

CAPACITY BUILDING AND SKILL DEVELOPMENT AMONG RURAL YOUTH**Siddharth Giri¹, N. M. Vegad² and Dhruv N. Patel³**

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ABSTRACT

*Capacity building and skill development have become central components in strengthening employability, entrepreneurship and socio-economic empowerment among rural youth. This study assesses the effectiveness, utilization patterns and influencing factors of capacity building programmes in Central Gujarat. A sample of 120 rural youths was selected using simple random sampling. Data were collected through a structured questionnaire and analysed using descriptive statistics, correlation and multiple regression. Results reveal that 58.33% of respondents exhibited a medium level of skill development, followed by 22.50% with a high level and 19.17% with a low level. Training participation, education, and access to extension services emerged as strong determinants of skill enhancement. Correlation analysis showed significant positive relationships between skill development and educational qualification ($r = 0.331^{**}$), training exposure ($r = 0.412^{**}$) and ICT literacy ($r = 0.287^{*}$). Regression analysis further confirmed that training exposure, motivation level and institutional support were significant predictors ($R^2 = 0.547$). The study concludes that structured training, practical learning and exposure to ICT tools significantly enhance rural youths' capacity building. Strengthening institutional linkages, developing need-based training modules and improving extension support mechanisms are essential for sustainable rural development.*

Keywords: employability, effectiveness, utilization patterns, training, regression analysis

INTRODUCTION

Rural youth form a significant share of the workforce in developing countries like India and are key agents of agricultural and rural development. However, unemployment, limited skills and inadequate exposure to modern technologies and markets restrict their productive engagement. In response, capacity building and skill development programmes have been promoted to enhance competencies, improve employability and foster entrepreneurship among rural youth.

In agricultural extension, **capacity building** refers to the process of enhancing knowledge, skills, and abilities for effective performance, while **skill development** focuses on improving technical, managerial, and soft skills. The term **rural** denotes areas primarily dependent on agriculture and **youth** generally refers to individuals in the 15–35 age group. These concepts are central to strengthening human resources in agriculture and allied sectors.

Despite several government and institutional initiatives in India, studies indicate that while training programmes improve knowledge and employability, issues such as uneven participation, varying skill outcomes and low retention persist (Kumar & Singh, 2020; Mehra,

2021). Further, most research has focused on programme effectiveness rather than examining the socio-economic characteristics of rural youth, their participation behaviour, and the factors influencing skill enhancement. In Gujarat, such empirical evidence is particularly limited (Rathod et al., 2023; Sharma & Roy, 2024).

Therefore, there exists a clear research gap in understanding the socio-economic profile of rural youth, their extent of participation in capacity building programmes, the level of skills acquired, and the relationship between personal factors and skill development (Pal et al., 2025; Nandania et al., 2025). Addressing this gap is important for agricultural extension systems to design need-based and effective youth-oriented interventions (Sarmah et al., 2024; Patel et al., 2024; Patel et al., 2023; Patel & Vinaya, 2022).

The present study is thus justified as it will provide location-specific insights for improving capacity building strategies and strengthening rural youth empowerment and livelihood development

Statement of the problem

Although various initiatives promote skill development, gaps exist in:

- (1) Awareness of training programmes
- (2) Quality and practicality of modules
- (3) Access to appropriate technologies
- (4) Motivation levels and behavioural constraints
- (5) Institutional support and follow-up services

Understanding these challenges is essential to design more relevant and impactful programmes.

OBJECTIVES

- (1) To study the profile of rural youth in the selected area
- (2) To analyse the capacity building and skill development levels among rural youth
- (3) To determine the relationship between personal, socio-economic and psychological variables with skill development
- (4) To identify significant predictors influencing capacity building and skill enhancement

METHODOLOGY

The present study was conducted in selected villages of Anand, Umreth and Borsad blocks of Central Gujarat of Anand district, as the region represents a progressive agricultural belt with active implementation of extension and capacity building programmes for rural youth. The study area was purposively selected due to its accessibility, diversity in training exposure and relevance to agricultural extension interventions.

The target population comprised rural youth in the age group of 18–35 years residing in the selected villages. A list of eligible respondents was prepared with the help of local extension agencies and village records, forming the sampling frame. From this, a sample of 120 respondents was selected using simple random sampling to ensure equal representation and minimize selection bias. The sample size was determined based on feasibility, resource availability and adequacy for statistical analysis, as suggested in social science research for obtaining reliable and generalizable results.

An **ex-post facto research design** was adopted, as the study aimed to analyze existing conditions and relationships without manipulating any independent variables. The dependent variable of the study was the level of skill development among rural youth, operationalized as the composite score of technical, managerial and soft skills acquired through participation in capacity building programmes. Independent variables included socio-

economic and personal characteristics such as age, education, occupation, income, training exposure and motivation.

A structured interview schedule was developed based on the objectives of the study and relevant literature. The instrument consisted of both closed and open-ended questions to capture quantitative as well as qualitative information. The schedule was pre-tested on a small group of respondents outside the study area to ensure clarity, relevance, and consistency. Necessary modifications were made based on feedback. Reliability of the instrument was ensured using appropriate methods such as internal consistency checks, while content validity was established through expert consultation from faculty members in agricultural extension.

Data were collected through a combination of online (Google Forms) and personal interviews to ensure maximum coverage and accuracy of responses. Respondents were informed about the purpose of the study and their consent was obtained prior to data collection, ensuring adherence to ethical research practices. Confidentiality and anonymity of the respondents were maintained throughout the study.

The collected data were coded, tabulated and analyzed using appropriate statistical tools such as frequency, percentage, mean and standard deviation for descriptive analysis and correlation and multiple regression analysis for examining relationships between variables. Data analysis was carried out using statistical software such as SPSS (version XX) and MS Excel.

RESULTS AND DISCUSSION

Table 1: Profile of Respondents

(n = 120)

Variable	Category	Frequency	Percentage
Gender	Male	68	56.67%
	Female	52	43.33%
Education	Up to Secondary	24	20.00%
	Higher Secondary	47	39.17%
	Graduation & above	49	40.83%
Annual Income	Up to 1 lakh	18	15.00%
	1–3 lakh	46	38.33%
	3–5 lakh	34	28.33%
	Above 5 lakh	22	18.34%
Training Exposure	No training	27	22.50%
	1–2 trainings	61	50.83%
	>2 trainings	32	26.67%
ICT Literacy	Low	33	27.50%
	Medium	59	49.17%
	High	28	23.33%

The socio-economic profile of respondents was analyzed using frequency and percentage, as these tools help in summarizing categorical data and understanding

distribution patterns clearly. The findings revealed that the majority of respondents were male (56.67%), while females constituted 43.33 per cent. In terms of education, most respondents had higher secondary (39.17%) and graduation or above (40.83%) qualifications, indicating a relatively educated sample. Regarding annual income, the largest group (38.33%) belonged to the ₹1–3 lakh category, followed by 28.33 per cent in the ₹3–5 lakh range. Training exposure analysis showed that 50.83 per cent of respondents had attended 1–2 training programmes, while 26.67 per cent had participated in more than two trainings. ICT literacy was found to be moderate for nearly half of the respondents (49.17%). Overall, the results indicate that most respondents were moderately educated, had some level of ICT awareness and had participated in at least one capacity building programme.

This finding aligns with Kumar and Singh (2020), who reported that rural youth participating in capacity building programmes tend to have moderate to higher educational levels, facilitating better learning and adoption.

Table 2: overall skill development level (n=120)

Sr. No.	Skill Level	Frequency	Percentage
1	High	27	22.50%
2	Medium	70	58.33%
3	Low	23	19.17%

The overall skill development level was also analyzed using frequency and percentage distribution to classify respondents into categories. The results indicated that 58.33 per cent of respondents had a medium level of skill development, followed by 22.50 per cent with a high level and 19.17 per cent with a low level. This suggests that while training programmes have had a positive impact, there is still scope for improving skill enhancement among rural youth.

Similar observations were made by Sharma and Roy (2024), who reported moderate skill retention among rural youth due to gaps in follow-up support and institutional linkage.

Table 3: Correlation between profile variables and skill development (n=120)

Sr. No.	Variable	r-value
X ₁	Education	0.331**
X ₂	Training Exposure	0.412**
X ₃	ICT Literacy	0.287*
X ₄	Motivation Level	0.304**
X ₅	Mass Media Exposure	0.118 (NS)
X ₆	Annual Income	0.094 (NS)
X ₇	Age	-0.062 (NS)

* Significant at 0.05 level

** Significant at 0.01 level

To examine the relationship between independent variables and skill development, correlation analysis was used, as it helps in measuring the degree and direction of association between variables. The results showed that education ($r = 0.331^{**}$) and training exposure ($r = 0.412^{**}$) had a strong and highly significant positive relationship with skill development, indicating that higher education and greater training participation lead to better skill outcomes. Similarly, ICT literacy ($r = 0.287^{*}$) and motivation level ($r = 0.304^{**}$) were also found to have significant positive relationships, suggesting that access to digital tools and personal drive play important roles in skill enhancement. On the other hand, variables such as mass media exposure ($r = 0.118$), annual income ($r = 0.094$), and age ($r = -0.062$) were found to be non-significant, indicating minimal or no influence on skill development.

This is consistent with findings of Chandre et al. (2022), who reported that skill acquisition is more influenced by training quality and personal attributes than demographic factors.

Table 4: Regression Analysis (Skill Development as Dependent Variable) (n=120)

Predictor	β	t-value	p-value	Relationship
Education	0.241	2.56	0.012*	Significant Positive
Training Exposure	0.362	4.11	0.000**	Highly Significant
ICT Literacy	0.198	2.27	0.025*	Significant Positive
Motivation Level	0.274	3.04	0.003**	Highly Significant
Institutional Support	0.222	2.35	0.020*	Significant Positive
Gender	-0.061	-0.79	0.432	NS

Model Summary:

$$R^2 = 0.547$$

$$\text{Adjusted } R^2 = 0.524$$

$$F = 19.62 \text{ (} p = 0.000 \text{)}$$

To identify the most influential predictors of skill development, multiple regression analysis was employed, as it helps in determining the combined and individual effect of multiple independent variables on a dependent variable. The results revealed that training exposure ($\beta = 0.362$, $p < 0.01$) was the most significant predictor, followed by motivation level ($\beta = 0.274$, $p < 0.01$), education ($\beta = 0.241$, $p < 0.05$), institutional support ($\beta = 0.222$, $p < 0.05$), and ICT literacy ($\beta = 0.198$, $p < 0.05$), all showing significant

positive relationships. Gender ($\beta = -0.061$) was found to be non-significant, indicating that skill development was not influenced by gender differences in the study area. The model summary showed an R^2 value of 0.547 and adjusted R^2 of 0.524, meaning that approximately 54.7 per cent of the variation in skill development was explained by the selected independent variables. The F-value (19.62, $p < 0.01$) further confirmed that the model was statistically significant and reliable.

The strong effect of training exposure is also supported by Chandre et al. (2022), who concluded that repeated and practical training significantly improves competency levels among participants. The non-significant effect of gender indicates equitable outcomes across male and female respondents, which reflects improving inclusiveness in extension programmes.

CONCLUSION

Rural youth, despite being a crucial resource for agricultural and rural development, face challenges such as inadequate skills, limited training exposure and insufficient institutional support, which hinder their effective participation. The findings of the study revealed that a majority of respondents possessed a medium level of skill development, while factors such as education, training exposure, ICT literacy, motivation and institutional support showed significant positive influence. Among these, training exposure emerged as the most critical determinant, explaining a substantial proportion of variation in skill development, whereas variables like age, income and gender had negligible effects.

Based on this evidence, it can be concluded that capacity building and skill development programmes are effective but not fully optimized, as gaps still exist in programme reach, quality and follow-up mechanisms. The results highlight that skill enhancement among rural youth is largely dependent on access to quality training, supportive institutions and individual motivation rather than demographic characteristics alone. The implications of the study suggest that agricultural extension systems must focus on strengthening need-based and practical training programmes, enhancing ICT integration, improving institutional linkages and ensuring continuous mentoring and support. Such targeted interventions will significantly contribute to improving employability, promoting entrepreneurship and achieving sustainable rural development.

RECOMMENDATIONS

Based on the findings, a few practical steps can make these programmes more effective:

Extension agencies should focus on simple, practical,

hands-on training instead of theory. Using mobile apps, WhatsApp groups, and videos can help reach more youth and keep them engaged. Motivating youth through success stories and peer learning can also improve participation. Policy makers need to ensure not just more programmes, but better quality ones. Strong follow-up support, proper monitoring and linking youth with jobs or entrepreneurship opportunities are important. Special efforts should be made to include women and less-privileged youth. KVKs and NGOs should provide continuous support even after training ends. Regular guidance, field visits and linking youth with markets and financial institutions can help them apply what they learn. Agri-tech firms can play a big role by creating easy-to-use digital tools in local languages. Apps, short videos and online advisory services can make learning faster and more accessible.

Overall, the focus should be on practical training, better communication, digital support and inclusive participation, so that rural youth can truly benefit and move towards employment and entrepreneurship.

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CONFLICT OF INTEREST

The authors declare that there is no conflict of interest regarding the publication of this paper.

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