



# Exploring financial behaviour and scheme awareness through chi-square analysis: evidence from rural Gujarat

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**Abstract:** This study examines the financial behaviour, gender disparities and awareness of VKY<sup>1</sup> among tribal communities in Tapi district, Gujarat, using descriptive statistics and chi-square analysis. It investigates how awareness and income from VKY vary with education, age and gender, drawing on relevant economic and development theories to contextualise the findings. Based on primary data from 161 respondents, results reveal significant associations between education and income, age and scheme awareness and level of education and awareness with moderate effect sizes. The research concludes that bridging these gaps through financial literacy, simplified process and gender inclusive policy interventions is critical to achieving inclusive and sustainable rural transformation in tribal life in Gujarat.

While the scheme has fostered positive changes, targeted interventions are needed to address persistent gaps. VKY has the potential to improve conditions for the tribal populations in the Tapi district but further refinements are essential to fully realize its benefits.

**Keywords:** Financial behaviour, sustainable development, Gender disparities, rural transformation and formal credit.

## 1. INTRODUCTION:

The transition from rural development to rural transformation in India marks a shift from basic infrastructure and welfare support to a more holistic approach emphasizing self-sufficiency, economic diversification and social empowerment. While traditional rural development focused on poverty alleviation, employment and infrastructure, rural transformation integrates entrepreneurship, digital inclusion, skill development and market driven growth. Key government initiatives such as MGNREGA, Digital India and VKY have facilitated this shift by promoting technology use, financial inclusion and capacity building.

Despite years of rural development programmes and Gujarat's strong economic growth, tribal districts like Tapi remain left out of the state's transformation story. Financial habits are central to understanding any community's socioeconomic conditions. In Tapi District, these habits are shaped by traditional customs, limited access to banks and formal sources of finance and varying levels of financial knowledge. Gender also plays an important role, studies show that men usually make large spending decisions, while women handle day to day household finances, creating an informal but clear division of financial roles. After India gained independence, women's participation in financial decisions in rural areas remained very low due to deeply rooted patriarchal norms and limited educational and economic opportunities. Although women manage household budgets and savings, major financial decisions like land purchase, investment or borrowing continue to be dominated by men. This pattern is also visible among tribal households in Tapi, where women's financial roles are largely confined to managing daily needs rather than formal savings, credit or investment decisions.



The Life Cycle Hypothesis *suggests that people plan their savings and spending based on expected income across life stages*. However, in Tapi, where income is seasonal and uncertain due to rain fed farming, households often cannot save as predicted by this theory, leading to dependence on informal loans. Similarly, the Permanent Income Hypothesis *suggests that people spend based on long term income expectations, but in tribal areas with unstable incomes, immediate needs take precedence over long term planning, limiting financial growth*.

Education is a key driver of change in financial behaviour. Families where members, especially women have higher education tend to save more, invest and use formal banking services. The Human Capital Theory *concludes that higher education levels increase skills and knowledge, leading to better financial decisions and income management*. However, many people in Tapi still face barriers to quality education, keeping them dependent on informal credit systems and traditional saving methods, limiting their ability to join the formal financial sector.

Urbanisation and economic growth in Gujarat are slowly influencing tribal financial habits. As cities expand and economic opportunities grow, tribal communities face the challenge of keeping cultural practices while adapting to new market demands, creating tension as they balance tradition with modern ways of living and earning.

Tapi District, separated from Surat in 2007, has a largely tribal population, with nearly 90% living in villages. Despite natural resources and a good location, it struggles with poverty, poor infrastructure and dependence on rain fed farming, making its economy fragile and exposed to weather and market risks. Lack of health facilities, education and sustainable job opportunities, combined with high migration rates, worsens these problems and creates a cycle of poverty with generational impacts.

Globally, rural communities remain important but continue to face longstanding challenges. Developed countries like the United States and Germany have industrialised rural areas, improved technology and linked rural and urban economies. China's rural transformation through land reforms, rural industries and global market integration reduced poverty and diversified livelihoods.

The Structural Change Theory *suggests economic development occurs when labour moves from agriculture to more productive sectors like industry and services*. In Tapi, lack of industrialisation limits such transformation. Inclusive Growth Theory *shows growth led by targeted government schemes can reduce poverty if it includes marginal groups*. Programmes like MGNREGA<sup>1</sup> and PMGSY<sup>2</sup> created rural jobs and improved roads but often fail to create long term economic change without skill development and market linkages. True rural transformation requires structural changes bringing in industries, technology and market connections.

*This study aims to explain how financial behaviour and government schemes together influence rural transformation, applying the Life Cycle Hypothesis, Structural Change Theory and Inclusive Growth Theory to provide insights for practical, inclusive and sustainable policies for Tapi and similar regions.*

### From Rural Development to Rural Transformation

India's shift from rural development to rural transformation moves beyond basic infrastructure and welfare to a holistic model promoting self-sufficiency, economic diversification and social empowerment. Traditional approaches focused on poverty alleviation and employment, while rural transformation integrates entrepreneurship, digital inclusion, skill development and market-driven growth. Key initiatives like MGNREGA, Digital India and VKY drive this change. Launched in 2007, VKY has improved infrastructure, education, healthcare and economic empowerment in Gujarat's tribal regions, reducing literacy gaps and increasing incomes for over 7 lakh families. However, challenges remain in sustaining income growth, ensuring digital inclusion and fostering community participation for long term transformation.

### Reasons for selecting the VKY:

- **Economic Inclusion:** Addresses the economic needs of Gujarat's rural population, reducing disparities in health, education, income and employment.

<sup>1</sup> The Mahatma Gandhi National Rural Employment Guarantee Act.

<sup>2</sup> The PM Gram Sadak Yojana.



- *Targeted Socioeconomic Development:* Implement culturally and socially relevant programs in healthcare, education, infrastructure and livelihoods to drive sustainable growth.
- *Policy Effectiveness:* Evaluates and reforms rural population socioeconomic development policies to bridge economic gaps, ensuring long-term rural transformation.

## 2 LITERATURE REVIEW:

Traditional rural development strategies have been characterized by efforts to improve infrastructure, healthcare, education and agricultural productivity. While these initiatives have fostered Socioeconomic progress, their impact has often been limited by institutional inefficiencies, dependency on government aid and a lack of economic diversification.

### 2.1 Socio-Economic Transformation of the rural population

Davis et al. (2010), *A Cross-Country Comparison of Rural Income Generating Activities*, this study highlights that while agriculture remains a crucial income source for rural communities, diversified economic activities play a significant role in reducing poverty.

Zezza et al. (2007), *Rural Income Generating Activities*, researchers argue that institutional frameworks are vital in enabling sustainable rural livelihoods, as strong institutions provide better access to markets, financial credit and technological advancements.

Brookfield's (2008), *Institutional Frameworks and the Role of Smallholder Farming in Sustainable Rural Livelihoods*, the researcher further challenges the notion that large scale agribusiness is the only pathway to economic growth. He argues that small land holder farmers need support by appropriate policies then it can contribute significantly to sustainable rural economies. This perspective shifts the focus towards inclusive agricultural policies that promote small scale farming as a viable and sustainable alternative to large scale industrial agriculture.

Andrabi (2014), *Tribal Education and Government Intervention*, highlights the critical role of education in socioeconomic advancement among Scheduled Tribes. The study concludes that a strong correlation between education levels and economic prosperity. The researcher argues that while constitutional protections and government initiatives aim to improve tribal education, effective implementation, governance and scheme awareness are essential for accelerating educational outcomes.

Banothu (2016), *Tribal Economic Development in India*, study further emphasizes that Indian tribal communities continue to face socioeconomic challenges, such as lower living standards and limited access to development initiatives. The study reveals that isolation and lack of awareness prevent tribal populations from benefiting from government programs. The researcher suggests that awareness campaigns and simplified procedures are recommended to ensure inclusivity in development efforts.

### 2.2 Rural Transformation Policy Implementation in India

Patel (2014), *An impact of Tribal Sub-Plan scheme on tribal community: A Sociological study*, examines the effectiveness of the TSP in addressing socioeconomic inequalities among tribal communities. This study highlights that, while respondents benefited from housing, agriculture, education and skill development schemes, inconsistent oversight and lack of awareness about available initiatives limited the program's impact.

Sh. R. B. (2016), *The effectiveness of the Tribal Sub Plan. The Standing Committee on External Affairs*, it provides a report in which a critical analysis of TSP<sup>3</sup> and its implementation process and also identifying issues such as underutilization of funds, inadequate health infrastructure and insufficient state level adherence to funding guidelines. The report advocates for improved fund allocation mechanisms and centralized data collection to ensure equitable outcomes.

Khengar (2017), *Comparative Study of the Development of the People in Tribal Talukas of Gujarat\_ Mandvi \_Surat\_Songadh\_Vansada\_Valsad and Rajpipla, due to Van Bandhu Kalyan Yojana, using statistical methods*, researcher investigates the VKY in Gujarat and evaluates its impact on tribal communities. The study finds positive

<sup>3</sup> Tribal Area Sub Plan.



outcomes in areas like infrastructure and employment, but highlights the need for targeted efforts in road connectivity, healthcare and economic development to address regional disparities effectively.

### **2.3 Transformation Challenges in Rural Areas**

Lal (2019), *Tribal Development in India: Some Observations*. In *Tribal Development Issues in India* provides a detailed look at the challenges facing tribal communities in India. identifies several developmental issues faced by tribal communities, such as resource depletion, poverty and economic exploitation. He suggests that empowering tribal women through health education, diversifying livelihoods and providing fair payment for forest products can foster sustainable development.

Makwana (2017), *An impact of tribal sub plan scheme on tribal community: a sociological study*. It focuses on the Dang district in Gujarat, emphasizing the challenges posed by low literacy rates and economic constraints among tribal populations. The study suggests increasing accountability in program implementation, providing local communities with greater decision-making power and ensuring equitable access to development benefits.

### **2.4 Financial Awareness Among Rural Women in India**

Dr. Joshi (2022), *INDIA@75: Financial literacy of rural women in Gujarat State*, examined the financial awareness of rural women and its impact on economic growth. The study highlights that only 24% of Indian adults are financially literate, with rural women particularly lacking knowledge due to traditional societal roles. Based on a sample of 180 women, it found that most rely on social media, family or workshops for financial information, focusing mainly on banking, budgeting and savings. Statistical analysis showed that financial literacy is linked to income levels but not directly to education. The study suggests that government initiatives and targeted financial education are crucial for enhancing women's financial and socioeconomic empowerment.

### **2.5 Financial Literacy and Awareness in Rajkot, Gujarat**

Mehta et al. (2022), *A Study of Financial Literacy of Rajkot District*, Gujarat, analysed financial literacy and awareness among 100 respondents in Rajkot, distinguishing financial literacy (knowledge and skills) from financial awareness (exposure and familiarity). Their findings indicate that gender, age and education significantly affect financial literacy, with males and older individuals scoring higher. However, they found only a weak correlation ( $r = 0.054$ ) between financial awareness and literacy. The authors recommend enhancing financial education programmes, especially for women and rural populations is to improve financial inclusion and economic stability.

### **2.6 Financial Knowledge and Perception of Financial Services in Rural Gujarat**

Prof. Lodha et al. (2022), *Impact of Financial Literacy on Attitude towards Financial Services: A Study of Rural and Semi-Urban Region of Gujarat*, studied how financial knowledge influences perceptions of financial services among 122 participants in rural and semi urban Gujarat. The study reveals that many individuals lack awareness of financial products due to limited education and exposure. Cluster and factor analysis showed that financial security and safety concerns are key factors shaping attitudes towards financial services. Higher financial literacy was found to improve financial decision making. The researchers recommend expanding financial education initiatives to build trust and increase participation in formal financial markets.

## **3. OBJECTIVES:**

- To examine the association between different education levels and the monthly income of beneficiaries after the implementation of the scheme.
- To analyze the relationship between age groups and their awareness regarding the features and benefits of the scheme post-implementation.
- The analyze the relationship between the highest level of education and awareness regarding features and benefits post implementation.



- To investigate and analyze how the level of education and gender dynamics impact the financial planning and decisions in the day to day life in rural Gujarat.
- To explore the importance of financial habits, which play a significant role in achieving holistic wellbeing in rural areas.

#### 4. METHODOLOGY AND RESEARCH DESIGN:

This study employs a *descriptive research design* to evaluate the implementation and impact of the VKY under the DAPST<sup>4</sup> in the Tapi district of Gujarat, a region with a significant tribal population. The study focuses on five Talukas: Songadh, Vyara, Nizar, Uchchhal and Dolvan.

##### Data Collection

A purposive sampling method<sup>5</sup> was used to select 161 respondents directly linked to the scheme. Primary data were collected through structured bilingual (Gujarati/English) questionnaires and interviews, focusing on income, education, employment and financial knowledge. Secondary data from government reports, academic sources and key informant interviews offered contextual and qualitative insights.

##### Data Analysis

This study used primarily a categorical dataset, which was analyzed using **descriptive statistics, Chi-square ( $\chi^2$ ) tests of independence** and **Cramer's V** to examine associations between variables and assess the strength of relationships.

**Ethical protocols:** - All ethical protocols were followed, including informed consent, confidentiality and voluntary participation. Interviews were conducted neutrally and findings were cross verified with secondary data to ensure reliability.

#### 5. RESULTS AND FINDINGS:

##### Hypothesis Test<sup>6</sup>

##### Hypothesis-1

##### Introduction to the Test

*The objective of this analysis is to examine the association between different levels of education and monthly income post implementation of the scheme.*

A cross tabulation of income categories by education levels reveals distinct patterns. Respondents with **primary or no formal education** are largely concentrated in the lowest income bracket (<₹6,000), suggesting limited economic mobility. Those with **secondary education** show a slightly broader income distribution. In contrast, individuals with **college or postgraduate education** display more diverse income levels, including higher income brackets and a significant share choosing not to disclose income.

A **Chi-square test<sup>7</sup> of independence** was conducted to assess the association between education levels and monthly income. The results indicate a significant relationship

- $\chi^2 = 28.0$ , D.F<sup>8</sup> = 12, N= 161, K=4.

<sup>4</sup> Development Action Plan for Scheduled Tribes.

<sup>5</sup> Non-random selection using researcher's judgment for specific participants.

<sup>6</sup> Statistical method comparing group differences.

<sup>7</sup> Examines relationships between categorical variables for independence.

<sup>8</sup> Degrees of freedom.





- $\chi^2$  continuity correction<sup>9</sup> = 28.0 &  $p^{10}$  = 0.005
- Likelihood Ratio<sup>11</sup> = 32.4,  $p$  = 0.001, Fisher's Exact Test<sup>12</sup> =  $p$  = 0.002.

Given that  $p$ -values are below 0.05, we reject *the null hypothesis of independence*. This implies that **education level and income are statistically associated** among beneficiaries of the scheme.

To evaluate the strength of this association, **Cramér's  $V^{13}$**  was calculated as:

$$V^{14} = \sqrt{\frac{28.0}{161*(4-1)}} = \sqrt{\frac{28.0}{483}} \approx 0.2675$$

A value of **0.26** indicates a **moderate association** between education and income level.

The findings suggest that as the level of education improves, the period then access to education enhances income level. Overall, the analysis concludes a significant link between education and income. Its importance lies in shaping livelihoods through socioeconomic development schemes.

## **Hypothesis -2**

### **Introduction to the Test**

*This analysis aims to examine the association between age group and awareness regarding the features and benefits of the scheme post implementation.*

This analysis aims to examine the association between *age group and awareness regarding the features and benefits of the scheme post implementation*. Awareness and interest vary across age groups among the respondents, with 18-35 showing high awareness but low beneficiaries, 35-45 having strong conversion potential because the respondents were aware but not users.

The 45+ age group need targeted campaigns and outreach due to low interest or awareness. Tailored strategies are essential to boost engagement across all age groups.

A **Chi-square test of independence** was conducted to assess the association *between Age group and awareness regarding the features and benefits of the scheme post-implementation*. The results indicate a significant relationship

- $\chi^2$  = 35.5, D.F = 9, N= 161, K=4.
- $\chi^2$  continuity correction = 35.5 &  $p$  = < .001
- Likelihood Ratio = 40.4,  $p$  = <.001, Fisher's Exact Test=  $p$  = <.001.

Given that the  $p$ -value is significantly less than the conventional alpha level of 0.05. *For this reason, we reject the null hypothesis*. This indicates a **significant association between age group and awareness regarding the features and benefits of the scheme**.

To understand the strength of the association, we calculate Cramer's V:

$$V = \sqrt{\frac{35.5}{161*(4-1)}} = \sqrt{\frac{35.5}{483}} \approx 0.272$$

A Cramer's V value of **0.272** indicates a **moderate association** between the age group and awareness of the schemes, suggesting that age moderately influences awareness levels. These findings underscore the importance of designing age

<sup>9</sup> Adjustment for discrete data approximation accuracy.

<sup>10</sup> Probability of observed results occurring by random chance

<sup>11</sup> It compares the goodness of fit between the observed data and the expected data.

<sup>12</sup> It is used to determine if there are non-random associations between two categorical variables.

<sup>13</sup> Measures the strength of association between categorical variables.

<sup>14</sup> Cramér's V is calculated as  $V = \sqrt{(\chi^2 / n) (k - 1)}$ .



group play as a significant role in the context of the successful on ground implementation of socioeconomic specific development schemes.

### ***Hypothesis -3***

Introduction to the Test

*The objective of this analysis is to examine the association between the highest level of education and awareness regarding features and benefits.*

The analysis reveals education based disparities in awareness and usage of the scheme. Uneducated and primary level respondents show low awareness and engagement, though some exhibit interest despite being uninformed. Secondary level educated, respondents are moderately aware but largely non-users, with potential for conversion among the unaware yet interested group. College educated individuals display high awareness but limited usage, indicating a need to bridge the awareness action gap.

Postgraduates show similar trends, suggesting that higher education does not guarantee participation. Overall, the findings highlight a consistent mismatch between awareness and utilisation across education levels, emphasizing the need for tailored, education specific outreach to enhance scheme adoption.

A **Chi-square test of independence** was conducted to assess *the association between the level of education and awareness regarding the features and benefits of the scheme post implementation*. The results indicate a significant relationship:

$$\text{Chi-}\chi^2 = 38, D.F=12, N= 161 \text{ \& } K=5$$

$$\chi^2 \text{ continuity correction}=38 \text{ \& } P= < .001$$

$$\text{Likelihood Ratio}=38.6, \text{ Fisher's Exact Test } P= < .001$$

Given that the p-value is significantly less than the conventional alpha level of 0.05, ***we will reject the null hypothesis***. *This indicates a significant association between gender and awareness regarding the features and benefits of the scheme, with overall improvement observed after the scheme's implementation.*

To understand the strength of the association, we calculate Cramer's V:

$$V = \sqrt{\frac{38}{161 * (5 - 1)}} = \sqrt{\frac{38}{644}} \approx 0.243$$

A Cramer's V value of **0.243** indicates a **moderate relationship** between education level and awareness of the scheme, suggesting that educational attainment moderately influences awareness and interest. These findings suggest the need for targeted, education specific awareness campaigns to improve outreach and benefits across different levels of education.

## **6. DISCUSSION AND ANALYSIS:**

### **Demographic information:**

#### *Gender Distribution*

From our primary dataset, researcher analysed that there is a gender disparity among the respondents because of patriarchal society. The gender distribution indicates a significant disparity, with **70.4%** male and only **27.8%** female respondents and **1.8%** others.

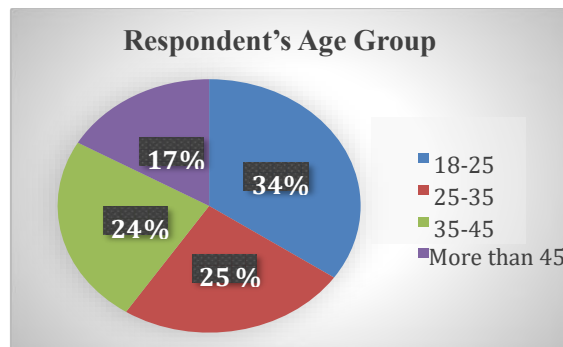
#### *Age Distribution*



**Table 1**

Age Group	18-25	25-35	35-45	More than 45
Respondent's	34.6%	24.7%	24.1%	16.7%

(Primary Data)



*(Graphical Representation1)*

### Interpretation

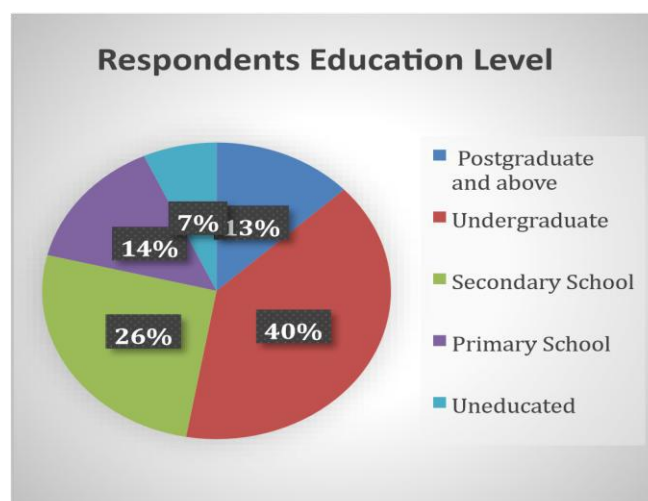
After analysing the data, the researcher found that **83.4%** of respondents are aged **18-45**, representing the working-age population. Their awareness of the scheme likely comes from education, community exposure or career needs, with utilization linked to livelihood and family support. In contrast, only **16.7%** are **above 45**, offering perspectives shaped by long term experiences with government schemes. Overall, the findings are skewed towards younger demographics, reflecting their immediate needs and aspirations rather than long term impacts.

### Education Qualifications

**Table 2**

Education Level	Respondents (%)	Males (%)	Females (%)	Others (%)
Postgraduate and above	13.04	5.59	6.83	0.62
Undergraduate	39.75	29.81	9.31	0.62
Secondary School	26.08	18.63	7.45	0
Primary School	14.28	11.18	2.48	0.62
Uneducated	6.83	4.96	1.86	0

(Primary Data)



*(Graphical Representation 2)*





### Interpretation

This Study shows that only **13.04%** attained postgraduate and above education, with females only **6.83%**, slightly surpassing males only **5.59%**, However, at the undergraduate level approx **39.75%**, males only **29.81%** for exceed females **9.31%**. Similarly male dominant continues at secondary and primary levels education. these findings suggest that while enrolment may have increased, actual educational attainment among rural girls remains low, especially beyond school. This study concludes that the gap between policy and ground realities are different, underscoring the need for focused interventions to retain girls in higher education as soon as possible.

### Monthly Income

**Table 3**

Income Category	Count (Frequency)	Assigned Midpoint (₹)	Frequency × Midpoint (₹)
less than 6000	61	5000	305,000
8000-10000	37	9000	333,000
More than 10000	16	11000	176,000
Subtotal (valid)	114	—	814,000
Prefer not to say	47	Excluded	—
Total	161	—	—
Mean of monthly income: $814,000/114 = ₹7140.35$ (Primary data)			

### Interpretation

This study indicates that the average monthly income calculated from the survey data is approximately **₹7,140**. This is much higher than Tapi District's rural average income of **₹4,500-₹5,500** per month<sup>15</sup>. In conclusion, the survey shows that respondents have a higher average monthly income compared to the Tapi district's rural averages reported as per the 2011 Census data. It indicates a positive change in income levels over time, suggesting that household earnings in the Tapi district have improved by 2024.

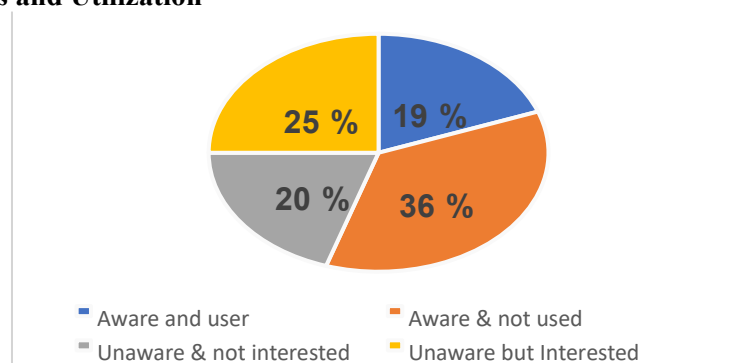
### Awareness and Utilization

**Table 4**

Total Respondent	Aware & user	Aware & not a user	Unaware & not interested	Unaware & but interested
161	19.2546	35.4037	19.8757	24.8447

(Primary Data)

### Respondents Awareness and Utilization



(Graphical Representation 3)

<sup>15</sup> Census of India, 2011



### Interpretation

Analysis of the primary data reveals a substantial gap between awareness and utilization of the scheme among respondents. This study shows a clear gap between awareness and utilization of the scheme. While **55%** are aware, only **19%** use it, with **36%** citing complex procedures as barriers. Meanwhile, **45%** remain unaware of these, **25%** are interested, which indicates that a significant opportunity for policymakers to increase adoption through targeted information dissemination, outreach programmes and educational campaigns tailored to this interested yet uninformed segment. However, **20%** are uninterested. This segment poses a unique challenge and may require alternative engagement strategies. Their disinterest could stem from perceptions of irrelevance, mistrust, lack of immediate need, or previous negative experiences with welfare schemes.

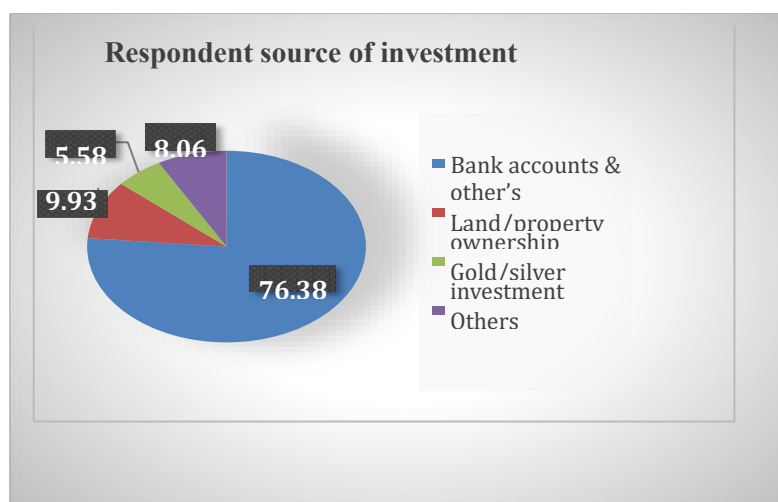
Overall analysis, this study concludes that an urgent need to simplify application procedures and make processes user friendly to convert awareness into actual utilization of the scheme.

### Source of investment

**Table 5**

Source of investment	Total participants (%)	Males (%)	Females (%)	Others (%)
Bank accounts & other's	76.38	50.3	24.22	1.86
Land/property ownership	9.93	9.31	0.62	0
Gold/silver investment	5.58	4.34	1.24	0
Others	8.06	6.2	1.86	0

(Primary data)



### (Graphical Representation 4)

### Interpretation

After analysis of data, this study found that clear gender disparities in financial activities in the rural areas. Overall, **76.4%** of respondents have bank accounts, dominated by males **50.3%** compared to females **24.22%** and others **1.86%**. Investments in land and property are similarly skewed, with **9.31%** males investing versus only **0.62%** females. Gold and silver investments show a similar trend **4.34%** males, **1.24%** females. Even in informal savings like lending to others **8.06%** overall, males lead **6.2%** over females **1.86%**.

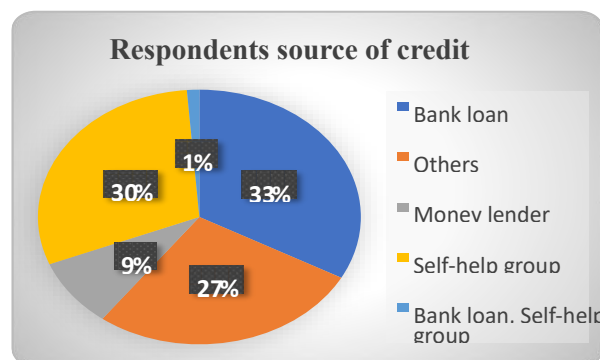
This pattern reflects deep rooted barriers restricting women's participation in formal financial systems and asset ownership. Despite policies to improve financial inclusion, this study concludes that an urgent need for gender focused financial literacy, asset rights and access initiatives to achieve meaningful economic empowerment for women in rural areas.



### Source of Credit

**Table 6**

Credit Source	Total Participants (%)	Males (%)	Females (%)	Other's (%)
<b>Bank loans</b>	34.15	26.70	6.21	1.86
<b>Self-help group</b>	29.81	18.01	11.80	0
<b>Money Lender</b>	8.69	5.59	2.48	0.62
<b>Other's</b>	27.32	19.87	7.45	0
<i>(Primary Data)</i>				



**(Graphical Representation 5)**

### Interpretation

After analysis of data, this study found that clear gender disparities exist in financial activities in the rural areas which is also highlighted in the persistent gender gap in the source of credit.

While **34.15%** take loans from banks, males **26.7%** far outnumber females only **6.21%**, showing women's limited access to formal banking credit despite schemes like Jan Dhan Yojana. In SHGs, male participation **18.01%** exceeds females **11.80%**, suggesting either mixed group dominance or male control over finances even within women-focused programmes.

Moneylender reliance also shows male dominance **5.59%** males vs. **2.48%** females, reflecting men's higher credit demand for agriculture, business or consumption needs. Informal credit sources like lending to others similarly favour males **19.87%** over females **7.45%**, indicating males have stronger social and financial networks.

Overall, males have greater access to both formal and informal credit, while women remain restricted, limiting their economic agency. This disparity stems from structural barriers such as a lack of collateral, mobility restrictions and patriarchal norms. Bridging this gap requires targeted policies enhancing women's financial literacy, independent credit access and supportive environments to strengthen their role in economic development.

### 7. CONCLUSION:

This study concludes that financial behaviour, educational attainment and gender dynamics play a critical role in shaping the socioeconomic development of tribal communities in Tapi. The chi-square analyses confirmed significant associations between education and income, age and scheme awareness and education and awareness need to targeted interventions.

The Descriptive findings highlight persistent gender disparities in education, formal financial access, credit utilisation and asset ownership, with women facing structural barriers that limit their economic agency. Gender creates a major hurdle in overall socioeconomic development, as financial decision making remains largely male dominated. The government needs to announce special drives to reduce these gender disparities and empower women economically and socially.



Although Vanbandhu Kalyan Yojana is a very good scheme with a comprehensive approach to rural transformation in context of socioeconomic development, its implementation on the ground level is suffering due to a lack of awareness about its features and benefits. Addressing these gaps will not only empower women and also marginalised groups of our society. And then they sit on the driver seat to drive holistic rural transformation in the society. economic diversification and long-term resilience in tribal regions like Tapi and other parts of India.

### **7.1 LIMITATIONS OF THIS STUDY:**

- In our primary dataset, the number of female respondents is much lower than male respondents because very few women participated in the questionnaire during data collection.
- Many respondents were reluctant to disclose their income and sources of earnings, leading to incomplete or inaccurate data. This limited the study's ability to assess actual income changes and the scheme's true impact.
- Several respondents did not disclose their proper education level.
- While filling out the questionnaires, several local people refused to fill out the form because a lack of awareness about the importance of the policy analysis study.

### **7.2 RECOMMENDATIONS:**

- Roll out village-level awareness campaigns to inform people about VKY's features, benefits and application steps.
- Introduce special programmes to address gender gaps in education and financial decision-making, with dedicated support for women's economic empowerment.
- Make the application and benefit process more user-friendly through digital helpdesks, local facilitators and clear guidelines.
- Conduct regular workshops on budgeting, savings, digital banking and credit management, especially targeting women and less educated households.
- Integrate skill training and higher education support with livelihood schemes to improve income-generating opportunities for tribal youth and women.

### **7.3 FUTURE SCOPE:**

- Future researchers can utilize a longitudinal design to track changes in financial behaviour, gender disparities and scheme utilization over time to assess long term effects.
- Expanding the study to other tribal districts within Gujarat or different states will allow comparative analysis to identify region-specific challenges and best practices.
- Conducting focused group discussions and in depth interviews will provide richer insights into cultural, psychological and institutional barriers affecting financial inclusion.
- Evaluating the effectiveness of targeted awareness campaigns, gender empowerment drives and simplified application procedures will help refine policy strategies.
- Future studies can examine how digital literacy, fintech adoption and smartphone penetration affect financial habits and scheme awareness among tribal youth and women.

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