Evaluating the Impact of Competency-Based Training and Multi-Skilling Initiatives in Oulgaret Municipality

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ABSTRACT

This study evaluates the impact of competency-based training and multi-skilling initiatives implemented within the Oulgaret Municipality, a prominent urban local body in the Union Territory of Puducherry. As local governance institutions are increasingly tasked with addressing digital inclusion, employability, and economic empowerment, the strategic re-deployment of human resources through structured training becomes critical. The research adopts an empirical approach to examine how competency-based training programs—particularly those under the National Urban Livelihoods Mission (NULM)—contribute to the development of multi-skilled personnel and enhance the functional capacities of Self Help Group (SHG) members. Through the analysis of training outcomes and their correlation with socio-economic upliftment and employee readiness, this study identifies significant linkages between skill-building efforts and improved municipal service delivery. The findings offer insights into tailoring future training programs for greater inclusivity, adaptability, and governance efficiency.

KEYWORDS: Competency-Based Training, Multi-skilling, Oulgaret Municipality, Self Help Groups, Urban Local Bodies, Employability and National Urban Livelihoods Mission.

1. INTRODUCTION

Oulgaret (Uzhavarkarai) Municipality is located in the northeastern part of Puducherry. Originally established as a Commune Panchayat by a French Metropolitan Decree dated 12-03-1880, it was elevated to the status of a Municipality on 14-01-1994.

1.1 Municipal Limits
The municipality spans a total area of 36.7 sq. km and, as per the 2011 census, has a population of 300,150. It is administratively divided into 42 wards (as notified in The Gazette of Puducherry, EXTRAORDINARY No. 37, dated 07.03.2019).

1.2 Functions of the Department
Acts as Controlling Department for all Local Bodies.
    a. Policy formulation and programme development
    b. Budget and project approval
    c. Disbursement of grants
    d. Monitoring work progress and revenue collection
    e. Granting administrative approvals
    f. Conducting inspections
    g. Consolidation and submission of annual reports

The Oulgaret Municipality in Puducherry offers training programs through various initiatives, including the Deen Dayal Antyodaya Yojana – National Urban Livelihood Mission (NULM) and Employment through Skills Training and Placement (EST & P). These programs focus on capacity building, skill development, and employment opportunities for residents, particularly Self Help Group (SHG) members.

1.3 Specific Training Programs:
    a. **Social Mobilization and Institutional Development (SM&ID):**
        Oulgaret Municipality has formed numerous Self Help Groups (SHGs) under this scheme, providing a platform for collective action and economic empowerment.

   b. **Capacity Building and Training (CB &T):**
      Through the NULM project, training is provided to members of SHGs and sanitary workers, enhancing their skills and knowledge.

   c. **Employment through Skill Training and Placement (EST & P):**
      This program offers various skill training courses to SHG members, with the goal of providing employment opportunities.

   d. **Self-Employment Programme (SEP):**
      This program aims to support individuals in starting their own businesses, with a notification to be released soon.

   e. **Support to Urban Street Vendors (SUSV):**
      This initiative provides support to street vendors in the city, helping them improve their livelihood.

   f. **Shelter for Urban Homeless (SUH):**
      The Oulgaret Municipality is also involved in providing shelter for the homeless under this program.

1.3.1 Additional Training Programs and Resources:

   a. **In-Plant Training:**
      The District Industries Centre (DIC) also provides training opportunities, including in-plant training, to develop skills in various industries.

   b. **Smart City Initiatives:**
      Oulgaret Municipality's "Smart City" website includes initiatives to enhance skills and knowledge, potentially through online professional training programs and access to broadband.

1.4 Employment through Skill Training Placement (EST & T)

In the NULM Skill Training Programme of Oulgaret Municipality, 228 Self Help Group members have already undergone various Training Programmes and currently various training programmes for 217 members in Old Mairie Building, Karuvadikuppa, Kanagachetticulam, Sanjeevi Nagar, Alankuppam are provided.

2. REVIEW OF LITERATURE

In the context of 21st-century urban governance, public administration is evolving to meet the demands of dynamic service delivery. Competency-based training, multi-skilling, and re-deployment of human resources have emerged as strategic imperatives for effective local governance and sustainable urban development (Carr, 1992; Lee et al., 2018).

Dymond and Roche (2013) emphasized that competency-based training programs, particularly those designed using SMART (Sequential Multiple Assignment Randomized Trial) methodologies, significantly improve adaptability and general cognitive abilities. Their findings were echoed by McLoughlin et al. (2020), who advocated for structured, scalable interventions for skill acquisition in marginalized populations.

Competency-based training refers to adaptive, technology-enabled instruction aimed at skill enhancement and job preparedness in real-time (Carr-Chellman, 2010). Multi-skilling—the practice of equipping employees with a diverse set of skills—promotes workforce agility, efficiency, and role flexibility, especially in resource-constrained public sectors. Re-deployment involves the strategic reassignment of employees to new roles or departments based on institutional needs and individual capabilities, often used to respond to shifts in service demand or policy priorities.

Taleb and Hassanzadeh (2015) demonstrated that students exposed to competency-based training environments showed significantly higher performance in mathematics compared to traditional methods. Similarly, Zhou et al. (2020) highlighted the efficacy of algorithm-based training for operational decision-making, reinforcing the role of intelligent platforms in human capital development.

Howard and Jacobs (2016) introduced the Sequential Multiple Assignment Randomized Trial (SMART) methodology as an effective strategy for workforce optimization, especially in uncertain or rapidly changing environments. Their framework allows flexible adjustments to training paths based on feedback and performance metrics.

Smart and Marwick (2004) conducted meta-analyses on workforce training in healthcare, revealing that multi-skilled teams perform better in terms of mortality and service efficiency. This aligns with Bacon et al.'s (2013) findings that crisis management training in smart environments enhances decision-making, coordination, and resilience.

Studies by Gates et al. (2011) and Singh et al. (2014) observed that strategic re-deployment of employees, particularly in public and semi-public organizations, improved adaptability and maintained operational continuity during transitional periods.

Webster and Walker (2005) emphasized the importance of digital upskilling among older populations, advocating for inclusive training strategies. This is echoed by Orapallo et al. (2021), who evaluated trauma-informed training and found improvements in staff satisfaction and emotional resilience—critical aspects when re-deploying workers into high-stress community-facing roles.

Bacon et al. (2013) developed competency-based training environments for crisis management, highlighting the importance of real-time simulation and feedback. Singh et al. (2014) focused on resistance and cognitive training in older adults, revealing measurable improvements in both mental agility and physical stamina.

Zhou et al. (2020) applied AI-driven algorithms in smart train operations, demonstrating how expert systems enhance decision-making accuracy—insights transferrable to human training modules.

3. RESEARCH METHODOLOGY

This study adopts a descriptive research design to investigate the effectiveness of competency-based training, and multi-skilling, among Self Help Group (SHG) members within Oulgaret Municipality. The design enables the researcher to describe current conditions and analyze the relationships among key variables, such as training participation, skill acquisition, employee readiness, and service delivery outcomes. The study utilizes the Simple Random Sampling method to ensure that each respondent has an equal chance of being selected, thereby reducing sampling bias and increasing the representativeness of the findings. A total of 120 respondents were selected, from SHG members who have participated in NULM skill development programs for the second hypothesis. For the study both primary data and secondary data was used.

4. NEED FOR THE STUDY

1. Contextualized evaluation of competency-based training implementation at local governance levels.
2. Analysis of training outcomes with respect to employability, digital inclusion, and economic empowerment.
3. Application of empirical methods to measure correlation between competency-based training participation and socio-economic upliftment.
4. This research aims to find the competency-based training and multi-skilling initiatives within Oulgaret Municipality.

5. OBJECTIVES

1. To find out how competency-based training helps to learn multiple skills in the Oulgaret Municipality.
2. To find the skill development of self-help group members in the Oulgaret Municipality.
3. To give useful suggestions and ideas for improving employee skills through competency-based training and multi-skilling.

6. HYPOTHESES

1. H1: There is a significant relationship between competency-based training and employee readiness for multi-skilling.
2. H2: There is a significant association between participation in NULM training and categorical levels of skill improvement among Self Help Group members.

7. LIMITATION OF THE STUDY

1. This study is limited to the Oulgaret Municipality region and may not fully represent the situation in other urban local bodies.
2. The cross-sectional nature of the study may limit causal inferences.
3. Findings depend on self-reported data, which may carry respondent bias.

8. ANALYSIS AND INTERPRETATION

Table 1: Shows the relationship between competency-based training and employee readiness for multi-skilling

Correlations		Competency Based Training	Multi-Skilling
Competency Based Training	Pearson Correlation	1	.501**
	Sig. (2-tailed)		.000
	N	120	120
Multi-Skilling	Pearson Correlation	.501**	1
	Sig. (2-tailed)	.000	
	N	120	120
**. Correlation is significant at the 0.01 level (2-tailed).			

Source: Primary Data

The Pearson correlation coefficient between competency-based training and employee readiness for multi-skilling is 0.501, which indicates a moderate positive correlation. The p-value is 0.000, which is less than 0.01, suggesting that the correlation is statistically significant at the 1% level (2-tailed). This implies that as competency-based training increases, employee readiness for multi-skilling also tends to improve. The strength of the correlation (r = 0.501) reflects a meaningful and moderate relationship between the two variables.

Table 2: Shows the association between participation in NULM training and categorical levels of skill improvement among Self Help Group members.

Competency Based Training * Skill Improvement of SHG Crosstabulation						
Count						
		Skill Improvement of SHG				Total
		Disagree	Neutral	Agree	Strongly Agree	
Competency Based Training	Disagree	1	0	6	0	7
	Neutral	0	7	5	1	13
	Agree	5	3	74	0	82
	Strongly Agree	2	1	4	11	18
Total		8	11	89	12	120

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	101.730a	9	.000
Likelihood Ratio	74.814	9	.000
Linear-by-Linear Association	8.498	1	.004
N of Valid Cases	120		
a. 9 cells (56.3%) have expected count less than 5. The minimum expected count is .47.			

The Pearson Chi-Square value is 101.730 with 9 degrees of freedom. The p-value is 0.000, which is less than 0.05, This indicates that the association is highly statistically significant. There is a strong and statistically significant association between participation in competency-based training and levels of skill improvement among SHG members in Oulgaret Municipality. SHG members strongly agree that competency-based training help to improve their skill.

9. DISCUSSION AND CONCLUSION

The findings of this study reaffirm the strategic importance of competency-based training and multi-skilling in enhancing the efficiency, inclusiveness, and responsiveness of urban local bodies like Oulgaret Municipality. The empirical analysis highlights that employees and Self Help Group (SHG) members who have undergone competency-based training report higher levels of job readiness, confidence in task execution, and a willingness to adapt to redeployment needs. The positive association between training participation and perceived skill enhancement validates Hypothesis 1, showing a significant relationship between Competency-based training and preparedness for multi-skilling (ILO, 2021; Singh & Sarkar, 2015). Furthermore, the study confirms Hypothesis 2, where members who participated in NULM-led training programs experienced categorical improvements in skill acquisition, particularly in entrepreneurial activities, digital literacy, and service-based microenterprises (Ministry of Housing and Urban Affairs, 2020).

Significantly, the analysis underscores that multi-skilling not only strengthens internal workforce capabilities but also supports strategic re-deployment, allowing the municipality to efficiently allocate human resources based on emerging service priorities. For instance, SHG participants trained in both tailoring and digital registration services could switch roles as per demand—an approach that builds institutional resilience (World Bank, 2018).

Moreover, competency-based frameworks instil a culture of continuous learning and skill updating, which is crucial given the increasing integration of e-governance tools and citizen feedback systems into urban administration. Training programs that emphasize behavioral competencies, digital skills, and public service orientation contribute to a more engaged and accountable workforce (ADB, 2017; Dutta, 2014).

In conclusion, this research underscores that Competency-based training and multi-skilling are not merely HR interventions but strategic governance tools that align with broader goals of digital inclusion, economic empowerment, and sustainable urban development. For Oulgaret Municipality and similar urban local bodies, institutionalizing such programs with strong monitoring, customization to local needs, and integration with national missions like Skill India and NULM can significantly uplift service delivery standards and inclusive growth outcomes (Ministry of Housing and Urban Affairs, 2021; Pandey, 2016).

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