## **Incubation Centres are the Elixir for Development of Rural Economy**

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## **ABSTRACT**

India is a nation of villages with agriculture as a backbone of the nation. The development of the rural economy depends on the entrepreneurial activities of the nation. The invention or the buzz word start up is supported with the incubation centres which in turn help the rural population. Technology is a base for every innovative idea and help to explore new business ways to the world. Startups are providing wings to youth's innovation and fly towards successful entrepreneurs and are boosting through incubation centres which motivate the youth to think differently and utilize the technology to their ideas to become self-employed through their own unit. In view of this the present paper focuses on role of incubation centres in providing employment opportunity to the rural youth and helps to develop the rural economy in general. It also helps in establishing stronger economy in the rural areas.

**Keywords:** Start-up; Incubation Centre; Rural Economy; Employment.

### 1.0 Introduction

India is a country of villages, and it has more population concentrated here only. Human resources are the biggest asset of every country. So, need to utilize it very carefully in increasing the wealth of the country (Mishra, 2023). The time when human resources involved in economic activity then only the country grow overall, and financial position of the country also improve (Kulkarni *et al.*, 2021). So, this improvement needs the involvement of human resources in every activity, if they need to involve then they should need some centres who influence them and explore their idea through technology in this modernized world(Kulkarni *et al.*, 2021).

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At present startups are the new concept bought in business world through this the innovative ideas of youths got explore and this exploration did through incubation centre, who train and educate youths towards innovation (Gokhale & Kulkarni, 2020).

# 1.1 Rationale behind the study

In olden days small businesses and self-employment was promoted by providing facilities like training programs, skills development, and handmade works training and so on. At present the way of promotion slightly changed, here some centres are created to educate the small entrepreneurs towards innovation and application of new technologies (Duraivadivel et al., 2022).

So, this modernisation playing vital role in this business, so incubation centres are very helpful to give birth to startups in the country and it also important to know their role in promoting these startups in rural area. The researcher understood the significance of the study by considering the importance of start-ups in the present scenario and their supporting systems like incubation centres to be promoted so that more facilities can be provided to the startups, and they will help in the development of rural economy (Bhatt et al., 2022).

# 1.2 Objective of the study

- 1. To study the importance of incubation centres.
- 2. To study the role of incubation centres in employment creation.

The very important and major issue of the country is creating employment opportunities to the rural youth. Providing employment through government is not possible, so the mindset of the people should be changed from asking jobs from others to giving jobs to others. It helps in creating jobs instead of searching employment (Subrahmanya, 2022). So, the startups are new ways of creating self-employment for the youth. For promoting these startups, facilities need to be created and this is the major problem of every startup that lack of promotional facilities (Krishnan et al., 2022). It is the need to concentrate on the systems whoever taking part to establish these ideas into new business operation. Such as eco systems, incubation centres, financial system etc (Bhatia & Dhawan, 2023).

Also, with the gap in the studies like many researchers concentrated their studies on startups and incubation centres but not on the role of incubation centres (Bhatia & Dhawan, 2023). Therefore, the researcher felt to undertake the study on the topic entitled "Incubation Centres are the Elixir for Development of Rural Economy".

## 2.0 Literature Review

Thomas & Ki (2020) incubation centres & startups: A study on Kerala's startup ecosystem, this research studied the role & facilities provided by the incubators & its impact on startups in Kerala. For this they had gone through convenience sampling technique to select 80 startup founders & 8 incubation managers with questionnaire. The collected data were analysed through one sample t-test & presented by using tables. Finally, they concluded that startup founders are quite satisfied with the existing facilities at their incubation centres. But government need to increase technical education funding & necessary assistance to promote innovation through incubation centres.

Gupta et al., (2022) role of incubator centres in promoting startups in Rajasthan, the study examines and analyse the services provided by incubation centres and perception, expectations, and satisfaction level towards these centres. So, the work is carried out by interacting with incubators in Rajasthan established in between 2013 to 2018 and they chose 239incubators for the study under simple random sampling. Interpretation of data was made through hypothesis testing such as, paired F test, oneway ANOVA & Kruskal Wallis test. Finally, they concluded the incubation centres are played vital role in promoting startups and their development.

Salem (2014) the role of business incubators in the economic development of Saudi Arabia, the paper studied importance of establishing business incubators and its role towards creation of startups through that development of national income & employment creation. Here the researchers mainly focus on incubation centres working in Saudi Arabia & its implication on national growth, it was descriptive research, so the researcher analysed the importance, objective & working procedures of incubation centres & suggested that need of introducing such a centre in the country is necessary.

Shukla et al., (2015) can business incubators impact the startup success? India perspective, the researcher analysed the success of startup is based on incubation centres and their impact on startup working. Here the researcher collected information through selected managers of business incubation centres with structured questions regarding their institution benefits to startups and their role in startup success. Finally, they concluded that it was positive impact on startups & newly working units need these type incubators for better support & help to develop the nation.

Shokeir & Alsukaity (2019) the role business incubators in supporting small & medium enterprises in Saudi Arabia with special reference to some international, arb experiences, the paper studied conceptual framework of business incubators and its importance to business success. This work was theoretical in nature they presented incubation centres importance and its role in supporting small & medium enterprise in Saudi Arabia, for this they gathered the information from some articles, journal and by interacting with some selected entrepreneurs through structured questions. Finally, they concluded that it was positive impact on small & medium enterprises on their success & working.

Dhingra (2020) start-up ecosystem in India: growth & challenge, the present study analyses the situation of startups & ecosystem available for their growth. And the study was based on secondary data and analysed it. Finally, they found that youth from smaller towns & cities for want of facilities. So, the government should take up proper dissemination of all its policies to all concerned. The startup ecosystem in India is very vibrant. Only a small push to make it more inclusive would go a long way in promoting youth to take entrepreneurship as a career.

Dwivedi (2019) India startups: analysing the vulnerabilities & prevailing challenges, this research was done by exploring the performance of startups as well as the role of various stakeholders & it also explained the different barriers such as demonetization & GST on startups for getting answer for this the researcher. Selected 100 startups from working in NCR based on convenient sampling technique & interact them with close ended questions. Finally, they got responses and represented through tables. Finally, they got result of capital & infrastructure are most critical problems faced by startups in India so they suggest that awareness level for all aspect related to startups should be raised by stakeholder & funding is crucial for startups so it should be provided through angel investors.

Chandiok (2016) India the world's fastest growing startup ecosystem: a study, this article studied the initiative & life cycle of startup with their awareness towards recent change in industry. So, for this work the researcher adopted qualitative data tools with sample size 145 under random sampling method and they interact with young & educated males & female entrepreneurs in Delhi & NCR Indian market. After analysing the data, they found that number of respondents felt that role of family are key importance in startup financing stage so that banks & other financial institutions should encourage economically disadvantaged sections to participate in the mainstream.

Patil & Wadajkar (2021) Indian startups: shining unicorns, in this paper the term unicorns were discussed how the Indians startups turning to unicorns & it presented the data of last 2 to 3 years startups whoever become unicorn and leading successful journey. And it analysed the relation between unicorns & business incubators who support the startups to become a unicorn. Finally, incubation centres & government initiatives are very necessary to become startup into unicorn.

Subud (2019) assessing startup performance: case study at national business incubator, this study analyses the startup performance of the national incubator which includes knowledge management, business incubator & the effectiveness of innovation. For this the study gone through 339 startups established in jabodetabek to analyse the startup units. And they used confirmatory factor analysis to test path analysis by operating AMOS22. Finally, they got the result that knowledge management variable has a positive & significant effect on the effectiveness of innovation. So, they concluded that if knowledge management is increasing it will increase the effectiveness of innovation.

Sabina & Navi (2022) implications of digital innovation on startups: challenges & solutions. This paper aims to address the challenges and solutions to startups while implementing digital technology in their business. The paper focuses much on some of the implications of digital innovation on startup as well as uses of digital technologies in start-up. The researcher put on effort to provide certain solutions to overcome challenges of startups due to digital innovation. Finally, they conclude startups require a plan & tools to support their digital innovation goals.

## 3.0 Research Methodology

# 3.1 Research design

The study aims to fulfil the parameters of analytical research being conceptual in nature. It has met the requirements of analytical data collection pertaining to concepts such as the role of incubation centre for rural development. The study has also made use of certain quantitative statistical tools such as bar graphs, pie charts and line graphs in order to classify and support the analytical data obtained.

#### 3.2 Sources of data

To achieve the objectives of the paper, the researcher has used secondary sources published from Karnataka Economic Survey 2020-21, Karnataka startup website, articles and research papers related to the topic.

## 3.3 Rationale of selection of this study

Incubators are institution who supports small entrepreneurs in their promoting stages. Likewise, these centres in colleges are established to develop self-employment and entrepreneur culture in the country from base only. So, these incubators put their efforts towards speeding up the growth and success of startups in the country (Voisey et al., 2006). The main objective of these centres is to facilitate and assisted the small enterprise and startups in their initial stages. It takes small business towards innovation and application of technology in their activities. And it grows a startup from its initial idea to a company that can stand on its own and successful enterprise in future. Facilities

provided by incubators include office space, administrative functions, entrepreneurship education, and mentorship, access to investor for capital and idea generation (Voisey et al., 2006).

Incubators for new businesses assist them by offering administrative and advisory support. The main goal of an incubator, according to the International Business Innovation Association, is to create profitable, successful businesses that can stand alone. Early incubators specialised in working with technology companies or a mix of industrial and service businesses, but more recent incubators deal with businesses from a variety of industries (Yusubova et al., 2019).

Financial Management: Incubators assist startups in reducing operating expenses. The businesses included in an incubator can utilise the same spaces and pool their overhead costs, including rent for office supplies and equipment, utilities, and receptionist services. Startups can benefit from cheaper leasing rates if the incubator is situated in an industrial park with affordable rent. By connecting start-ups with angel investors and venture capitalists and assisting them with presentations, incubators can also assist them with their financial needs. If start-ups get the seal of approval from incubator programmes, they may have more success obtaining financing. (Merrifield, 1987).

Management Support: Startups require not only financial support but also advice on how to successfully take on well-established market incumbents. According to Velocity Global, incubators can use their networks of seasoned business owners and former executives who can offer managerial advice and operational support. A biotechnology startup, for instance, might profit from the advice of former pharmaceutical executives who have first-hand knowledge of the process of drug development and clinical approval. Similarly, former leaders in the hotel sector could educate a restaurant owner about the challenges of expanding abroad. (Hausberg & Korreck, 2020)

Synergies Between Startups: Synergies are a natural by-product of the business incubation process because of the tight working connections that develop amongst the start-ups in an incubator. The ties and networks formed through these partnerships might continue long after the start-ups leave an incubator. Entrepreneurs in different industries can support one another by starting new businesses, and staff members can exchange ideas on creative solutions to persistent issues. According to the business journal Inc.com, startups may collaborate on product development projects and create combined marketing efforts(Weiblen & Chesbrough, 2015)

Incubation Centres in the country: The growth of incubation centres in the country go raise in the period of pandemic where startups entering every sector of the

economy. Incubation centres are established thought the country which are divided by geographically, the following diagram shows the incubation centres in the country (Weiblen & Chesbrough, 2015)

# 3.3.1 Role of Incubation centres in employment generation

K-Tech innovation hub by NASSCOM: The government of Karnataka in line with its i4 policy has set up a K-tech Innovation Hub at NASSCOM Diamond District, Old Airport Road, Domlur, Bengaluru. The facility has been fully set up and has been operational since 2013. K-Tech Innovation Hub is housed in the premises of Diamond District, Old Airport Road, Bengaluru. It is spread over an area of 37,000 sq. ft. and has a seating capacity of 350 with a 100% power backup, leased internet line, a vibrant ambiance, Conference room with AV facility, over 10 meeting rooms, cafeteria, and housekeeping facilities. The facility offers subsidized incubation space which will help the Start-ups to make use of the ecosystem and in turn help the companies which are in their nascent stages to attract angel investors, venture capitals and enterprises to play a major role in Bengaluru and helping more such Start-ups to thrive and succeed (Thomas et al., 2022).

VLSI LABS, KLE University, Hubballi: Services available at the VLSI Incubation Centre include overall training and development for incubates to create Entrepreneurs, trained, on campus faculty, 30 fully equipped workstations, expert guidance on intellectual property (IP) creation and registrations, skilled industry mentors for product design, system, ESDM and VLSI, techno-commercial help for product & chip design with validation of proof of concept, legal, administrative and accounting help, access to markets and funds through investor networks and access to subsidies through Government policies and various other schemes (Thomas et al., 2022).

Technology Business incubators (TBI'S): Business incubation has been globally recognized as an important tool for job creation and economic development. Establishment of Technology Business Incubators primarily in Institutions with strong R&D focus will enable tap innovations and technologies for venture creation by utilizing expertise and infrastructure already available with the host institution. To foster a strong partnership between R&D institutions and industry, the Karnataka Startup policy had envisaged supporting the establishment of TBI for promoting Innovations in thrust areas such as ICT/IOT/Software Products, ESDM, Robotics, 3D Printing, Healthcare and Biopharma, Agriculture & Allied Fields, Cleantech, Energy, Water & its recycling(Thomas et al., 2022).

Brownfield cluster, Deshpande foundation, Hubballi: The ESDM brownfield cluster has been established over 5,000 sq. ft. and has a fully equipped lab setup comprising of testing tools and equipment. The objective of setting up this cluster is to host ESDM entrepreneurs and invite other companies from surrounding areas to use the facilities at the ESDM Brownfield Clusters. The ESDM Cluster is a logical step forward towards our conscious focus on hardware. Common instrumentation facilities provided would include bare board prototype PCBs machine, PCB Stencil Printer, Pick and Place machine and other related equipment for PCB design and manufacturing of PCB, Testing & measuring equipment, Dust Chamber, Rain testing chamber, Environment testing equipment, Vibration testing equipment, Video Conference equipment, DG Set and UPS (Kickul et al., 2010).

Incubation Centre at VTU Belagavi Campus: It was good news for the students who come from rural areas and want to begin their own startups, VTU is set to start an incubation centre to startups to work from the idea to product phase. Although the startups must take care of their financing now, the university will provide them a space at its Belagavi campus, where the startups can use the internet, electricity, and lab facilities of the university. The facilities basically provided to their students, alumni and interested faculties to grow them as an entrepreneur (Kickul et al., 2010).

Incubation Centre at KLS Gogte institute of Technology, Belagavi: The centre was established with the mission to promote entrepreneurial leadership across all disciplines, facilitate entrepreneurial activity amongst students, and invite entrepreneurs to use Incubation Centre services to develop end products for commercialization. IT Incubation Centre is open to anyone who wants to make a difference. However, students of KLS Gogte Institute of Technology, both past and present will be given a preference in terms of priority of admission into the incubator and charges as running cost of the incubator. The incubator is also open to faculty from both within and outside KLS Gogte Institute of Technology. Applicants must fulfil above criteria for making an admission in the IT Incubation Centre, for incubation programme (Kickul et al., 2010).

## 4.0 Analysis and Discussion

The analysis is presented in three section, namely registration of small units and employment during the year 2020 to 2021, secondly, registration of employment exchange for providing employment and thirdly, employment in public and private sector. Table 1 represents the number of small units registered in udyam portal of government with its investment and number of employments through the units. It is result of transformation of youths towards self-employment and creation of job instead of searching. As compared to developed cities such as Bengaluru, Mysuru the developing districts such as Belagavi, Dharwad are also showing good result and they also providing facilities to make youths self-employed through incubation centres.

Table 1: The Number of Registered Small Units, Investment and Employment for the Year 2020-21 up to 30 November 2021

S. No.	Districts	Units	Investment	Employment
1.	Bagalkot	12	22.81	321
2.	Ballari	22	21.44	611
3.	Bengaluru ®	35	63.18	648
4.	Bengaluru (U)	170	242.84	2915
5.	Belagavi	31	81.99	799
6.	Bidar	15	31.89	235
7.	Chamarajnagar	4	12.14	56
8.	Chikballapur	6	16.84	64
9.	Chikkamangaluru	9	8.17	172
10.	Chitradurga	6	4.26	70
11.	Dakshin kannad	12	10.22	97
12.	Davangere	11	12.02	218
13.	Dharawad	26	28.43	380
14.	Gadag	7	7.96	68
15.	Hasan	14	14.87	242
16.	Haveri	9	18.37	75
17.	Kalaburgi	23	37.84	285
18.	Kodagu	2	2.1	35
19.	Kolar	17	27.07	296
20.	Koppal	18	23.7	198
21.	Mandya	13	15.02	318
22.	Mysuru	22	39.42	434
23.	Raichuru	27	34.05	390
24.	Ramanagar	4	3.78	31
25.	Shivamogga	8	17.42	91
26.	Tumkuru	22	24.13	446
27.	Udapi	11	16.3	94
28.	Uttar kannad	9	18.82	145
29.	Vijayapura	10	18.91	118
30.	Yadagiri	5	13.11	78

Source: Karnataka economic survey 2021-22

In Table 2 the number of job seekers as per the live figures of employment exchange was 3.04 lakhs in November-2021 compared to 3.17 lakh at the end of march-2021, decline of 3.92 percent. There was overall increase of 0.56 in Postgraduates, 5.93% in Graduates and decline of 7.01% in Diploma holders, 8.23% ITI and other certificate holders, 4.14% in Matriculates and Stenographers, and 11.12% in below Matriculation.

Table 2: Registrants on the Live Registers of Employment Exchanges in Karnataka

S. No.	Registrants	March 2020	March, 2021	Nov, 2021
1.	Postgraduates	3863	3516	3536
2.	Graduates	49269	45351	48211
3.	Diploma holders	12754	12290	11428
4.	I.T.I Apprenticeship, Other certificate holders	45842	42276	38795
5.	Matriculates and Stenographers	199750	183015	175425
6.	Below Matriculation	30375	30557	27159
	Total	341853	317005	304554

Source: Karnataka economic survey 2021-22

**Table 3: Employment in Public Sector and Private Sector (In Thousands)** 

	Branch	March 2021	June 2021	Percentage variation June 2021, March 2021
1.	Central government	91547	91646	0.11
2.	State Government	543595	542904	-0.13
3.	Central government (Quasi)	165374	164987	-0.23
4.	State Government (Quasi)	163613	163615	0
5.	Local bodies	63222	62652	-0.9
6.	Private sector-Act	1326763	1326061	-0.05
7.	Private sector-non-Act	59928	60099	0.29
	Total public sector	1027351	1025804	-0.15
	Total private sector	1386691	1386160	-0.04
	Grand total	2414042	2411964	-0.09

Source: Karnataka economic survey 2021-22

In the Table 3 organised sector employment in the state has increased by 0.21% from 24.097 lakh at the end of the march-2022 to 24.119 lakh at the end of the March-2020 to 24.119 lakh at the end of june-2020. Public sector employment account for

10.318 lakh (42.88%) and private sector has 13.815 lakh (57.12%), public sector share has declined by 0.14% whereas private sector has increased by 0.26% between March-2020 to June-2020. Organized sector employment in the State has declined by 0.09% from 24,14,042 at the end of the March-2021 to 24,11,964 at the end of June-2021. Public Sector employment account for 10,27,351 (42.55%) and Private Sector for 13,86,691 (57.44%), Public sector has declined by 0.15% and Private sector by 0.04% between June and March-2021.

### 5.0 Discussion

Our article demonstrates the significance of incubation centres in generating employment based on the information and tables above. Through these incubation centres, young people are given the tools they need to start their own business. As a result, Table 1 shows the number of small businesses (startups) that have been officially registered as well as their investment and employment for the years 2020-21. This data is broken down by district in the state of Karnataka, in that capital city having the highest number of small businesses.

The number of youths with various degrees who have registered for employment exchange is represented in Table 2 of the article. If these youths receive the necessary facilities and training, they may become entrepreneurs with the aid of incubation centers, as they are currently changing their attitudes toward government jobs and wanting to explore themselves in the private sector, these changes are represented in Table 3. Employment in the public and private sectors is shown in the table, with a favourable outcome for the private sector.

Prior research has been done on the value of incubation centres and their resources for fostering the startup culture in the nation. The number of people who have applied for jobs and their interest in starting their own businesses in the private sector in various state districts are shown in this article. Additionally, it comprises incubation centres with a focus on north Karnataka areas, where youth are more prevalent.

The investigation was quite focused and contained information about the state of Karnataka's employment-related data centres. Here, we've included a few incubation centres along with the amenities and activities they now offer to young people. Finally, the scope of our article was the districts of north Karnataka and comparisons to the capital city of the state.

It is found that small units established by the other districts than rest of Bangalore districts are not crossed 50 units. This shows the concentration of incubation centres in the capital city of the state. It also signifies Bangalore is the startup hub of the

country. Therefore, it is suggested that the government should take initiation in establishing large number of startups in the various parts.

The comparison of developing cities like Belagavi and Dharwad is done with the developed cities like Bangalore for showing their performance and in establishing small units which is not satisfactory. They also establishing incubation centres to promote entrepreneurial culture in north Karnataka but still they are in promotion stage. Therefore, it is suggested to establish a greater number of awareness and training programs can be organised to improve the performance.

It is found that how many youths are registered for employment and they are seeing forward for promotion of their ideas and necessary facilities. So, need to create an opportunity to get more job opportunities.

It is understood that the percentage of people working under government shows less interest as compared to private sector. It shows the attitude towards government job is now changing and everyone want to expose their talent through their own unit or project. It is suggested that the government should come up with good proposals to attract more youths.

### 6.0 Conclusion

As we mentioned starting of the paper that incubation centres are the need to promote entrepreneurs in the country and necessarily in the rural area. The centres are now opening their units in north Karnataka districts to provide entrepreneurial education and boost the ideas of youths. But observing the data of employment in private sector and small units registers by districts are not satisfactory one. So, we can conclude here that incubation centres should be establish everywhere not in capital city and facilities given by them should be reached to the needy person.

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