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### ABSTRACT

Business incubation is one of the implementation tools of government's strategy for facilitating women entrepreneurship development in India. The purpose of this study is to measure the effectiveness of incubation services for women entrepreneurs in Bengaluru city. Study was carried out by using survey method. Only twenty five tenants from a women specific incubator "AWAKE (Association of Women Entrepreneurs of Karnataka) of Bengaluru city were respondents, since, it's a pilot study. Self-administered questionnaire measuring the effectiveness of 24 incubation services was incorporated in this study. Results reflected that, women entrepreneurs are satisfied with their incubator in terms of providing them with various incubation related facilities/services. The study revealed that, incubator has been effective in delivering the facilities/services to its tenants, which may in turn empower the women entrepreneurs to face the competition and challenges in carrying out business.

**Keywords:** Incubation, Women entrepreneurship, performance evaluation, economic development, Business incubation.

### **1. INTRODUCTION**

Incubation, by definition, is a unique business support model that contains inbuilt capacity to contribute valuable interventions for enterprise creation and development. The concept of incubation has achieved worldwide popularity for its efficacy in enabling a conducive environment for nurturing and supporting small and medium enterprises. A typical incubator stimulates creation and development of SMEs by providing physical work-space, shared office facilities, counseling, information, training, access to finance and professional services etc. at affordable prices.

Incubators are growing in numbers, across the world, and so is the concern of their performance evaluation, among governments and other sponsors who continue to support them. Systematic review of incubation literature, however, shows that incubation impact is surprisingly highly understudied area and thus represents wide scope for future research. There are around 7,935 urban units in India and 31% of our population lives in towns of which females have a share of 47.4%. Social and economic development of women is necessary for overall economic development of any society or country.

Entrepreneurs play a key role in any economy. These are the people who have the skills and initiative necessary to take good new ideas to market and make the right decisions to make the

idea profitable. The reward for the risks taken is the potential economic profits the entrepreneur could earn. Technically, a "women entrepreneur" is any women who organizes and manages any enterprise, usually with considerable initiative and risk.

### 2. EFFECTIVENESS OF INCUBATION:

In broader sense, the term effectiveness of incubator connotes all the benefits and satisfaction, which stake holders derive across the value chain, in relation to the resource incurred (Lalkaka, 2000). A typical incubator may involve large number of stake holders, including state authorities, local community, related universities, new start-ups, chambers and business associations, business development services provides, and donor/International business development agencies. This diversity

brings interests and compound inputs to incubator and is fundamental feature of incubator-Incubation process.

Access to multiple resources like easy approach to government departments, collaboration with universities, networking with industry and other incubators, provision of subsidized legal and other business development services etc. put forward a decisive part in winning performance of incubators (Peters *et al.*, 2004). Effectiveness of incubator relates to the fulfillment of the respective objectives for each stake holder. Since different stakeholders have varied interests and objectives, it becomes a daunting task to develop a laid down criteria of measuring the success of incubators.

### Measuring Effectiveness through Perceived Effectiveness And Value To Tenants:

Incubators vary in terms of their scope and sponsors. On the basis of missions, policies, services and performance Allen and Mc Cluskey (1990) classified incubators in four discreet groups.

- For-profit property development incubators
- Non-profit development corporation incubators
- Academic incubators
- Business development for 'for-profit' seed capital incubators.

They proposed that incubators of each discrete group offer different level of value to its clients. Furthermore tenants obtain greatest value from those incubators that function as enterprise development programs. Value to tenants was also measured by Mian (1996) in his survey of tenant's perceptions regarding the usefulness of services of University Technology Business Incubator. Lalkaka (2000) took a further step and suggested that satisfaction of tenants and other beneficiaries should continuously be measured so that timely corrective actions regarding functionality of incubators could be taken. He asserted that benefits obtained by tenants, sponsors and local community were criteria of effectiveness.

### **3. ABOUT AWAKE:**

Association of Women Entrepreneurs of Karnataka the only incubator working exclusively for women. AWAKE is a not-for profit, Non-Governmental Organization, established in 1983, with the mission of 'Empowering Women through Entrepreneurship for Economic Development'.

AWAKE has a unique approach of 'Entrepreneur guiding Entrepreneur' through voluntary efforts of successful women entrepreneurs by counseling, training, business incubation, mentoring and peer group support. AWAKE provides support and guidance to aspiring women from rural, urban, national and international arenas to be successful entrepreneurs, irrespective of their age, academic, social, economic background. AWAKE's services are extended to women Self Help Groups (SHGs), NGOs and other development agencies engaged in Income Generation Activities and Entrepreneurship Development.

## 4. REVIEW OF LITERATURE

Lois Peters, Mark Rice & Malavika Sundararajan (2004), in their article entitled "The Role of Incubators in the Entrepreneurial Process" focused on understanding the impact of the services offered, namely infrastructure, coaching and networks, on the graduation rates of the respective incubators' tenants. The model was tested among three different types of incubators, for-profit, non-profit, university-based incubators. The developed model was found effective and it as observed that, interviews with directors of incubator centers were also carried out simultaneously.

McAdam, M., & Marlow, S. (2008), in their research paper entitled "The Business Incubator and the Female High Technology Entrepreneur: A Perfect Match?" tried to explore the reasons underlying women's exclusion from business incubators. It was found that that because of traditional gendered divisions which spill over from employment into self-employment, women are less likely to begin new ventures within sectors particularly suitable for incubation. Business incubators offer women training and assistance to become honorary men without ever challenging the fundamental values that underpin the barriers faced by female business owners in SET sectors or recognizing the constraining influence of culture. Such initiatives assist women to accommodate their specific disadvantages whilst not addressing their source.

*Roomi, M. A., & Parrott, G. (2008)*, in their article entitled "*Barriers to Development and Progression of Women Entrepreneurs in Pakistan*" the study revealed that, The economic potential of female entrepreneurs is not being realized as they suffer from a lack of access to capital, land, business premises, information technology, training and agency assistance. Inherent attitudes of a patriarchal society, that men are superior to women and that women are best suited to be homemakers, create formidable challenges. Women also receive little encouragement from some male family members, resulting in limited spatial mobility and a dearth of social capital.

Shahzad, Khuram, et al. (2012) in their research article entitled "Role of incubation in women entrepreneurship development in Pakistan" found that, female entrepreneurs are well aware of the contemporary challenges and needs of their businesses. Female entrepreneurs consider incubation facilities/services very important for the success of their businesses. On the whole all the females are satisfied with their incubator in terms of providing them with various incubation related facilities/services. The gap between tenants' perception regarding the importance of incubator's facilities/services, and the incubator's effectiveness in delivering on those promised facilities/services highlights a slightly different picture.

*Mathur, D., Jain, T. K., & Keswani, B.(2019)*, in their research paper entitled "*Impact of Business Incubation for Women Entrepreneurs*" concluded in their study that, The role of incubation in the development and sustainable growth of small and medium businesses is vital. This study shows that female entrepreneurs are well aware of the contemporary challenges and needs of their businesses. Female entrepreneurs consider incubation facilities/services very important for the success of their businesses. Introducing Business Incubator Strategies and Programs and the role of such important moves in ensuring sustainable value creation in wealth creation of the nation by women participation.

Gabarret, I., & Andria A. (2021), in their research article entitled "Improving gender equality through entrepreneurship: The role of women-dedicated business incubators", argue that, gender equality and entrepreneurship would enhance economic, sustainable, and inclusive growth. Following these ideas, most countries are setting up business incubators to improve start-up creation. This article explores the role of French women's business incubators in the development of female entrepreneurship as a key driver of women's empowerment and gender equality. We observed some important aspects within women-dedicated business incubators, such as the development of confidence and inspiration through role models, but also a psychological attachment and a focus on mostly traditional female activities.

### **5. NEED OF THE STUDY:**

Business incubation is one of the implementation tools of government's strategy for facilitating women entrepreneurship development in India. The concept of incubation has achieved worldwide popularity for its efficacy in enabling a conducive environment for nurturing and supporting small and medium enterprises. Incubators are growing in numbers, across the world, and so is the concern of their performance evaluation, among governments and other sponsors who continue to support them. Systematic review of incubation literature, however, shows that incubation impact is surprisingly highly understudied area and thus represents wide scope for future research.

Thus, "The Study on Role of Incubation in Women Entrepreneurship Development with special reference to Bengaluru City", was carried to measure the importance and effectiveness of incubation services for women entrepreneurs in Bengaluru city.

## 6. OBJECTIVES OF THE STUDY:

- 1. To identify the criterion for performance evaluation of incubator services towards developing women entrepreneurs in Bengaluru city.
- 2. To assess the effectiveness of incubators in developing women entrepreneurs in Bengaluru city.
- 3. To analyze, interpret and provide suggestion based on the findings to enhance the effectiveness of incubator services.

## 7. SCOPE OF THE STUDY:

1. The study is confined to incubator services towards developing women entrepreneurs in Bengaluru city.

- 2. The criteria for performance evaluation of incubator services considered in the study are Infrastructural facilities, Marketing services, Training programs, Networking and Consultancy services.
- 3. The study is confined to the services provided by AWAKE (Association of Women Entrepreneurs of Karnataka) the only incubator working exclusively for women.

## 8. RESEARCH DESIGN

a. Type of the Study: Descriptive Research

## **b.** Sources of Data Collection:

I. Primary Data: The primary data were collected through structured questionnaire containing 25 closed ended, followed by the discussions with tenants of AWAKE, Bengaluru.

ii. Secondary Data: Secondary data for this study has been collected from AWAKE website,

journals, previous research works and the internet.

## c. Sampling Design:

a. Sampling Unit: The target respondents of the study are the tenants of AWAKE, Bengaluru.

b. Sampling Size:25 Tenants.

c. Sampling Procedure: Non-Probability: Convenient Sample Method

**d. Plan of Analysis:** SPSS version 22.0 is used for tabulation and presentation of data. The following statistical tools are used for the analysis of the data:

- 1. Mean analysis is used to analyze the effectiveness of the incubator in tenants perception.
- 2. Chi-Square test is used for testing the hypothesis.

**Objective Statement:** To test the overall effectiveness of incubator services in developing women entrepreneurship in Bengaluru city.

**Null Hypothesis (H**<sub>0</sub>): The overall effectiveness of incubator services is not effective in developing women entrepreneurship in Bengaluru city.

Alternative Hypothesis (H<sub>1</sub>): The overall effectiveness of incubator services is effective in developing women entrepreneurship in Bengaluru city.

1	2	3	4	5
Highly Dissatisfied	Dissatisfied	Satisfactory	Effective	Highly Effective

# 9. DATA ANALYSIS AND INTERPRETATION

Data were analysed by calculating and comparing the mean averages of tenants' perceptions about the effectiveness of AWAKE in delivering the facilities/services for their businesses, Composite means scores across five categories and individual mean score for individual facilities/services were calculated and presented separately by using SPSS v.22 package. Chi-square test was employed to test the formulated hypothesis.

Categories	Ν	Effectiveness
Infrastructural Facilities	25	4.89
Marketing Services	25	4.61
Training Programs	25	4.52
Networking Services	25	4.30
Consultancy Services	25	4.20

### Table No.1: Composite mean scores across all categories

Source: Field survey

From the above table it is evident that, incubator has been highly effective in delivering the promised facilities to its tenants, with the highest composite mean score among all five categories. A comparably low composite mean score in Consultancy Services express the need for improvement.

Table No.2: Mean scores for effectiveness of Infrastructural Facilities

Infrastructural Facilities	N	Effectiveness
Affordable Office and Infrastructural Facilities	25	4.90
Prime Location/Visibility	25	4.85
Office equipment	25	4.90
Shared Office Facilities	25	4.86
Secure and Hassle Free Workplace Environment	25	4.95
Composite Mean		4.89

Source: Field survey

The perception of tenants about the effectiveness of incubator in delivering the stated facilities, results show that generally tenants believe that incubator has been highly effective (Mean. 4.89) in delivering the promised facilities to its tenants, with the highest composite mean score among all five categories (Table 1). However, with respect to individual facilities the secure and hassle free work environment is the factor which, according to respondents, incubator has delivered most effectively followed by the office space (Mean.4.90), office equipment (4.90), and shared facilities (Mean. 4.86).

Marketing Services	Ν	Effectiveness
Local as well as International Market Opportunities	25	4.49
Display Centers	25	4.65
Participation in Exhibitions/Business fairs	25	4.69
Composite Mean		4.61

## Table No.3: Mean scores for effectiveness of Marketing Services

Source: Field survey

Mean score of 4.61 shows the tenants' strong agreement with the incubator's effectiveness in delivering marketing related services to its tenants. However, in terms of individual services incubator has provided services of display centres (Mean. 4.69) more effectively compared with participation in exhibitions and business fares (Mean. 4.65) and identification of new markets (4.49) for the tenants.

Training Programs	N	Effectiveness
Capacity Building Skills	25	4.56
Product Development Skills	25	4.45
Business Management Skills	25	4.34
Customized Training Services	25	4.51
Marketing Skills	25	4.72
Composite Mean		4.52

Source: Field survey

The above table shows the incubator's ability to deliver training related services, on the whole, tenants perceive their incubator highly effective (Mean. 4.52) in delivering training related services to its members. However, customized training services (Mean. 4.72), capacity building skills (Mean. 4.56), and marketing skills (4.51) are the respective categories where incubator, according to respondents, has delivered most effectively.

Table No.5: Mean scores for effectiveness of Networking Services

Networking Services	N	Effectiveness
Latest information on sectors, regulation, and Exhibitions	25	4.36
Networking with chambers and associations	25	4.21

Information/updates on technological developments	25	4.35
Composite Mean		4.30

Source: Field survey

From the above table it is evident that, Incubator has been viewed as highly effective in delivering the networking related services as tenants rated it above 4 on rating scale of 5. It can be inferred that tenants are given sufficient networking services to build and expand their business.

Effectiveness **Consultancy Services** Ν Project identification 25 3.82 Project development 25 4.00 25 Business plan development 4.46 25 Developing marketing and management strategies 4.64 Designing brochures/ business cards/websites 25 4.45 25 Tax, company registration, contract designing 4.45 25 4.27 Managing cash or raising finance through bank Using accounting software 3.36 25 4.20 **Composite Mean** 

Table No.6: Mean scores for effectiveness of Consultancy Services

Source: Field survey

Mean score of 4.20 in the above table shows the tenants' strong agreement with the incubator's effectiveness in delivering consultancy related services to its tenants. However, using accounting software followed by project identification, factors exhibit comparably low mean scores, expressing the need for improvement.

# HYPOTHESIS TESTING

**Objective Statement:** To test the overall effectiveness of incubator services in developing women entrepreneurship in Bengaluru city.

**Null Hypothesis (H**<sub>0</sub>): The overall effectiveness of incubator services is not effective in developing women entrepreneurship in Bengaluru city.

Alternative Hypothesis (H<sub>1</sub>): The overall effectiveness of incubator services is effective in developing women entrepreneurship in Bengaluru city.

 Table No.7: Chi square test (2)

**Overall Effectiveness** 

	Observed N	Expected N	Residual
Highly Dissatisfied	1	5.0	-4.0
Dissatisfied	1	5.0	-4.0
Satisfactory	3	5.0	-2.0
Effective	14	5.0	9.0
Highly Effective	6	5.0	1.0
Total	25		

Source: Field survey

Test Statistics		
	Overall Effectiveness	
Chi-Square	23.600ª	
Df	4	
Asymp. Sig.	.000	
a. 0 cells (0.0%) ha frequencies less tha expected cell freque	n 5. The minimum	

$$\chi^2$$
Calculated >  $\chi^2$ Tabulated

# 23.600 > 9.488

**Outcome**:  $\chi^2$  (chi-square) calculated (23.600) is greater than  $\chi^2$  tabulated (9.488) @ 5 % S.L, 4 d.f.

Hence null hypothesis is rejected and alternative hypothesis is accepted.

**Conclusion:** The overall effectiveness of incubator services is effective in developing women entrepreneurship in Bengaluru city.

# 10. FINDINGS

- It is evident by mean analysis that, incubator has been highly effective in delivering the promised facilities to its tenants, with the highest composite mean score among all five categories.
- Mean score of 4.61 shows the tenants' strong agreement with the incubator's effectiveness in delivering marketing related services to its tenants.
- From the analysis, we understand that, the incubator's ability to deliver training related services, is highly effective.

- From the mean analysis, it can be inferred that tenants are given sufficient networking services to build and expand their business.
- It is evident by mean analysis that, the tenants' exhibit strong agreement with the incubator's effectiveness in delivering consultancy related services to its tenants. But improvement in the areas like, using accounting software, project identification cannot be ignore by the incubator.

• From Chi-Square analysis, it is evident that, the overall effectiveness of incubator services is effective in developing women entrepreneurship in Bengaluru city.

## **11. CONCLUSION**

The role of incubation in the development and sustainable growth of small and medium businesses is vital. The findings of the study show women entrepreneurs are well aware of the contemporary challenges and needs of their businesses and it is found that they are satisfied with their incubator in terms of providing them with various incubation related facilities/services. From chi-square test, it can be concluded that, incubator has been effective in delivering the facilities/services to its tenants, which may in turn empower the women entrepreneurs to face the competition and challenges in carrying out business. The low mean scores, doesn't portray the inability of incubator's management to deliver on those services, instead it reflects the higher expectations of tenants from incubator's management to enhance their efficiency/effectiveness.

## **12. RECOMENDATIONS**

- The incubator can enhance its effectiveness in the area of supporting, use of accounting software by providing financial aid to the tenants and providing the tutorial classes to tenants to learn use of software.
- Another important area which needs to improved is the identification the better projects, and this can be facilitated by consulting the government bodies like district industrial centers-schools, etc,.
- The enhancement of effectiveness related to product development can be achieved by collaborating with government and non-government R & D agencies.

# REFERENCES

- Peters, L., Rice, M., & Sundararajan, M. (2004). The role of incubators in the entrepreneurial process. The Journal of Technology Transfer, 29(1), 83-91.
- McAdam, M., & Marlow, S. (2008). The business incubator and the female high technology entrepreneur: a perfect match. In 53rd International Conference on Small Business, Halifax, Canada, July.
- Roomi, M. A., & Parrott, G. (2008). Barriers to development and progression of women entrepreneurs in Pakistan. The Journal of Entrepreneurship, 17(1), 59-72.
- Shahzad, K., Bajwa, S. U., Ali, Q., & Zia, S. (2012). Role of incubation in women entrepreneurship development in Pakistan. Asian Journal of Business Management, 4(2), 200-208.

- Mathur, D., Jain, T. K., & Keswani, B. Impact of Business Incubation for Women Entrepreneurs, 2019.
- Gabarret, I., & d'ANDRIA, A. (2021). Improving gender equality through entrepreneurship: The role of women-dedicated business incubators. Journal of the International Council for Small Business, 2(2), 79-89.
- Association of Women Entrepreneurs of Karnataka, URL: <u>https://awakeindia.org.in/</u>