality education.

Table-2: Head wise achievements and Initiatives of Education in TS

Sl.No	Head of Education	Achievements & Initiatives	
1	Polytechnic	Administers 54 Government Polytechnics, wherein around 12,000	
		Tenth Class-pass students getting their education.	
		→ 17 New Buildings worth Rs.127.33 Cr have been completed.	
		▶ 12 New Government Polytechnics were established out of which 4	
		of the Institutions are Women's Polytechnics and one is for ST boys.	
		▶ E-office, OSDES, ABCs, ABAS, Industrial training and Skill-	
		Development are other initiatives.	
2	Commissionarate of	As of July 2022, in the Government Degree Colleges, out of	
	Collegiate Education	4098 sanctioned lecturer posts, 1243 Regular, 804 Contract and 1940	
		Guest Faculties are working.	
		◆ 4 Institutions nelow 100 Ranking of NIRF (UoH, IIT-H, NIT-	
		W and OU-15,17,46 and 53 respectively).	
		Out of 134 sanctioned, 54 Regular Principals, 21 Physical	
		Directors and 48 Librarians are currently at work.	
		Also, 595 out of 1548 regular and 341 outsourced non-	
		teaching posts are currently in the function.	
		DOST, QFix, CAIMS, OSDES, ISO Certifications, MoUs,	
		TSKC, ED-cell, CBCS are wonderful initiatives.	
		♦ 68% Admissions in to Government Colleges have increased,	
		99 Colleges with Virtual class rooms. 98% online teaching during	
		COVID-19.	
		OUTBI, K-Hub (50 Crore) are other contributing initiatives.	
		▶ 174 Crore RUSA funding for Infrastructure development to	
		Universities and Degree Colleges under 12 th plan (60:40).	

3	School Education	 ≥ 254 Crores during 2018-20 for additional infrastructure to State Universities and 58 GDCs and 100 crores to OU for enhancement of Quality & Excellence. ⇒ Establishment of Women's University with 100 Crores, initiative for AI & Machine learning. ⇒ 53 Residential Degree Colleges. ⇒ Prof. Jayashankar Badi Baata Programme (3,497 Crores)- increased enrolment, during 2022-23 Fiscal Year ⇒ For 43,293 Government Schools sanctioned with 13,727.97 Crore during 2022-23 Fiscal Year. 	
4	Intermediate Education	 ▶ E Content Repositories / E learning portals. ▶ Digital Interactive Classrooms / Virtual Classrooms ▶ Free intensive coaching for EAMCET, NEET and national level academic as well as employment entrances and examinations. 	

Source: Government official portal, CCE-TS website and RUSA Documents

IT Sector: Some Glimpses in Indian Economy:

IT is the one of the flourishing and biggest sectors to contribute India's economic growth with 17000 firms. It includes IT-Services, Software Products, ITES and E-commerce facilities & Services. This sector has been taking the nation's economy to unprecedented heights by its varied services and products. Close to 9.3% share in GDP (in 1998 it was 1.8%) and 55% employment opportunities (4.1 Million people were employed) are being contributed by the sector, besides capturing 56% of the Global outsourcing market. The National Association of Software and Service Companies (Nasscom) estimates that the revenue of the Indian IT industry will reach \$227 billion in 2022, which is

a massive increase from \$196 billion in 2021. The Foreign Direct Investment (FDI) inflows in the IT sector (computer hardware and software, to be precise) between April 2000-December 2021 stood at \$81.31 billion (14.19% of the FDI inflows). The data from the Department for Promotion of Industry and Internal Trade (DPIIT) proves that it was the second-largest sector to have received such high FDI inflows. Record investments of \$36 billion were made in private-sector IT companies in the financial year 2021 alone. In 2020, this number stood at \$11 billion. Hence, the investment increased more than three times in just a year, making this sector a lucrative investment destination.

12%

10%

8%

8.1%

7.5%

9.3%

7.7%

7.9%

7.8%

7.7%

7.9%

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7.7%

8%

8.1%

4%

2%

6.4%

Additional Information:
OEA (India): India Brand Equity Foundation; Various India: FY 2009 to FY 2020 sources (L.B. Associates (Pv) Ltd)

Table-3: .IT and BPM share in the Indian GDP from 2009 to 2020

State of IT Sector in Telangana Economy:

Information technology is one of the fastest growing sectors in Telangana state too. Our state contribution in Information Technology (IT) and Information Technology Enabled Services (ITES) sector played a vital role in putting India on the global map.

During the 2022 financial year, Hyderabad being an IT hub of India has, read 1, 83,569 crore IT and ITES exports (Second in India). To make more lucrative, Telangana Government is aggressively setting up Export Oriented Units (EOU), Software Technology Parks (STP), and Special Economic

Zones (SEZ) to further this cause and facilitate more IT and ITES investments in to India. The central government recently announced formation of an Information Technology Investment Region (ITIR) near Hyderabad. With the establishment of the ITIR, the government plans to generate 1.5 million direct and 5.3 million indirect jobs in the IT sector in the next five years. There are 1500 IT/ITeS companies that employ over 5.8 lakh professionals, besides providing indirect employment to over 7 lakh people. Telangana's IT/ITeS Exports grew at 17.93% compared to the National Average of 8.09% and the rest of the Nation's Average of 6.92%. Telangana's exports in India went up from

10.6% to 11.6% and the share of Telangana in this year's growth in National Exports is a remarkable 23.5%. Therefore it can be inferred that Hyderabad has become a premier global destination for IT and ITES investments. Image Policy, Rural Technology Centres, Innovation, Open Data, Data Analytics, Cyber Security, IOT and E-waste management initiatives have prompting the sector more attractive and attentive.

State Initiatives for progressive strides in IT Sector: Following Table give a candid picture on State initiatives during fast five years for promotion and development of IT Sector

Table-4: Telangana State Initiatives for progressive strides in IT Sector

Sl.No	Title of the Initiative	Its Contribution		
1	T-Hub (Technology	Innovation Hub and Ecosystem enabler		
	Hub)	It has provided more than 18000 National and International start		
		ups.		
		▶ Promoting access to better technology to individuals, Customers,		
		Corporate and Agencies.		
2	T-Fiber	Aimed at creating a scalable, robust, resilient, secure and long-		
		lasting digital infrastructure to deliver various IT services and		
		applications.		
		Thrust focus is making state as 'Digital Telangana'.		
		It provides high speed connectivity to 3.5 crore people and		
		institutions of the state.		
		It also form the basic platform for the provision of a number of		
		services like e-governance, e-health, e-banking, etc.		
3	Power Supply and	Uninterrupted power supply as a big incentive.		
	Fiscal Incentive	→ Waiver of Municipal Taxes for first 3 years of operation for first		
		5 IT companies and Parks of each Town.		
4	Industry Promotion	For promotion of an event organized by IT firm, 5 lakhs or 50%		
		of event cost will be reimbursed.		
		→ 50% exhibition stall rental cost or Rs. 50,000, whichever is		
		reimbursed for National / International exhibition		
5	Workforce Training	Create non-IT skill development centre to train		
		Faculty Development Program as part of TASK.		
		Subsidy or Tax incentive for organizations providing skill		
		development training upto 10 lakhs or 20% of Tax paid.		
		Recruitment assistance @20,000 per employee, minimum annual		
		recruitment of 100 new IT professionals from Colleges located in		
		Telangana.		
6	Agriculture	AI4AI: To achieve digital transformation in agriculture		
	Development Initiatives	AI-PMC: The AI solution enables cotton farmers to catch pest		
		infestations, especially the Pink Bollworm early and take correct,		
		immediate action to avoid significant crop damage, and consequently		
		improve the quality of the crop and increase incomes.		
		NeGPA: for innovative solutions using Emerging Technologies		
		from startups - Automated Irrigation Systems, Fertilizer Estimation,		
		Automating Farm Operations, Produce Grading and Quality Assaying,		
		and Traceability of Seeds		

Drone Initiatives: MFTS as Supply Chain and Vaccines of Block chain, Cloud Computing, e-waste Management, a for Cyber Security etc are other prominent initiatives of the TS G TSIC (Telangana State Innovative Cell) Started in 2017 to foster innovation driven economy in the state. Startup Ecosystem of Telangana & India, over 200 District offici been sensitised on District Innovation Ecosystem Mile officials of 30 Govt. Departments have been sensitised on District Innovation Ecosystem Launched State Startup Portal for the entire startup ecosy facilitate engagement, & act as a central place for kn dissemination about state support. 90+ lakh worth incentives have been sanctioned Applications from 28 unique startups 91- y0+ lakh worth incentives have been sanctioned Applications from 28 unique startups 92- y0- y0- y0- y0- y0- y0- y0- y0- y0- y0	-
for Cyber Security etc are other prominent initiatives of the TS G 7 TSIC (Telangana State Innovative Cell) Started in 2017 to foster innovation driven economy in the state. 8 While officials of 30 Govt. Departments have been sensitised on District offici been sensitised on District Innovation Ecosystem 9 Caunched State Startup Portal for the entire startup ecosyfacilitate engagement, & act as a central place for kn dissemination about state support. 9 O+ lakh worth incentives have been sanctioned Applications from 28 unique startups 9 Unique startups have pitched their Solutions & Propositions to 12 State Government Departments 125 Startups have been mentored during the pandemic Rejig-HydStartups program led by city's Incubation Ecosystem Organised the first-ever Assistive Technology (AT) Su collaboration with Dept. of Disabled Welfare, State & Nation organisations 8 T-SAT (SoFTNET) To telecasts programmes on education, employment, he	
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	mmit in
Nipuna. ▶ 8121 Videos have uploaded, 5.62 Crores Viewers and 11.	dya and
downloads. It telecast daily 11 episodes of digital lessons, Digital clenglish Medium and Telugu Medium and Digital lessons (2041 for all the vocational courses for Intermediate students. It telecast 8 hours of digital lessons for school students classes telecast in English Medium, Telugu Medium and Urdu Medium Digital lessons available in all 6 subjects a total of 2350 videos. Women Development and Child Welfare, TSWR TTWREIS, Staff Selection Commission, Agriculture and Rytu Health Arogya Mitra, T-SAT e-magazine are a few other we initiatives of this program.	Digital Medium, EIS & Mitra, onderful
9 TASK (Telangana Academy for Skill and Knowledge) Skilling youth in technologies, building essential 21st workplace (transferrable) skills and developing an entrepreneurial in the youth of Telangana. → 718 HEIs and 3,00,000 Students have enrolled on this p 6,53,189 Students and 14,388 faculty have been skilled so far. 129 job Melaas/Placement drives executed, 16,912 open generated and 6,213 students were placed for the fiscal year 2021-	mindset

Source: Compiled Based on the News Papers, Magazines, Reports and Telangana IT Department Annual Report: 2020-21, Page No. 20

Investments and Expansions of State IT Sector:

Following table will give us a lucid picture on Investments and Expansions of the state during 2020-22.

Table-5: Investments and Expansions of State IT Sector

Sl.No	Name of the Company	Amount Invested	For the Purpose of
1	Amazon Data Services	Rs.`20,761 Crores	For setting up three Data Centres in
	India Pvt. Ltd.	(\$ 2.77 Bn).	Fab City, Pharma City and

			Chandanvelly
2	National Payments	Rs 500 crore.	To establish a smart data centre in
	Corporation of India		Hyderabad
	(NPCI)		
3	Salesforce	Rs.1,119 Cr.	To start VSEZ and to create 2,500
			more jobs in the next 5 years.
4	Goldman Sachs	Estimated	For the global shared services
		investment of Rs.	footprint in India with an
		1200 Crore	employment of 500
5	World leader in	Rs.1100 crores	To promote 1000 jobs in the first
	automobiles, Fiat Chrysler		year.
	Automobiles (FCA)		
6	OPPO	Rs. 280 Crores	For 5G Innovation Lab at its
			Hyderabad R&D Centre
7	BFSI major MassMutual	Initial investment of	With an emplacement potential of
		`1000 Cr	more than 300.

Source: Telangana IT Department Annual Report: 2020-21, Page No. 8

Challenges of Higher Education in India and Telangana:

Higher education in India is presently having some challenges, if they do not address positively they may become onerous road blacks in the path towards growth and development of our nation. Such concerns includes promotion of world standard infrastructural ambience, providing amount of financial resources, inculcating interest and zeal among faculty and disciples on research and scientific temper, revamp of curriculum and conventional pedagogy, implementation professional, Technical and Vocational Education in higher learning institutions, harnessing the power of youth with value & quality orientation global outlook and a strong altruistic government initiation and intervention in almost all strategic issues and policy frameworks pertaining to the higher education. Furthermore, as we are dwelling in information age, where information communication and technology has been playing pivotal role in almost all spheres of life, it must be earmarked with significantly considerable amount of investment and well versed training to be also provided for teachers and other human resources of the higher education institutions.

Similarly the sate of Telanagana also struggling with certain fightable challenges, such as slow in adopting technology, lower enrolment, quality of educational infrastructure and pedagogy and not able to sustain with quality Accreditation and Grading. Rural –Urban gaps in acquiring advanced skills & competences, lack of regular recruitment in HEIs, poor Training & Development practices,

inadequate research facilities and paltry scholarship facilities for the students are other hindrances of progress of education sector in the state. Even insubstantial budgetary allocation for education, brain drain of quality teachers and Students, missing element of interdisciplinary and multidisciplinary environment, certain bureaucratic hurdles and persistent socio-economic ills are also vehemently causing the sector for the lagging behind.

Challenges of IT Sector in India and Telangana:

'Information Technology' is a key word and a huge boon for the generation living in the present century. It is a developing field which has changed our lives and acted as a pioneer to drive globalization. But as we enjoy the perks of the digital era there are few challenges too. Cyber security threats, shortage of required talent, cloud computing issues, difficulties of remote work places, risk of outsourcing and government policies, neglecting element of research & Development, to-much emphasis on low end IT services are the areas of challenges of IT sector, both in the country and the state. Issues of hardware manufacturing or importing from other nations, concentration on only a few cities, miss-match between rural & urban in identification of the potency, variations of norms from state to state and place to place, more dependency on import market for the hard & software and their respective accessories, domestic as well as offshore legal complications, issues relating to work from home and digital transformation are other underlying challenges of the sector, that hampering the progress.

How to look ahead for the progress and contribution of the Sectors:

After the detailed empirical study on the problem with the research inquest, the principal investigator of the present work has tried to derive following pathways to look ahead for the progress and contribution of the identified Sectors in the nation in general and Telangana State in particular.

- To focus on world standard academic and research infrastructural facilities.
- More emphasis is required to promote academia and Industry nexus.
- → Policy makers should see that there should be close interrelation and interdependence among the people of policy design and its implementation.
- Higher Education and IT sectors must be earmarked with significantly considerable amount of funds by the both government in their respective budgets.
- An advanced training and development platform for the human resources engaged in the sectors is also to be the thrust area.
- As intellectual capital only create the competitive competency in the nation, Higher education needs to prepare proper plans and abreast with world progress.
- The political interventions must be minimised possible extent for unbiased strides in the sectors.
- More number of MoUs, Linkages and Collaborations with pioneered national and International institutions is to be encouraged for both the sectors, so as to reap more returns and explore at global platforms as well.
- Start-up culture, innovative & creative impulse and entrepreneurial mind set among the youth of 18-25 age brackets should be incorporated with mission framework.
- ➡ High quality integrations among institutions of the sectors, investments on human capital and infusing the climate of scientific temper should also be aimed by the governance for the long run benefit of the sectors.

V. CONCLUSION

Undoubtedly, Service sector in India today accounts for more than half of nation's GDP. This vantage of contribution is not an exemption to our Telangana State too. Coverage of wide verity of segments, lion share (55%) in GDP, attraction of 2/3 FDI,s, providing huge employment opportunities, encouraging volume of Government initiatives, witnessing 6% growth in IT and ITES,s and standing as top 10 in WTO members in service providers have been remarkably signifies the Indian Service Sector in the contemporary scenario. Therefore it can be inferred that the challenges such as quality in education, lower enrolment, technology gap between rural and urban and slow in adopting technology are addressed with immediate intensity, this sector flourish with more fragrance in the nation and in our state as well.

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