An Empirical Study on The Performance of Tech – Based Rural Entrepreneurs in Thoothukudi District

J. Sutha

Assistant Professor, Department of Commerce, JP College of Arts and Science (Autonomous), Ayikudi, Tenkasi, Tamil Nadu

Corresponding Author Email: sutha@jpcas.edu.in

Abstract

Rural enterprises are increasingly functioning in an environment marked by rapid and dynamic changes. Although entrepreneurship is widely recognized as a key driver of rural economic development, there is a noticeable lack of extensive empirical research in this area, leaving the concept relatively unexplored. Understanding the conceptual framework of rural entrepreneurship is therefore essential. In this context, rural entrepreneurs, along with the support provided by various developmental institutions, play a crucial role in establishing micro and small-scale village enterprises. Their contribution has proven to be highly significant in strengthening rural economies. At present, rural entrepreneurship has attracted considerable attention at theoretical, practical, and policy levels. Governments and institutions have introduced numerous innovative financial incentives, concessions, and support mechanisms aimed at reinforcing the economic foundation of rural areas and promoting industrial growth. These supportive measures include subsidies, access to credit on favorable terms, structured training programmes, provision of machinery on a hire-purchase basis, and technical guidance. Collectively, these initiatives have facilitated the growth and success of rural entrepreneurs, enabling them to perform effectively and contribute to sustainable rural development.

Keywords*: Rural entrepreneurs, performance evaluation, Entrepreneurship*

I. Introduction

Entrepreneurship is a typical global phenomenon attracting millions of economists, Politicians and social workers. In developed countries, entrepreneurship has gained attention in the last century. But in developing countries, it has been gained original consideration only

in recent decades. In these countries, entrepreneurship development is considered as the way to promote self-employment- the panacea not only for chronic unemployment among the educated youth but also to sustain economic development and to augment the competitiveness of industries in the eve of globalization and liberalization. Social scientist and economists are in search of this factor as a component agency for the coherent integration of resources to stimulate sustainable and balanced socio-economic development. In the Industrial and agricultural sectors, threshold of new generation entrepreneurs has been welcomed for they carry out radical and tremendous changes in the arena of production and distribution. In the academic scenario, special importance is being given for the entrepreneurial lessons as a part of curriculum plan and a number of research studies are being conducted to learn the stimulants and inhibitors of entrepreneurship development. Rural development is more than ever before linked to entrepreneurship. Institutions and individuals promoting rural development now see entrepreneurship as a strategic development intervention that could accelerate the rural development process. Furthermore, institutions and individuals seem to agree on the urgent need to promote rural enterprises; development agencies see rural entrepreneurship as an enormous employment potential; politicians see it as the key strategy to prevent rural unrest; farmers see it as an instrument for improving farm earnings; and women see it as an employment possibility near their homes which provides autonomy, independence and a reduced need for social support. To all these groups, however, entrepreneurship stands as a vehicle to improve the quality of life for individuals, families and communities and to sustain a healthy economy and environment[1].

Review of Literature

Ayoub Akherati Ivari, Hamid Jafari (2021) "Evaluating the performance of Rural areas in improving entrepreneurship infrastructure for the development of rural entrepreneurship" Villages can be create rural entrepreneurship development in various sectors in terms of developing entrepreneurial infrastructure, improving the social context of entrepreneurship and attracting the financial resources. According to the result, satisfaction with performance of rural areas in improving the entrepreneurial infrastructure for entrepreneurial development is less than average.

[1]*Petrin.T, "Entrepreneurship as an economic force in rural development", paper presented at the Seventh FAO/ REU International Rural Development Summer School, Herrsching, Germany, 1994.*

Alexander Tabares, Jose Alejandro Cano (2022) "Rural Entrepreneurship: An Analysis of Current and Emerging Issues from the Sustainable Livelihood Framework" The result of general mapping of rural entrepreneurship from the framework of sustainable livelihoods allowed the identification of two nodes: sustainable development and sustainability. This study conclude that, eco-entrepreneurship to provide eco-innovation and ecological solutions while ensuring poverty alleviation.

Bin Gao and Naiwen Zhang (2024) "Comprehensive evaluation of rural entrepreneurial environment based on Pressure- State-Response model- evidence from China" This study confirms that the pressure, national and response indicators in the rural entrepreneurial environment under the rural revitalization strategy from a nested, intertwined and dynamically developing entrepreneurial ecosystem. Finally increase the connection of rural entrepreneurship market expand the new growth points of rural entrepreneurship income.

Arvind Arahant and Naraender Kumar "Developing Rural entrepreneurs through start up Village Entrepreneurship Programme: Understanding Impact and Challenges for Marginalized Sections" The Government of India has given special emphasis to develop entrepreneurship in rural population and especially among the marginalized groups in recent times. It is worth noting that all the selected entrepreneurs come from marginalized communities and and happen to be women.

II. Statement of the Problem

Thoothukudi district has been a leading and pioneering revenue unit in Tamil Nadu on the basis of Agriculture, Paper manufacturing sericulture and coir-based industries. This district has been endowed with plenty of both natural and human resources which are highly productive. The right type of entrepreneurs could find an enlarged and rewarding scope for their ventures in Thoothukudi district. Though industries are coming up in good number here, the unexplored resources and promising potentials are considerable and deserving. A good number of entrepreneurs – male and female; small and big – has already emerged and been in productive ventures. Some function with their own capital and many depend on banks or the district industrial centre (DIC) or certain private agencies for capital. Outsourcing is common everywhere.

The study of entrepreneurship has relevance today, not only because it helps entrepreneurs better fulfill their personal needs but because of the economic contribution of the new ventures. More than increasing national income by creating new jobs, entrepreneurship acts as a positive force in economic growth by serving as the bridge between innovation and market place. Although government gives great support to basic and applied research, it has to have great success in translating the technological innovations to products or services. Although entrepreneurship offers a promise of marriage of those research capabilities and business skills that one expects from a large corporation, the results have not been spectacular. This leaves the entrepreneur, who frequently lacks both technical and business skills, to serve as the major link in the process of innovation, development, and economic growth and revitalisation. The study of entrepreneurship and education of potential entrepreneurs are essential parts of any attempt to strengthen this link so essential to a country's economic well-being[2].

III. Need of the Study

Modern India is in need of substantial growth of the industrial and agricultural sectors for her march towards a global power and to successfully meet the social obligations such as poverty alleviation, raising standard of living, and meaningful employment to all. The role of entrepreneurs in this aspect is highly significant. Indian entrepreneurs have been instrumental in shaping the destiny of millions by providing them employment in their enterprises, venturing into untested arena, and introducing innovative business strategies. This naturally draws our attention to investigate as to how Indian entrepreneurs succeed in their ventures and the essence of such enquiry can be used as benchmark for budding and aspiring entrepreneurs[3].

The study of entrepreneurship and their performance evaluation has relevance today, not only because it helps entrepreneurs better fulfill their personal needs but because of the economic contribution of the new ventures. More than increasing national income by creating

[2] *Miner, J.B., Smith, N.R., & Bracker, J.S. (2004). Role of entrepreneurial task motivation in the growth of technologically Innovative firms: interpretations from follow-up data. Journal of Applied Psychology, 79, 627630.*

[3] *Fornell, C., & Larcker, D.F. (1991). Evaluating structural equation models with unobservable variables and measurement errors. Journal of Marketing Research, 18, 39-50.*

new jobs, entrepreneurship acts as a positive force in economic growth by serving as the bridge between innovation and market place. Although government gives great support to basic and applied research, it has to have great success in translating the technological innovations to products or services. Although entrepreneurship offers a promise of marriage of those research capabilities and business skills that one expects from a large corporation, the results have not been spectacular[4].

IV. Objectives of the Study

- To study the profile of rural entrepreneurs in Thoothukudi district.
- To evaluate rural entrepreneurs performance in the study area.
- To identify the factors influencing, factors affecting entrepreneurs in the study area.
- To know the various performance indicators, measures and dimensions.
- To find out the extent of problems faced by entrepreneurs in the study area.

V. Methodology

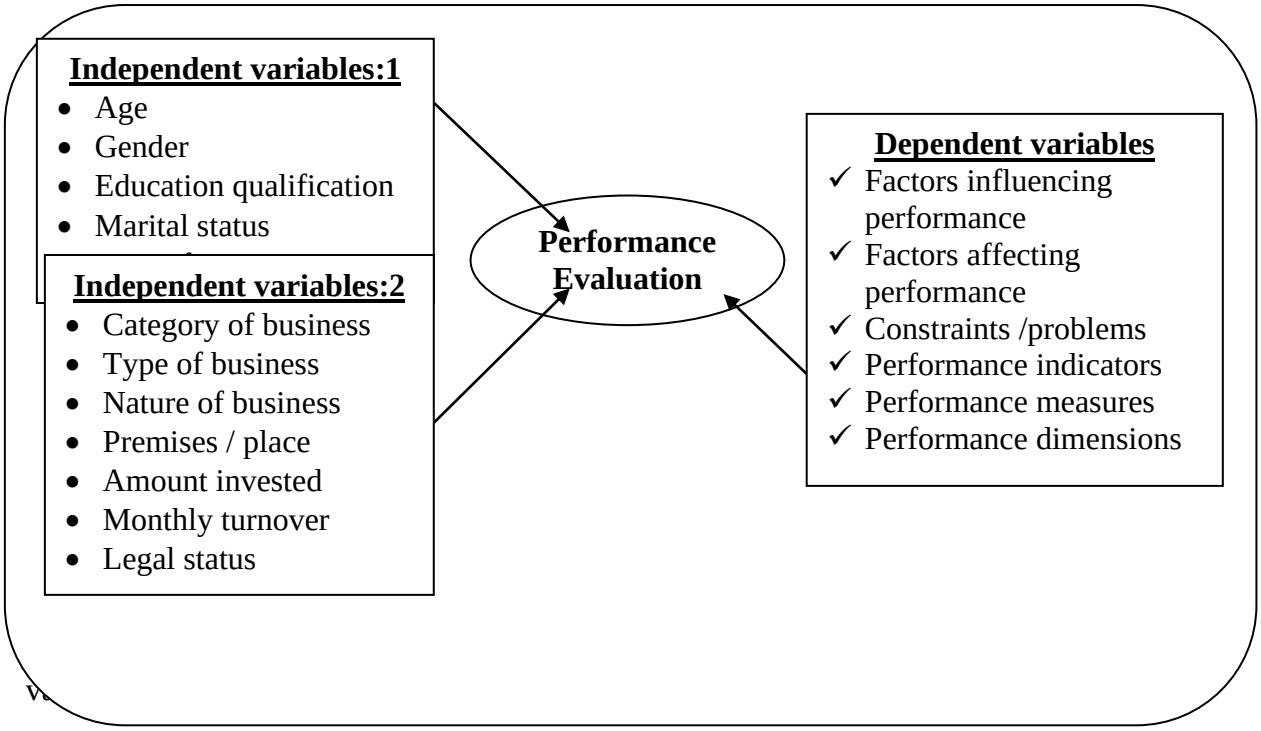
✓ Sample size –150respondents
✓ Respondents –Rural Entrepreneurs (150)
✓ Sampling Method - Stratified sampling method,
✓ Sample Plan - Questionnaire (Google forms)
✓ Sample Unit - the enterprises (Companies/Business)
✓ Sample area – Thoothukudi District
✓ Data analysis - SPSS (IBM 25.0)

VI. LIMITATIONS

- Due to time constraint, the researcher could not undertake extensive journeys for data collection.
- The study is confined to the respondents (entrepreneurs) of Thoothukudi district only.
- The primary data were collected through questionnaire (Google forms) method which is subjected to recall bias.

[4]*Olve, N.G., Roy, J., & Wetter, M. (1999). Performance Drivers; A Practical Guide to Using the Balanced Scorecard. New York; Wiley.*

VII. FRAMEWORK OF ANALYSIS



IX. ANALYSIS OF DATA

Table 1

Distribution on profile of respondents – Percentage analysis

Sl.no	Particulars	No. of respondents	Percentage
1.	**Age**		
	Below 25years	17	11
	26- 35years	26	17
	36-45years	30	20
	45 & above	78	52
	Total	**150**	**100**
2.	**Gender**		
	Male	143	95
	Female	7	5
	Total	**150**	**100**

3.	**Educational qualification**		
	below high school	14	9
	Higher secondary	84	56
	Graduation	30	20
	Post-Graduation	11	7
	Intermediate	3	2
	Diploma	9	6
	Total	**150**	**100**
4.	**Marital status**		
	Married	131	87
	Un-married	19	13
	Total	**150**	**100**
5.	**Year of experience**		
	Below 10 yrs.	7	5
	11-20 yrs	11	7
	21- 30 yrs	24	16
	Above 30 yrs	108	72
	Total	**150**	**100**

Source: Primary data

Table 2

Distribution on related information – Percentage analysis

Sl.no	Particulars	No. of the respondents	Percentage
1	**Category of business**		
	First generation	77	51
	Second generation same business	53	35
	Second generation different business	21	14
	Total	**150**	**100**
2	**Type of business**		
	Manufacturing	56	37

	Production	48	32
	Trading	47	31
	Total	**150**	**100**
3	**Nature of business**		
	Sole ownership	56	37
	Partnership/joint	27	18
	Company	32	21
	Family business	36	24
	Total	**150**	**100**
4	**Business premises**		
	Home	53	35
	Own building	41	27
	Rental building	57	38
	Total	**150**	**100**
5	**Amount of investment**		
	5 lakhs – 15 lakhs	143	96
	16 lakhs -25 lakhs	5	3
	26 lakhs and above	2	1
	Total	**150**	**100**
6	**Monthly turnover**		
	Upto 20000	33	22
	20001-30000	51	34
	30001-40000	38	25
	40001 & above	29	19
	Total	**150**	**100**
7	**Legal status**		
	Registered	141	94
	Not registered	9	6
	Total	**150**	**100**

Source: Primary data

Table 3

Distribution testing of hypothesis –Chi-square @ 5% level of significance

Sl.no	Particulars	Calculated value	Degrees of the freedom	Table value
1	Age and performance	15.959	3	7.815
2	Gender and performance	15.795	1	3.841
3	Educational qualification and performance	15.857	5	7.070
4	Marital status and performance	12.251	1	2.706
5	Year of experience and performance	12.039	3	6.251

Source: Computed data

Table 4

Distribution on relationship between indicators and performance evaluation – ANOVA

Sl.no	Particulars	Source	D.F	SS	MS	F
1	Innovation	Between groups	2	103.625	11.514	95.41**
		Within groups	335	1205.5	2.624	
2	Management capabilities	Between groups	2	544.324	60.480	21.79**
		Within groups	335	173.26	2.750	
3	Employee relation/satisfaction	Between groups	2	913.937	11.548	74.27**
		Within groups	335	1430.3	2.242	
4	Quality and brand value	Between groups	2	869.058	96.562	42.91**
		Within groups	335	134.88	2.293	
5	Intellectual capital	Between groups	2	160.484	17.83	52.49**
		Within groups	335	175.52	2.283	
6	Customer loyalty/Satisfaction	Between groups	2	137.477	17.497	69.19**
		Within groups	335	144.13	2.211	
7	Sustained Profitability	Between groups	2	108.699	12.077	45.43**
		Within groups	335	158.49	2.58	

8	Competitive strength	Between groups	2	138.625	17.625	62.32**
		Within groups	335	107.36	2.205	
9	Long term strategic goals	Between groups	2	545.109	60.568	23.15**
		Within groups	335	103.32	2.605	
10	Operational performance	Between groups	2	472.875	55.541	23.58**
		Within groups	335	135.89	2.209	
11	Suppliers	Between groups	2	753.723	83.747	69.35**
		Within groups	335	122.160	2.113	
12	Public relation(image)	Between groups	2	435.548	178.52	47.29**
		Within groups	335	352.75	51.60	
13	Financial institutions dealings	Between groups	2	194.67	198.22	29.72**
		Within groups	335	990.5	92.27	

Source: Computed data

Table 5

Distribution on profile of respondents and constraints – Factor analysis

Sl.no	Particulars	F1	F2	F3	F4	F6	h^2
1	V1	0.492	1.616	0.223	0.875	0.126	0.115
2	V2	1.191	3.578	0.932	0.859	7.226	0.121
3	V3	1.091	0.919	0.198	0.662	0.111	0.121
4	V4	0.135	0.939	0.919	0.592	0.223	0.148
5	V5	0.195	0.102	0.841	9.091	3.932	0.199
6	V6	0.143	0.466	0.666	2.091	0.198	0.129
7	V7	0.419	0.425	0.665	0.125	0.919	0.061
8	V8	0.137	1.386	1.609	0.195	0.841	0.141
9	V9	8.662	0.470	3.164	0.153	0.666	0.100
10	V10	0.366	0.317	0.371	0.419	0.665	0.137
11	V11	0.325	0.101	0.102	0.137	3.609	0.121
12	V12	0.875	2.091	0.919	2.662	3.164	0.100

13	V13	2.649	0.425	0.939	0.366	0.371	0.109
14	V14	1.319	0.195	0.102	0.325	0.102	0.166
15	V15	0.123	0.018	0.123	0.026	0.123	0.026
16	V16	0.516	0.099	0.046	0.036	0.516	0.036
17	V17	0.425	0.665	0.316	0.371	0.425	0.211
18	V18	0.823	0.154	0.115	0.043	0.823	0.115
19	V19	0.898	0.547	0.674	0.711	0.764	0.171
20	V20	0.983	0.773	0.672	0.863	0.534	1.203
21	V21	0.164	1.164	0.371	0.045	0.106	0.003
22	V22	0.193	1.164	0.992	0.145	0.060	0.001
23	**V23**	**0.919**	**0.198**	**0.241**	**6.649**	**0.939**	**1.646**
24	V24	0.407	0.935	0.946	0.366	0.585	1.009
25	V25	0.545	1.806	1.662	0.809	0.656	0.153
26	V26	1.932	0.840	0.366	0.013	0.757	0.408
27	V27	0.198	0.843	0.325	0.108	0.255	0.233
28	V28	0.325	0.831	0.241	0.262	0.033	0.248
29	V29	2.649	1.405	0.654	0.241	0.198	0.505
30	V30	0.823	0.154	0.516	0.023	0.417	0.872
31	V31	1.425	0.665	0.316	0.655	0.613	0.747
32	V32	0.466	0.665	0.452	0.325	0.102	0.866
33	V33	0.241	3.609	1.616	0.875	0.919	1.211
34	V34	0.989	0.986	0.976	0.447	0.570	1.002
35	V35	0.939	0.919	4.567	4.319	0.102	0.875
36	V36	0.102	0.841	4.712	0.428	0.466	0.545
37	V37	0.466	0.666	0.370	0.201	0.425	0.900
38	V38	0.417	3.386	4.525	5.619	3.386	0.861
39	V39	0.111	0.241	0.666	0.466	0.470	0.466
40	V40	0.466	0.452	4.319	0.417	0.417	1.032
41	V41	0.875	1.616	0.428	0.545	0.101	1.165
42	V42	0.666	0.417	5.619	0.111	0.241	0.829

43	V43	0.325	0.201	0.102	0.137	3.609	0.121
44	V44	0.875	1.091	0.919	2.662	3.164	0.100
45	V45	2.649	1.125	0.939	0.366	0.371	0.109
46	V46	1.319	1.195	0.102	0.325	0.102	0.166
Eigen Value		2.091	3.319	3.164	4.844	2.227	
Percentage of variation		12.291	13.154	15.358	14.598	15.906	
Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization, A Rotation converged in 46 iterations							

Source: Computed data

Table-6

Chi-Square test results between the Category of Business and Amount of Investment

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	25.645[a]	4	0.000
Likelihood Ratio	14.994	4	0.0
Linear-by-Linear Association	0.01	1	0.919
N of Valid Cases	150		
a. 5 cells (25.645%) have expected count less than 5.			

Source: Computed data

Pearson chi-square results of .000 which is lesser than the table value of .05 indicated that there is a significant relationship between the category of business and Amount of Investmet.

Table 7

Distribution on profile of respondents and dependent variables – Correlation

S. No	Correlation	Pearson	Spearman rho
1	Profile	0.497	0.429
	Factors influencing	0.316	0.397

2	Profile	0.269	0.105
	Factors affecting	0.662	0.866
3	Profile	0.538	0.803
	Performance dimensions	0.271	0.054
4	Profile	0.072	0.198
	Performance measures	0.876	0.670

Source: Computed data

X. Findings of the Study

Profile of respondents (percentage analysis):

It is found that in age group majority of the respondents fall under the age group 45 & above the number of respondents are 34(52%), in gender male 62(95%), marital status married 57(87%), educational qualification higher secondary 35(56%) and years of experience above 30 years 46(72%).

Related information (percentage analysis):

It is found that, category of business of the respondents fall under the group first generation the number of respondents are 33(51%), in type of business it is manufacturing 24(37%), nature of business sole ownership 24(37%), business premises 25(38%), amount invested 5 lakhs -15 lakhs 53(96%), monthly turnover 20001-30000 22(34%) and finally legal status it is registered 61(94%).

Testing of hypothesis (Chi-square):

It is found that, the calculated value of chi square is higher than the table value therefore the null hypothesis is rejected. It is concluded that, there is a significant relationship between the demographic profile of respondents and performance of the entrepreneurs in the study area.

Testing of other hypothesis (ANOVA):

From the above table it is clear that all the 13variables showed the result as ‘Rejected’ hence there is no significant difference between performance of entrepreneurs with performance indicators of the respondents is rejected.

Factor analysis (component matrix):

It is found that, all the variables showed positive loading stating there is significance relationship between each variables.

Chi-Square test

Chi Square results between the Category of Business and Amount of Investment: Pearson chi-square results of .000 which is lesser than the table value of .05 indicated that there is a significant relationship between the category of business and Amount of Investment.

Correlation

It is found that, there is high positive correlation i.e. a perfect positive linear reliability is found between the variables.

XI. Suggestions and Recommendations

To the Entrepreneurs

1) An association can be formed and meet at a central place on a regular basis to discuss their needs, problems and achievements.
2) The lack of saving habits is the root cause of problems and hence they should be aware among the entrepreneurs to increase the savings and reduce expenditures particularly at the time of surplus.
3) As there is poor inventory management the entrepreneurs must take every effort to reduce wastages in their produces.
4) There is poor education and lack of exposure in financial management practice and maintenance of accounts that lead to improper planning and development in their business. This could be solved through proper training programmes.

To the Government

1) The government and other agencies should conduct programmes to identify the potentialities of the rural entrepreneurs.
2) Since the respondents feel that the procedures are complicated in banks for loans, the procedure and formalities of the bank should be simplified and the required documents should be minimized with regional language.

3) By proper refreshing of knowledge through entrepreneurship development programmes the constraints of lack of exposure may be eliminated.
4) Regular training programmes will help the entrepreneurs to develop self confidence, self-esteem, assertiveness, courage and risk taking.

XII. Conclusion

In the current scenario for rural entrepreneurs to achieve economic efficiency and international quality standards, there is an imminent need to upgrade its technology. The process of liberalization and globalization has necessitated technological up-gradation and the building of appropriate marketing and other related infrastructure. Rural Entrepreneurs need to hasten the transition from existing levels to higher standards in terms of quality and design in order to become internationally competitive. Thereafter, constant adaptation and innovation would hold the key to sustained competitiveness. In order to do so, there is need for internalizing, not only new technology, but also effective management techniques and economies of scale. The government has already enhanced the limit of investment in plant and machinery in select subsectors of the SSI sector to facilitate their vertical expansion and building of competitive strength[5].

References

1) *Desai Vasant,"Entrepreneurial Development: Institutional Infrastructure programs and performance", Himalaya Publishing House, new Delhi, pp. 243-335, 1991.*
2) *Fornell, C., & Larcker, D.F. (1991). Evaluating structural equation models with unobservable variables and measurement errors. Journal ofMarketing Research, 18, 39-50.*
3) *Maichique, M.A., Entrepreneurs, Champions and Technological Innovation, Sloan Management Review, California, Winter, 2006, pp. 56-76.*
4) *Miner, J.B., Smith, N.R., & Bracker, J.S. (2004). Role of entrepreneurial task motivation in the growth of technologically Innovative firms: interpretations from follow-up data. Journal ofApplied Psychology, 79, 627630.*

[5]*Selvarajan E., Elango R.,"Rural Development Programs and Externalities", Serials Publication, New Delhi, pp. 63-117, 2004.*

5) *Olve, N.G., Roy, J., & Wetter, M. (1999). Performance Drivers; A Practical Guide to Using the Balanced Scorecard. New York; Wiley.*
6) *Petrin.T, "Entrepreneurship as an economic force in rural development", paper presented at the Seventh FAO/ REU International Rural Development Summer School, Herrsching, Germany, 1994.*
7) *Selvarajan E., Elango R.,"Rural Development Programs and Externalities", Serials Publication, New Delhi, pp. 63-117, 2004.*