ISSN No:-2456-2165 https://doi.org/10.38124/ijisrt/26oct1551

Women and Informality in Urban Nagaland: Field Based Investigations

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Publication Date: 2026/11/03

Abstract: This study analyses the extent of empowerment among self-employed women in the Urban Informal Sector of Nagaland in India, with particular reference to the districts of Kohima and Dimapur. Field based observations and interview schedule were used to collect responses from 106 self-employed women respondents selected using purposive sampling for primary data. The level of empowerment was assessed using four dimensions: Female Work Participation Index (FWPI), Female Income Index (FII), Female Decision-Making Index (FDMI) and Female Literacy Index (FLI). The findings of the study indicate that in the urban informal sector, 43.39% self -employed women are in the category of high empowerment, followed by 36.79% in the moderate level, while the low empowerment category consists of 29.81%. Based on the findings, the study concludes that urban informal sector has the potential to generate productive employment opportunities, enhance income generation and the overall livelihood opportunities to strengthen women empowerment in Nagaland.

Keywords: *Informal Sector, Self-Employment, Women Empowerment, Livelihood, Inclusive Growth.*

How to Cite: Metsesulu Veyie; Giribabu M. (2026) Women and Informality in Urban Nagaland: Field Based Investigations. *International Journal of Innovative Science and Research Technology*, 11(10), 2566-2577. https://doi.org/10.38124/ijisrt/26oct1551

I. INTRODUCTION

Empowerment of women in economic, social and political spheres is fundamental for the attainment of inclusive growth and sustainable development. Recognizing this significant issue, the United Nations Development Program targets to achieve gender equality and empower all women and girls through its 5th Goal of the Sustainable Development Goals (SDG). Despite several efforts being made by countries and international organizations, the attainment of women empowerment and removal of gender disparity continues to face challenges. This calls for further research in identifying the underlying causes, possible solutions and policy changes for the attainment of this pertinent issue. The present study is carried out on the self-employed women in Urban Kohima and Dimapur by incorporating dimensions such as female work participation index, decision making index, female income index and female literacy index for determining women empowerment. Self-employed are individuals independently operating or engaging in an economic activity, trade, or profession on own account or with one or more partners.

Keith Hart first used the term 'informal sector in 1971 to differentiate formal and informal income earning opportunity on the basis of paid earning or self-employment (Hart,1973). Hart referred to informal sector as those economic activities undertaken outside of the city's organised labour market. The International Labour Organization (ILO) considers informality to be associated with "lower job quality due to limited access to social protection, rights at work, workplace safety and job security". In 2026, globally 2.1 billion workers; 57.7% workforce population are engaged in the informal sector and over 90% in India where the global rate of informality has increased by 0.3 percent between 2015 and 2025 (ILO,2026).

Women constitute approximately 50 % of the population and therefore their productive participation in economic activities is fundamental in achieving inclusive growth. No society or nation can develop without the participation and empowerment of the half of its population. To achieve sustained growth, women should not be considered merely as a receiver of government support but rather they are economic agents and therefore educating and encouraging them for self-employment programs and reducing women dependency on men will not only improve women's welfare but the overall development of the nation. The global share of informality for women has increased from 54.8% in 2015 to 55.9% in 2025 (ILO,2026)

ISSN No:-2456-2165 https://doi.org/10.38124/ijisrt/26oct1551

underscoring the significance of studying women's participation in informal sector.

Nagaland is one of the North-eastern States of India with a population of 19,78,502 where urban population accounts for 28.86% according to 2011 Census. Dimapur district has the highest number of urban residents in the State with a total of 197277 persons followed by Kohima with a total of 123149 persons. The fast-growing urban population in the two cities of Dimapur and Kohima caused by rural-urban migration and limited capacity to absorb labour in formal employment has given rise to the need for an alternative source of livelihood leading to more engagement of people in self-employment and other informal employment for income generation. The employment scenario in the state highlights the significance of this transition where the Periodic Labour Force Survey (PLFS) 2025 shows that urban unemployment rate in Nagaland for male stands at 11.0% and 15.7% for female. Whereas the National average for urban male unemployment rate is 4.2% and for female is 6.4%, reflecting comparatively higher percentage of unemployment rate for both male and female in Nagaland as compared to the National Average (Annual Report: Periodic Labour Force Survey (PLFS), 2026). The comparative higher unemployment rate for women in Nagaland reinforces the importance of examining self-employment and informal economic activities as avenues for employment generation and livelihood security.

With this backdrop, self-employment assumes importance as an alternative form of absorbing labourer and increasing work participation in urban areas. However, when women's economic participation is considered, it goes beyond these factors, encompassing access to productive employment and control over economic resources which can influence their contribution to the household and also the broader processes of economic and social empowerment. The concept of empowerment is therefore vital in understanding the developmental implications of women's engagement in self-employment. The Division for Social Policy and Development (DSPD) of the United Nations Department of Economic and Social Affairs (UN-DESA) has defined empowerment in 2012 as "the process of enabling people to increase control over their lives, to gain control over the factors and decisions that shape their lives, to increase their resources and qualities to build capacities to gain access, partners, networks, a voice, in order to gain control".

The present study covers multiple economic activities in urban informal sector since the existing studies are focused on specific activity with most studies given attention on street vending. The objective of the study is to address this gap by examining women's engagement in multiple forms of self-employment and informal activities in urban Dimapur and Kohima. Although self-employment is widespread with women as major participants in urban areas, limited studies are done on the characteristics, potentials and challenges of self-employed entrepreneurship and its impact on the quality and empowerment in women's life.

II. LITERATURE REVIEW

Participation of women in economic activity is considered to be fundamental in attaining empowerment as employment and income can enhance women's capability and participation in household and societal decision making. Besides, women capability is enhanced when given opportunity to make decisions on resource allocation and working hour management (Duque & Moreno 2022). Given this backdrop, comprehensive understanding of the driving force for women's engagement in the urban informal sector remains as an intriguing question.

In the era of globalisation, it is evident that there is an increase in employment among women workers where majority of them are found to be self-employed in the informal sector (Banerjee & De, 2018). However, women in many aspects are impacted by the challenges they face in the form of societal norms, tradition old assigned gender roles and expectations, skills and training (Emon & Nipa, 2024), yet women led enterprises have contributed significantly to economic development in the form of employment generation, income redistribution and improvement of overall well-being of the family (Bhuyan, 2013).

Evidence supports that employment in urban informal sector is strongly determined by gender where the male population are found to be more likely engaged or looking for regular and salaried work, while women are comparatively engaging more in self-employed economic activities (Sahu & Behera, 2025). There is also a noticeable increase of women work participation from wage employment to self-employment and entrepreneurship as a result of increase in educational attainment reflecting increased capabilities and aspirations among women (Dixit & Pandey, 2020; Soputan & Kerebungu, 2020) underscoring the need to study the socio-economic factors influencing the nature and extent of such participation.

As compared to men, participation of women in the urban informal sector is driven more by necessity for survival rather than choice since domestic responsibilities and unpaid care contributions limits their work choices(Williams & Youssef, 2013; Chakraborty, 2021). On the contrary, some studies have argued that employment in the informal sector is also attracted by opportunity and driven by choice for its flexibility, convenience and ability to pursue one's passion and aspirations (Maloney, 2004; Snyder, 2004; Fiess, Fugazza, & Maloney, 2010; Williams & Youssef, 2013). Besides, some women opt to engage in informal sector to supplement their household income from other source (Peprah, Peprah & Ocloo, 2023; Banerjee & De, 2018) enabling them to increase their purchasing power and financial resilience, thereby enhancing the overall improvement in livelihood. However, despite significant contributions made by women, they are faced with continuous challenges and limited choices in the form of whether to provide for the family through monetary and

ISSN No:-2456-2165 https://doi.org/10.38124/ijisrt/26oct1551

labour market participation or non-monetary support and unpaid responsibilities (Boeri 2018; Duque & Moreno 2022).

Disparity in earning or wage between men and women is a persistent feature prevalent in most labour markets. Women are more likely to receive lower income or wage as compared to their male counterpart even when they may not have entered into the sector driven by necessity (M., 2021; Williams & Youssef 2013). The inequality in the earnings being favourable to men can be a result of high concentration of women in activities such as home-based enterprises and small-scale undertakings (Magidimisha & Gordon 2015) which offer flexibility to balance with family roles and responsibilities resulting in lesser working hour and lower returns. Productivity gap in informal sector is also determined by factors such as motives driven by necessity, other structural and cultural barriers etc. which are beyond observable characteristics of the firm. Hence, evidence suggests that lower earnings cannot be considered as an indicator of inferior entrepreneurial activity or productivity. (Chhetri, Indira, & Natarajan, 2026) in their study on India's informal sector found that although male-owned firms exhibit higher productivity, female owned-enterprises have the potential to earn comparable or even higher productivity had they been given the opportunity to operate under the same conditions of resources, market opportunities and time.

Self-employed women engaging in urban informal sector are faced with uncertainties of market in the form of unstable demand, economic insecurity for loss of work and income (Chakraborty,2021). Besides, women also encounter discrimination in the workplace in the form of harassment, health and safety issues (Sharma, 2012; Ogando, Roever, & Rogan, 2017)). Despite the challenges, engaging in the informal sector provides women with other non-monetary benefits and empowerment in the form of enhancing self-esteem and consciousness. It helps and enable women to participate and contribute to the community beyond their family and traditional roles in their respective ability (Peprah *et al.* 2023; Soputan & Kerebungu, 2020).

In recent times, the use of information and communication technology has been considered to be an enabler of financial inclusion of women by providing opportunities to formal financial services, digital payment systems and market information, thereby empowering women (Sherwani et al., 2024).

While many studies(Chhetri *et al.* 2026; Odyuo and Thangkhiew 2025; Sahu and Behera 2025;) report vulnerable and challenging conditions for self-employed people in urban informal sector, there are other studies confirming stable and productive engagements in the sector highlighting improvements in quality of women's life (Fiess *et al.* 2010; Peprah *et al.* 2023; Duque & Moreno, 2022). Such differences in findings may be influenced by the use of varied methodology, sample size and characteristics, location specific institutional and socio-economic factors for which the study was conducted (Pozarny, P. 2016).

Against this background, the present study examines the level and multidimensional nature of empowerment among self-employed women engaged in the urban informal sector of Kohima and Dimapur. The study specifically seeks to assess the extent of women's empowerment, examine the major challenges confronting self-employed women, and identify policy measures that could strengthen the sustainability of their economic engagement and contribute to sustained empowerment. By examining women's empowerment through multiple dimensions, the study aims to contribute to the literature on gender, informality, and inclusive development in the State and the North-Eastern region of India, while providing evidence relevant to policies for employment generation, livelihood enhancement, and women-centred economic development.

III. METHODS AND MATERIALS

The study employs both quantitative and qualitative methods to analyse empowerment amongst self-employed women in urban informal sector in Nagaland. 106 self-employed women respondents were selected using purposive sampling where 67 respondents are from Kohima and 39 from Dimapur. Field observations and interview schedule were used to collect responses and information from the respondents.

The collected data were then organised and the level of empowerment of self-employed women were analysed using the major dimensions: Female Work Participation Index (FWPI), Female Income Index (FII), Female Decision-Making Index (FDMI) and Female Literacy Index (FLI). Each of the four dimensions were assigned three sub-components with a total of 12 variables where self-employed women respondents rated their perception, experiences and conditions on the basis of 5 points Likert (Likert, 1932) scale ranging from 1 to 5 measuring overall women empowerment index. The first dimension is the Female Work Participation Index (FWPI) which covers perception such as satisfaction on working hours and days, working conditions, location and perceived safety of workplace. The Female Income Index (FII) which is the second-dimension measuring women empowerment on the amount of income earned from the enterprise where income range were assigned for 5 scales, family support on initial investment to set up the enterprise and perceived satisfaction over customer responses in terms of preferences and demand. Female Decision-Making Index (FDMI) encompasses decision making authority related to the enterprise, management and utilization of income and decision-making influence over matters relating to children and family, support and degree of cooperation from family in decision-making process. The fourth dimension is the Female Literacy Index (FLI) which covers perception and satisfaction level on matters such as suitability of attained education level to the current enterprise, knowledge and adequate training relevant for the enterprise.

All the dimensions were assigned equal weightage considering that each variables contributes equally in determining women empowerment. The weighted average

ISSN No:-2456-2165 https://doi.org/10.38124/ijisrt/26oct1551

of the sub-components for each of the four dimensions were computed, followed by construction of Index for each of the indicators using the method given below:

$$M_{ij} = \frac{X_{ij} - Min(X_{ij})}{Max(X_{ij}) - Min(X_{ij})} \quad (1)$$

Where, M_{ij} = index for the *i*th dimension, corresponding to *jth* respondent

Here, (X_{ij}) = weighted value of the three variables in *i*th dimension.

$Max(X_{ij})$ = Maximum observed weighted value of the ith dimension.

$Min(X_{ij})$ = Minimum observed weighted value of the ith dimension.

The four indices: The Female Work Participation Index (FWPI), Female Income Index (FII), Female Decision-Making Index (FDMI) and Female Literacy Index (FLI) were derived using equations (2), (3), (4) and (5) respectively as given below:

$$FWPI_j = \sum_{i=1} M_{ij} \quad (2)$$

$$FII_j = \sum_{i=2} M_{ij} \quad (3)$$

$$FDMI_j = \sum_{i=3} M_{ij} \quad (4)$$

$$FLI_j = \sum_{i=4} M_{ij} \quad (5)$$

Following the computation of the index for all the four dimensions, the respondents were then distributed into three categories based on the index scores where the value ≤ 0.350 are placed in low empowerment, value >0.350 ≤ 0.700 are placed in the moderately empowered level and values >0.700 are placed in the highly empowered category. Cross tabulation is then prepared and descriptive analyses were done to assess the distribution of self-employed women respondents across the three levels of empowerment for each dimension.

For construction of the composite Women Empowerment Index *(WEI)*, the weighted average of the four equally weighted indices (FWPI, FII, FDMI, FLI) for each self-employed woman are then computed (M., 2021).

The resulting WEI values are then categorised into three levels where the value ≤ 0.350 are placed in low empowerment, value >0.350 ≤ 0.700 are placed in the moderately empowered level and values >0.700 are placed in the highly empowered category.

This classification is then used in assessing composite women empowerment index for self-employed women in urban informal sector, resulting in comprehensive analysis of the multidimensional nature of women empowerment.

IV. RESULTS AND DISCUSSIONS

- *Demographic Profile of Self-Employed Women Respondents:*

A brief demographic profile of self-employed women in urban informal sector is presented in the table given below which include age, marital status, educational level, location of enterprise and years of engaging in the enterprise. The responses were collected through field observation and interview schedule.

Table 1 Demographic Profile of self-Employed Women

Particulars	Classifications	Kohima	Dimapur	All
Age	15-25	6 (9.00)	4 (10.30)	10 (9.43)
	26-45	44 (65.70)	23 (59.00)	67 (63.20)
	46-59	17 (25.40)	12 (30.80)	29 (27.35)
Marital Status	Married	40 (59.70)	28 (71.80)	68 (64.15)
	Unmarried	24 (35.80)	9 (23.10)	33 (31.13)
	Divorcee/separated	3 (4.50)	2 (5.10)	5 (4.71)
Education Level	Illiterate	9 (13.40)	15 (38.50)	24 (22.64)
	Below Matriculate	45 (67.2)	17 (43.60)	62 (58.49)
	Matriculate	13 (19.4)	**7** (17.90)	20 (18.86)
Location of work	Permanent Shed	27 (40.29)	12 (30.76)	39 (36.79)

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	Pavement	23 (34.32)	21 (53.84)	44 (41.50)
	Home	12 (17.91)	3 (7.69)	15 (14.15)
	Online	5 (7.46)	3 (7.69)	8 (7.54)
Years of engaging in the enterprise	0 -2 Years	16 (23.90)	6 (15.10)	22 (20.74)
	2-5 Years	12 (17.90)	12 (30.80)	24 (22.64)
	6-10 Years	10 (14.90)	10 (25.60)	20 (18.86)
	Above 10 years	29 (43.30)	11 (28.2)	40 (37.73)

Source: Field Survey 2024

- Note: Figures in Parentheses indicates Percentages.

Table 1 shows that majority of self-employed women respondents falls in the age group of 26 to 45 with 63.20% reflecting engagement of high middle-aged population workforce. 64.15% of respondents are married, 31.13% are unmarried and 4.71% are divorced or separated showing engagement of women in the sector irrespective of marital status. The urban informal sector also includes women from different educational level where around 20 % of the respondents are illiterate, 58.49% below matriculate and almost 20% are above matriculate. However, it also indicates that the sector attracts women with lower levels of education as almost 80% of the respondents are below matriculate. The table also reflects evidence of high concentration of respondents in undertaking business on the pavement in the form of street vending with 41.50% while it also illustrates the emergence of home-based employment and venturing into other business platforms like online purchases and sales of products. The data also reveals that the informal sector sees a high rate of retention of people with 37.73% being engaged in the enterprise for more than 10 years. Correspondingly, it continues to attract new entrants to the sector showing 20.74% respondents being engaged for less than 2 years.

Empowerment is a multidimensional concept extending beyond economic or monetary sufficiency. Therefore, this section presents an elaborate analysis of the four dimensions of women empowerment considered in the present study.

➢ *Women Work Participation Index:*

Participation in economic activities by women is a significant dimension of women empowerment. Higher female work participation can enhance household income generation and overall inclusive growth in urban development. Yet, mere participation in economic activities does not necessarily enhance empowerment. Rather the nature and quality of employment determine empowerment through work participation. The Female Work Participation Index is being constructed to assess the extent of women's empowerment covering areas such as satisfaction with working hours and working conditions, accessibility of location and perceived safety of workplace which are requisites for the attainment of livelihood and overall empowerment.

Table 2 Distribution of Respondents by Female Work Participation Index

Level of Empowerment	**Kohima**	**Dimapur**	**All**
Low	12 (17.91)	14 (35.89)	26 (24.52)
Moderate	5 (7.46)	10 (25.64)	15 (14.15)
High	50 (74.62	15 (38.46)	65 (61.32)
All	67 (100.00)	39 (100.00)	106 (100.00)

Source: Author's computation from primary data

- Note: Figures in parentheses are percentages

Table 2 reflects the distribution of respondents by Female Work Participation Index among self-employed women in Kohima and Dimapur. It can be seen that more than half of the respondents (61.32%) of the combined sample of both the cities falls in the category of high level of empowerment, while 24.52% are in the category of low empowerment and 14.15% in the moderate level of empowerment. The level of empowerment between Kohima and Dimapur is varied where, in Kohima, nearly 75% of respondents are in the category of high empowerment indicating favourable employment opportunities relating to work hour, working conditions, locational advantages and

ISSN No:-2456-2165 https://doi.org/10.38124/ijisrt/26oct1551

workplace safety, while in Dimapur it is only 38.46% presenting a less favourable employment opportunities and comparatively higher proportion of respondents in the category of moderate and low level of empowerment. The difference in the empowerment level between the two cities indicates that the variations in employment opportunities such as market environment, urban infrastructure, institutional support etc are factors determining empowerment of women. Qualitative data derived from personal interview also reflects the proactive role taken by the local community and NGOs such as Youth Organizations, Entrepreneurs Associate and Kohima Municipal Council etc. leading to better empowerment for self-employed women in Kohima as compared to the conditions in Dimapur.

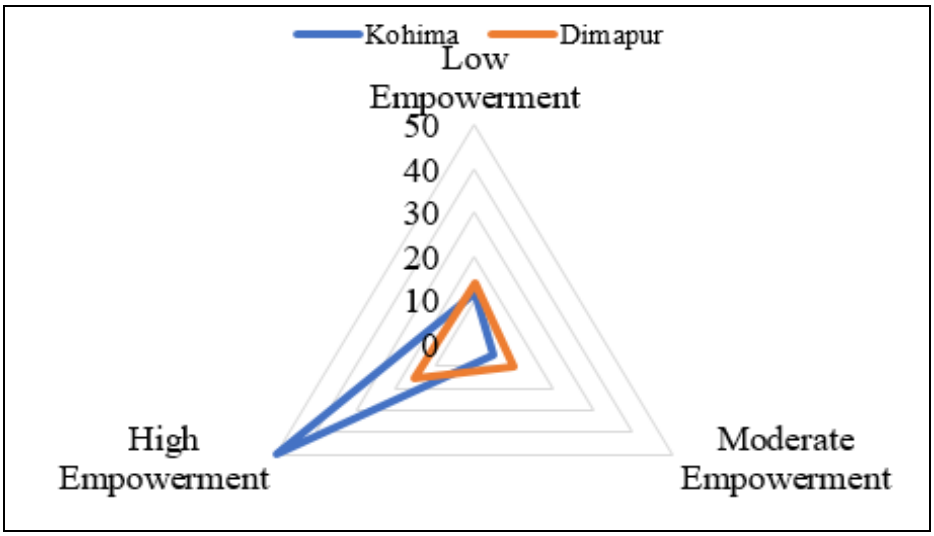


Fig 1 Distribution of Respondents by Female Work Participation Index

➢ *Female Income Index:*

Female income index measures the level of women empowerment through income generation, support from family for initial investment, satisfaction with earnings from the enterprise and customer responses. A higher income index indicates better economic security and increased capacity for women to improve livelihoods through self-employment.

Table 3 Distribution of Respondents by Female Income Index

Level of Empowerment	Kohima	Dimapur	All
Low	22 (32.83)	19 (48.71)	41 (38.67)
Moderate	9 (13.43)	9 (23.07)	18 (16.98)
High	36 (53.73)	11 (28.20)	47 (44.33)
All	67 (100.00)	39 (100.00)	106 (100.000

Source: Author's computation from primary data

- Note: Figures in parentheses are percentages

Table 3 reveals variation in results of the two districts in the income related empowerment. The aggregated data shows that 44.33% of women respondents falls in the category of high empowerment, while 38.67% falls in the category of low empowerment highlighting disparity in the level of empowerment related to income. 16.98% are in moderate level.

In Kohima, 53.73% of respondents are in the category of high empowerment and 32.83% in the low empowerment reflecting better economic status as compared to Dimapur where 48.71% of the respondents are in the category of low empowerment and only 28.20% are in high level of income empowerment. This may be attributed to better business environment, suitable climatic conditions, higher value products, institutional support from family and community enabling women to generate relatively higher income, stability and greater satisfaction with the income earned from the enterprise. The visible disparity also highlights the possible influence of economic environment, market structure, and institutional support mechanism in facilitating women to earn higher and stable income

Overall, the index suggests that the urban informal sector has the potential to promote women empowerment and accelerate economic development by providing financial services, credit provisions, entrepreneurship training and market linkage.

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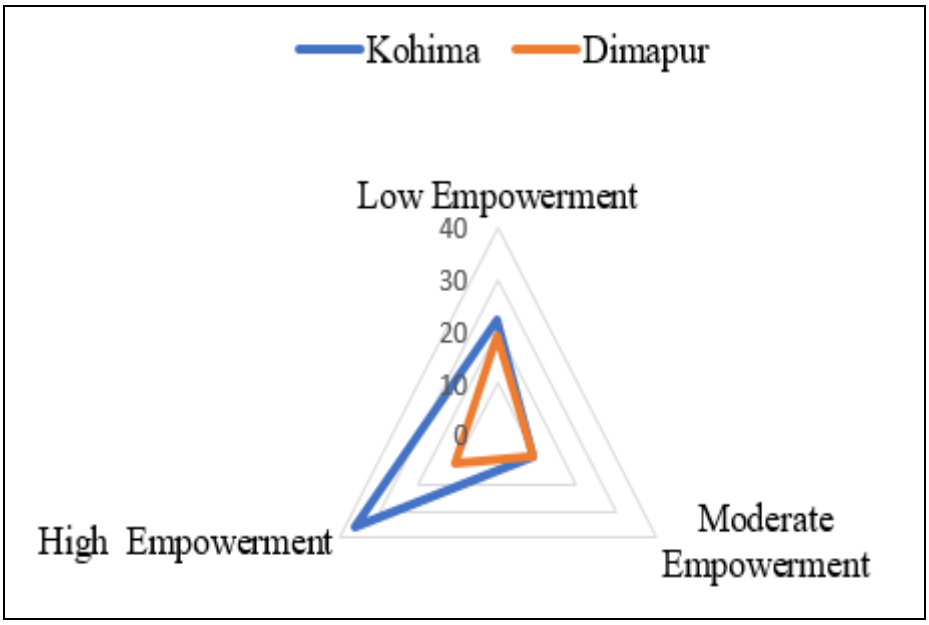


Fig 2 Distribution of Respondents by Female Income Index

➢ *Female Decision-Making Index:*

The Women Decision-Making Index is a measure that considers autonomy and participation of women in decisions relating to the enterprise, management and utilization of income and influence over matters relating to children and family; support and degree of cooperation from family in decision-making process relating to any livelihood activities.

Table 4 Distribution of Respondents by Women Decision Making Index

Level of Empowerment	Kohima	Dimapur	All
Low	16 (23.88)	16 (41.02)	32 (30.18)
Moderate	18 (26.86)	6 (15.38)	24 (22.64)
High	33 (49.25)	17 (42.58)	50 (47.16)
All	67 (100.00)	39 (100.00)	106 (100.00)

Source: Author's computation from primary data

- Note: Figures in parentheses are percentages

The findings show that 47.16% of the women respondents fall under the high empowerment in decision making index while 22.64% are in moderate level. 30.18% remain in the low level of empowerment. Almost half of the respondents in the high level of empowerment implies that urban informal self-employed women participate actively in household decision making on economic activities, family affairs and management of income. However, a sizeable proportion of women respondents in the low empowerment category reflects societal norms constraining the independent decision making of women.

Data also reveals variation in empowerment between the two cities. Kohima exhibits higher empowerment with 49.25% of respondents in the high empowerment category as compared to Dimapur with 42.58%. Similarly, in the moderate level, 26.86% of respondents in Kohima is relatively higher as compared to 15.38% in Dimapur. 23.88% for Kohima in the low empowerment as compared to Dimapur with 41.02% indicates that women respondents in Kohima possesses greater decision-making freedom in matters relating to the household, economic activities, management of family affairs etc., thereby contributing more to the urban informal economy. Dimapur data also indicates greater disparity in women decision making with high proportion of respondents in high and low empowerment and very few percentages in the moderate category of empowerment despite their involvement in income generating activities.

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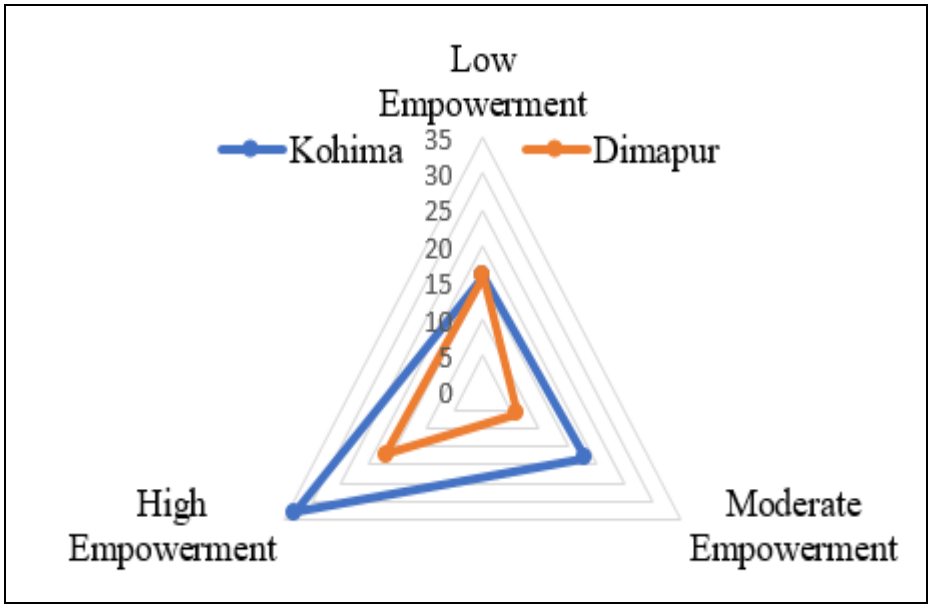


Fig. 3 Distribution of Respondents by Women Decision Making Index

➢ *Female Literacy Index:*

The Female Literacy Index is an important dimension of women empowerment. Literacy enhances women in business practices, participation in economic activities, access to information and adoption of new technologies. The index measures satisfaction of women respondents with their educational attainment and trainings acquired for advancing their participation in the economic activity of the enterprise.

Table 5 Distribution of Respondents by Female Literacy Index

Level of Empowerment	Kohima	Dimapur	All
Low	33 (49.25)	10 (25.64)	43 (40.56)
Moderate	12 (17.91)	5 (12.82)	17 (16.03)
High	22 (32.83)	24 (61.53)	46 (43.39)
All	67 (100.00)	39 (100.00)	106 (100.00)

Source: Author's computation from primary data

- Note: Figures in parentheses are percentages

The aggregated data of the two cities given in Table 5 reveals that 43.39% of the women respondents fall under the high category of empowerment related to literacy while 40.56% are in the low empowerment. 16.03% are in the moderate level of literacy empowerment. This indicates that a large proportion of women engaged in the urban informal sector lack proper access to education and have not attained trainings relevant to their business activity.

District-wise data highlights variation in literacy empowerment where Kohima exhibits relatively lower percentage of respondents in the high level of empowerment (32.83%) and higher percentage in the low level of empowerment (49.25%). The distribution implies that self-employed women in Kohima continue to operate their enterprises with minimal educational attainment as compared to women respondents in Dimapur where 61.53% are under high level of empowerment and only 25.64% are in the category of low empowerment. The moderate level of literacy empowerment in both the districts (Kohima-17.91% and Dimapur-12.82%) constitute a small proportion pointing to the non-uniformity in educational attainment and training acquisition among self-employed women in the informal sector.

The findings suggest that literacy is a significant factor in enhancing women empowerment, yet it may not guarantee concrete improvements in livelihood unless complemented with other factors such as entrepreneurship development, financial inclusion and conducive business environment.

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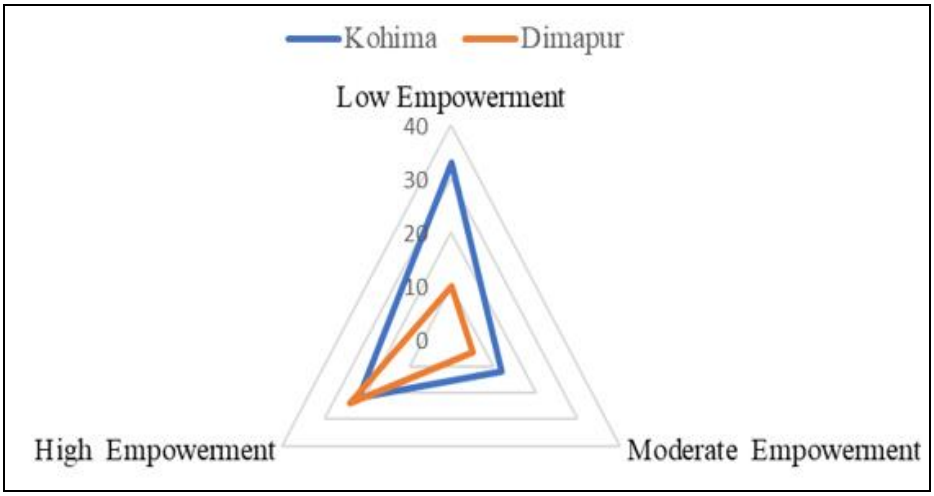


Fig 4 Distribution of Respondents by Female Literacy Index

➢ *Women Empowerment Index:*

The women empowerment index (WEI) is a composite measure of overall empowerment by integrating the four dimensions considered in the present study, namely Female Work Participation Index (FWPI), Female Income Index (FII), Female Decision-Making Index (FDMI), and Female Literacy Index (FLI). The composite index provides a comprehensive analysis of women empowerment in economic as well as social spheres. It studies self-employed women in productive activities, income generating abilities, educational attainment and decision-making power.

Table 6 Distribution of Respondents by Women Empowerment Index

Level of Empowerment	Kohima	Dimapur	All
Low	9 (13.43)	12 (30.77)	21 (19.81)
Moderate	24 (35.82)	15 (38.46)	39 (36.79)
High	34 (50.75)	12 (30.77)	46 (43.39)
All	67 (100.00)	39 (100.00)	106 (100.00)

Source: Author's computation from primary data

- Note: Figures in parentheses are percentages

Data presented in Table 6 indicates that the overall women empowerment among self-employed women respondents in the urban informal sector is 43.39% in the high category of empowerment, followed by 36.79% in the moderate level, while the low category consists of 19.81%. The concentration of respondents in the high and moderate categories implies that engaging in economic activities of urban informal sector contributes positively to women empowerment. On the other hand, more than one-fifth of the respondents in the low empowered category reflects that women continue to face challenges relating to economic, social and cultural norms.

Kohima district shows greater attainment of empowerment with 50.75% respondents falling in the high empowered category as compared to 13.43% in the low category implying that urban informal sector in Kohima occupies and important place in strengthening women economic independence, livelihood security and employment avenue. Contrastingly, in Dimapur only 30.77% falls in the high empowerment category, with the same proportion (30.77%) in the low category and 38.46% in the moderate empowerment category. This indicates that a large proportion of women respondents in Dimapur has only attained empowerment partially. The earlier findings revealing high empowerment in the dimension of Female Literacy Index for Dimapur, while showing large proportion in the moderate and low level in the composite index suggests that educational attainment alone is not sufficient to attain sustained empowerment. Hence, economic and social dimensions which include economic opportunities, productive employment, financial independence and independent decision-making power are essential for achieving empowerment in the long run.

Qualitative data drawn from interview reflects that many of the respondents from Kohima attributed improvements in their self-employment venture to an NGO called Entrepreneurs Associate for facilitating them in saving mobilization, advancing financial assistance and credits. Most respondents take independent decisions for the management and investment from the income earned from the informal activity. As compared to their decision-making power before their engagement in the activity, their influence is more after becoming self-employed as they are able to contribute in the family's income. Besides

ISSN No:-2456-2165 https://doi.org/10.38124/ijisrt/26oct1551

contributing to family income, they are able to make contributions to the various needs of the community and social events such as funeral, marriage ceremonies and religious organizations resulting in higher perceived satisfaction and empowerment level. The comparative higher empowerment in Kohima in the composite index indicates that empowerment in one dimension reinforces better outcome in the other dimension leading to overall higher empowerment.

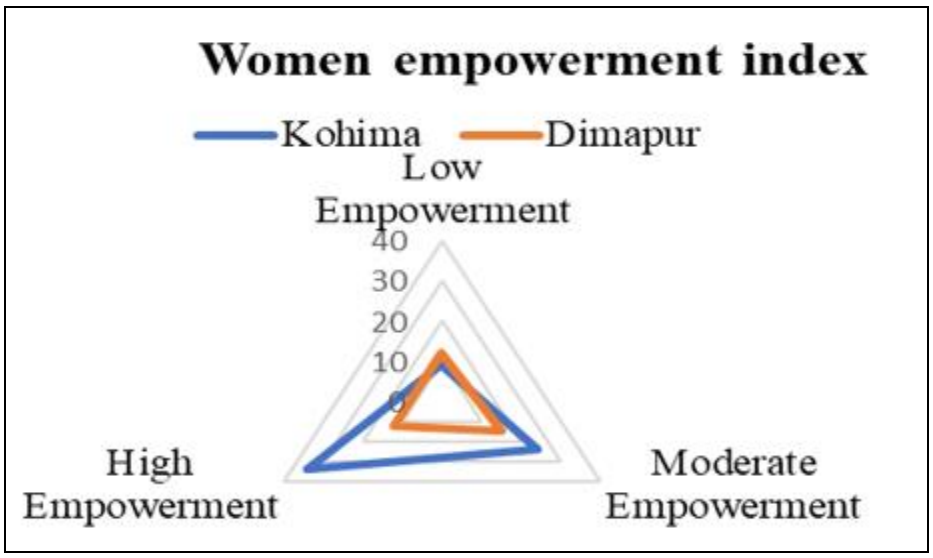


Fig 5 Distribution of Respondents by Women Empowerment Index

V. CHALLENGES

- Lack of awareness and difficulty in accessing various credit facilities and other financial support mechanisms.
- Limited access to social security programs and protection benefits.
- Family responsibilities such as caregiving and societal norms like gender roles constraints women working hours, mobility and enterprise development.
- Inadequate public infrastructure such as proper place for business and secured storage provisions, cold storages, transport facilities, public toilets, street lights and systematic waste disposal mechanisms largely affecting women vendors particularly dealing with perishable items.
- Irregular power supply adversely affecting productivity and efficiency of business. For enterprise dealing with food and other perishable items, unreliable power supply causes spoilage of products resulting in huge loss.

A. Suggestions

- Enhance space for women participation and implement policies on reservation for women for more representation in public policy making platforms.
- Strengthen skill development and entrepreneurial capacity building programs to enhance productivity and earnings.
- Promote adult literacy and digital literacy programs to improve women's capability to manage and strengthen livelihood resilience.
- Child care support in the form of creche in areas where women workers are highly concentrated for reducing the burden of unpaid care responsibilities, facilitating women workplace safety and regular work hour.
- Subsidized public transport provision for women self-employed for timely movement of procuring inputs, market access and transportation of products at ease which can reduce costs and facilitate timely and efficient participation in productive activity.
- Provide provisions for assisting in product marketing and market linkage for wider consumer markets and facilitate in accessing for credit facilities and financial assistance to reduce their dependency and risk on informal credit facility.
- Establish grievance redressal mechanisms at the municipal level for addressing issues and concerns effectively and timely for informal sector participants.

VI. LIMITATIONS

Employing self-reported data alone in the study are subject to personal biases and may reflect short term perspective only. More qualitative insights from the respondents may be collected for a deeper understanding which is constraint by a number of factors such as time, reluctance of sharing to a stranger whom they were meeting for the first time. The study is specific to women and therefore the findings cannot be generalized or considered true for both men and women or everyone engaged in the sector.

VII. CONCLUSION

Based on the findings, the study concludes that urban informal sector in Nagaland has the potential to generate productive employment opportunities, enhance income generation and the overall livelihood opportunities to promote women empowerment. In an economy where the formal labor market is limited to absorb all the labor, it is

ISSN No:-2456-2165 https://doi.org/10.38124/ijisrt/26oct1551

necessary to bring an improvement in women human capital, increased political participation and other public utility services which will bring about an attainment of the overall sustainable livelihood framework and inclusive growth principles, although the degree of empowerment varies across dimensions and locations. By examining women's empowerment through multiple dimensions, the study contributes to the literature on gender, informality, and inclusive development in the State and the North-Eastern region of India, while providing evidence relevant to policies for employment generation, livelihood enhancement, and women-centred economic development. The multidimensional nature of women empowerment underscores further studies into other dimensions alongside the existing economic dimensions not considered in the present study such as social empowerment index, digital empowerment index, psychological empowerment index and institutional support index which will provide a more holistic and comprehensive evidence to strengthen the overall women participation and empowerment in an increasingly dynamic, technology driven and competitive economy.

REFERENCES

[1.] Banerjee, S., & De, N. (2018). India's Informal Employment in the Era of Globalization: Trend and Challenges. IOSR Journal of Business and Management, 20(4), 12-20.

[2.] Bhuyan, Z. (2013). An Urban-Spatial Analysis of the Women in the Informal Sectors of Greater Guwahati City of Assam, India. Space and Culture, India, 1(1) 71-82.

[3.] Boeri, N. (2018). Challenging the Gendered Entrepreneurial Subject: Gender, Development, and the Informal Economy in India. Gender & Society 32(2):157–79. doi:10.1177/0891243217750119.

[4.] Chakraborty S. (2021). Women in the Indian Informal Economy. ISST, New Delhi.

[5.] Chhetri, P. C., Indira, K., & Natarajan, R. R. (2026). Breaking the Glass Ceiling: Unveiling Gender Inequality among India's Informal Sector Firms. Journal of Small Business & Entrepreneurship 38(2):203–34. doi:10.1080/08276331.2025.2561302.

[6.] Dixit, A., & Pandey, A. K. (2020). An Empirical Investigation of Inequality among the Self-Employed Women Entrepreneurs in Informal Sector in India. International Journal of Business and Globalisation 24(1):57. doi:10.1504/IJBG.2020.104957.

[7.] Emon, M. M. H., & Nipa, M. N. (2024). Exploring the Gender Dimension in Entrepreneurship Development: A systematic Literature Review in the Context of Bangladesh. Westcliff International Journal of Applied Research, 8(1). SSRN. https://ssrn.com/abstract=5122782

[8.] Fiess, N. M., Fugazza, M., & Maloney, M. F. (2010). Informal Self-Employment and Macroeconomic Fluctuations. Journal of Development Economics 91(2):211–26. doi:10.1016/j.jdeveco.2009.09.009.

[9.] Hart, K. (1973). Informal Income Opportunities and Urban Employment in Ghana. The Journal of Modern African Studies, 11(1), 61-89. http://www.jstor.org/stable/159873

[10.] ILO (2026). Employment and Social Trends 2026, World of Work Series, Geneva: International Labour Office, 2026. ISBN: 9789220430552 (print); 9789220430569 (web PDF) ISSN: 3106-941X (print); 3106-9428 (web) DOI: https://doi.org/10.54394/AHRT2681

[11.] Likert, R. (1932). A Technique for the Measurement of Attitudes. Archives of Psychology. 22(140):55.

[12.] M., Giribabu. 2021. Nagaland State Rural Livelihood Mission (NSRLM) and Sustainable Development: Some Field Based Evidences. Economic Affairs 66(1). doi:10.46852/0424-2513.1.2021.5.

[13.] Magidimisha, H. H. & Gordon, S. (2015). Profiling South African Gender Inequality in Informal Self-Employment. Journal of Gender Studies 24(3):275–92. doi:10.1080/09589236.2013.841569.

[14.] Maloney, W.F. (2004). Informality Revisited. World Development, 32(7), 1159–78.

[15.] Odyuo, M., & Thangkhiew, D. W. (2025). What Determines the Socio-Economic Vulnerability of Women in the Informal Sector? Insights from a Case Study of Vendors in Nagaland, India. The International Journal of Community and Social Development 7(1):31–56. doi:10.1177/25166026251319162.

[16.] Peprah, C., Peprah, V., & Ocloo, K. A. (2023). Improving the Socio-Economic Welfare of Women through Informal Sector Activities in Ghana. Environment, Development and Sustainability 25(4):3005–28. doi:10.1007/s10668-022-02161-5.

[17.] Duque, P., Armando, J. & Moreno, S.E.C. (2022). Informal Entrepreneurship and Women's Empowerment – the Case of Street Vendors in Urban Colombia. International Journal of Gender and Entrepreneurship 14(2):188–212. doi:10.1108/IJGE-04-2021-0068.

[18.] Pozarny, P. (2016). Gender Roles and Opportunities for Women in Urban Environments. Governance and Social Development Resource Centre (GSDRC) Helpdesk Research Report. Birmingham: GSDRC and University of Birmingham.

[19.] Sahu, P. R., and Behera, D. K. (2025). Barriers to Women's Empowerment in India's Informal Sector: Structural and Socio-Economic Constraints. Discover Sustainability 6(1):514. doi:10.1007/s43621-025-01398-0.

[20.] Sharma, K. (2012). Role of Women in Informal Sector in India. Journal of Humanities and Social Sciences, 4(1), 29-36.

[21.] Sherwani, F. K., Shaikh, S.Z., Behal, S. & Siddiqui, M.S. (2024). Determinants of Financial Inclusion among Women-Owned Enterprises: A Case Study of the Informal Sector. Arab Gulf Journal of Scientific Research 42(4):1340–58. doi:10.1108/AGJSR-05-2023-0193.

[22.] Snyder, KA. (2004). Routes to the Informal Economy in New York's East village: Crisis, Economics and Identity. Sociological Perspectives, 47(2), 215–40.

ISSN No:-2456-2165 https://doi.org/10.38124/ijisrt/26oct1551

[23.] Soputan, G. J. & Kerebungu, F. (2020). Women's Economic Empowerment in the Informal Sector. SALASIKA: Indonesian Journal of Gender, Women, Child, and Social Inclusion's Studies 3(1):35–47. doi:10.36625/sj.v3i1.57.

[24.] Williams, C. C. & Youssef, Y. (2013). Evaluating The Gender Variations in Informal Sector Entrepreneurship: Some Lessons from Brazil. Journal of Developmental Entrepreneurship 18(01):1350004. doi:10.1142/S1084946713500040.