

## RESEARCH

## Challenges Facing Youth Empowerment in Entrepreneurship in the Republic of Yemen

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## ABSTRACT

**PURPOSE:** The Republic of Yemen has a predominantly young population, and the country's future development hinges on these younger generations. However, their potential remains largely untapped due to complex socio-economic and political circumstances. Empowering youth in entrepreneurship can play a crucial role in addressing pressing challenges such as economic decline and limited job opportunities. This study aims to investigate the challenges facing youth empowerment in entrepreneurship and to identify the key predictors of entrepreneurial success in Yemen.

**DESIGN/METHODOLOGY:** The authors designed a structured questionnaire to collect responses from a sample of 565 participants across various regions of Yemen, focusing on the challenges faced by young entrepreneurs. The collected survey data were analysed using descriptive statistics, logistic regression analysis, and statistical testing.

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**FINDINGS:** The findings reveal several significant predictors of entrepreneurial success among Yemeni youth, including age, gender, financial support, government legislation and regulations, the political and security situation, and family support. Notably, participants who received financial support were 3.5 times more likely to achieve entrepreneurial success compared to those without such backing. Additionally, individuals aged 18-24 were less likely to own a private project than their peers in other age categories and faced the highest unemployment rates. Furthermore, the unemployment rate was higher among females than males.

**ORIGINALITY/VALUE:** There is a scarcity of research on youth empowerment in Yemen. This study distinguishes itself by providing a systematic examination of the challenges faced by youth, utilising appropriate research methods while considering variables such as age and gender.

**PRACTICAL IMPLICATIONS:** To foster youth entrepreneurial success, the government should improve access to financial resources, particularly for women entrepreneurs, strengthen legislative and regulatory frameworks, and address political and security challenges.

**KEYWORDS:** *Youth Empowerment; Yemen; Entrepreneurship; Women Empowerment; MENA; Arab Countries*

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## INTRODUCTION

Youth empowerment through entrepreneurship is a vital mechanism for promoting innovation, inclusive economic growth, and social stability. It enables young individuals to become job creators rather than job seekers, fostering self-reliance and resilience. Additionally, youth empowerment through entrepreneurship enhances essential business skills such as leadership, decision-making, flexibility, adaptability, and problem-solving, which are crucial for productivity growth. With a predominantly young population, the future development of the Republic of Yemen can be propelled by its younger generations; however, their potential remains largely untapped due to the country's complex socio-economic and political circumstances.

In this study, we investigate the challenges facing youth empowerment in entrepreneurship in Yemen, focusing on financial, institutional, political, social, digital, educational, and training challenges.

The study is organised into five sections. The first section provides a general framework for the research, followed by an examination of Yemen's economy and the status of youth empowerment. The third section details the research methods, focusing on the data collection procedures used in the field survey, as well as the demographics and general characteristics of the participants. This is followed by a descriptive analysis of the participants' responses. The fourth section presents a regression analysis of the survey data, while the final section concludes with insights and policy recommendations.

## SIGNIFICANCE OF THE RESEARCH

This study addresses the challenges and constraints facing Yemeni youth in achieving success in entrepreneurial activities and evaluates these challenges. The significance of this study is closely linked to the country's urgent socio-economic circumstances and its prospects for achieving sustainable development goals (SDGs) through coherent economic growth and social integration.

The Republic of Yemen faces high rates of poverty (48.6% of the population), inequality (36.7 points in the Gini coefficient index), and an age dependency ratio of 72.8%, among other issues. Empowering youth through entrepreneurship offers a promising pathway to break the cycle of poverty by creating new job opportunities, raising family incomes, and stimulating local business ecosystems. For women, developing entrepreneurial skills is crucial for overcoming barriers to economic participation, including those related to cultural and social norms. The significance of this study is also underscored by the lack of research in this area within Yemen.

## RESEARCH QUESTIONS

This study seeks to answer the following key questions:

What are the main challenges currently facing youth empowerment in entrepreneurship in Yemen?

In this context, we will address challenges related to access to finance, political instability, entrepreneurial training, digital skills, and social support, together with other factors that may impede youth participation in entrepreneurial activities. Additionally, the study will answer the following questions:

- Which of these challenges can serve as a reliable predictor of entrepreneurial success in Yemen?
- Do these challenges vary by age group (particularly for those aged 15-24) and gender?
- Which of the challenges is the most significant?

## Research Objectives

Based on the previously outlined research questions, this study aims to achieve the following objectives:

- to identify and analyse the institutional factors that hinder young entrepreneurs from achieving success in Yemen;
- to investigate the social challenges that influence the entrepreneurial aspirations and activities of young Yemeni entrepreneurs;
- to evaluate the impact of political instability and conflict-related disruptions on youth entrepreneurship in Yemen;

- to examine the difficulties young entrepreneurs face in accessing financial resources and assess the role of finance in empowering youth entrepreneurship;
- to explore the digital, educational, and training challenges encountered by Yemeni youth in entrepreneurship.

## Research Methods

This research aims to evaluate the challenges faced by Yemeni youth engaged in entrepreneurial activities. It employs both quantitative and qualitative methods to achieve its objectives. A field survey approach is used to gather primary data on youth empowerment challenges in entrepreneurship in the Republic of Yemen from November 2023 to August 2024. A structured questionnaire containing 16 questions was distributed to a sample population of male and female participants from various regions of Yemen, facilitating a comprehensive understanding of the socio-economic, political, and financial challenges that young entrepreneurs encounter. Additionally, secondary data were collected from international reports to reflect and analyse the current state of youth empowerment in Yemen.

Given the complexity of Yemen's economic, political, and social environments, the survey approach provides a practical and efficient means of understanding the obstacles faced by Yemeni youth in their entrepreneurial pursuits. This method allows for the collection of data from a large and diverse sample, offering a comprehensive view of the challenges confronting young entrepreneurs. Furthermore, the survey approach facilitates statistical analysis, enabling researchers to identify patterns and relationships among various factors that affect the performance of young entrepreneurs. This enhances the reliability and comparability of findings, making it easier to formulate robust, evidence-based policy recommendations. Remote survey administration is particularly advantageous in a conflict-affected country such as Yemen, where traditional fieldwork may pose significant challenges.

The survey data were analysed using descriptive statistics, regression analysis, and statistical testing. These methods provided insights into the distribution of variables, allowing the authors to identify patterns and correlations among key factors affecting youth engagement in entrepreneurship in Yemen.

To further examine the determinants of youth empowerment in entrepreneurship, binary logistic regression analysis was applied. This technique facilitated the identification of significant predictors, helping to establish relationships between independent variables and the likelihood of youth pursuing successful entrepreneurial projects. By employing binary logistic regression, the study achieved its objectives by distinguishing which factors were most influential in either supporting or hindering youth entrepreneurial success, thereby offering targeted recommendations for policy and programme development to support young entrepreneurs in Yemen.

Many of the challenges surveyed can be framed as binary outcomes (Yes/No), making this method effective for identifying key factors influencing these obstacles. Logistic regression generates odds ratios that quantify the strength of the relationships between independent variables and entrepreneurial challenges. By pinpointing the most significant challenges, the findings support evidence-based policy-making, enabling the prioritisation of interventions to effectively address these issues.

The study aims to test the following hypotheses to evaluate the determinants of entrepreneurial success among young Yemenis:

1. the following nine variables are good predictors of youth entrepreneurial success in Yemen: age of participant, financial support, entrepreneurship education, gender of participant, digital skills, family support, political and security situation, education level, and government legislation and regulations;
2. political instability and security problems are the most significant challenges facing young entrepreneurs in Yemen;
3. the youth age category (18-24 years) encounters more obstacles to entrepreneurial success compared to other age categories;
4. youth gender is not a significant factor in entrepreneurial success in Yemen.

## CHALLENGES OF YOUTH EMPOWERMENT

The theoretical framework for the challenges of youth empowerment in this study draws from several key sources: the United Nations strategy for youth empowerment, “Youth2030”; perspectives from the World Bank; and insights from the International Labour Organization (ILO) regarding youth empowerment (UN, 2018). According to the ILO (2021), youth empowerment involves equipping young people with the skills, opportunities, and support necessary to secure decent work, engage in decision-making processes, and overcome barriers to social and economic inclusion, while also enhancing their voice and representation in labour markets and society. The World Economic Forum (2013) identified eight pillars that shape the entrepreneurial ecosystem: government policy, regulatory framework and infrastructure, funding and finance, culture, mentors and advisors, support systems, universities as catalysts, education and training, and human capital and labour force.

Entrepreneurship is generally understood as a process that combines economic and social value to drive social change (Dees, 1998; Alvord *et al.*, 2004; Mair and Marti, 2006). Several studies have examined the challenges faced by young entrepreneurs in various contexts, including Ayyagari *et al.* (2007), Liñán and Chen (2009), Rogerson *et al.* (2013), Abdou *et al.* (2010), and Jamali and Kreidie (2014).

In 2024, the World Bank conducted a study on women entrepreneurs in Yemen, investigating the factors that enable or hinder their participation in economic activities during times of conflict. Based on a sample of 24 female entrepreneurs, the study revealed that Yemeni women continue to face societal expectations and restrictive norms that limit their mobility and public interactions (World Bank, 2024).

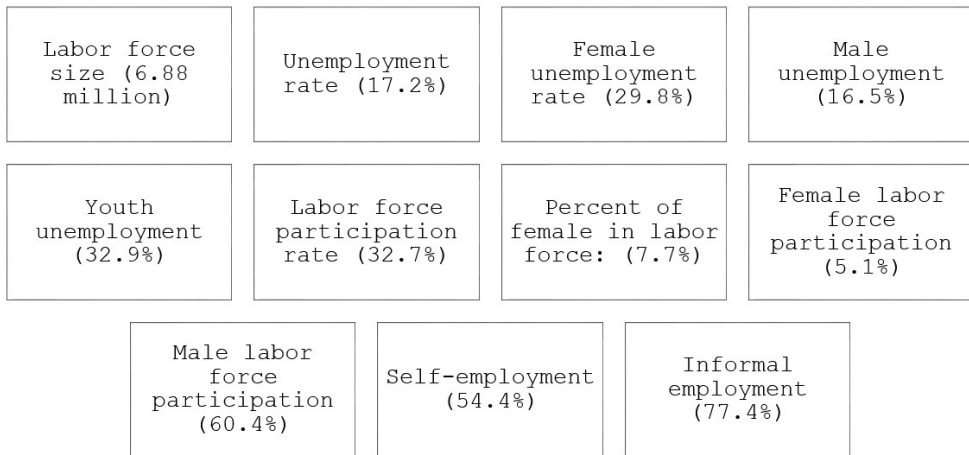
While previous studies have provided valuable insights into the challenges faced by young entrepreneurs, they do not fully address the unique obstacles encountered by male and female entrepreneurs in the Republic of Yemen. Moreover, the limited studies focused on the Yemeni context have not clearly identified which challenges are most significant for young Yemeni individuals. International reports often concentrate on specific issues, such as social barriers to women's empowerment in entrepreneurship, without systematically examining these challenges.

In contrast, the present study utilises a larger sample of 565 participants, including both male and female young entrepreneurs across various age groups (18-24, 25-35, and 36 and over). This approach enables a comprehensive analysis that considers both age and gender. In this study, we draw from the existing literature to identify the determinants of youth empowerment in Yemen, focusing on the following challenges: financial support, digital skills, family support, political and security situation, education level, government legislation and regulations, participant age, entrepreneurship education, and participant gender.

## CURRENT STATE OF YOUTH EMPOWERMENT IN YEMEN

Yemen currently faces significant economic, political, and social issues, and youth empowerment in Yemen is closely linked to the country's broader economic and institutional challenges. Since 2014, ongoing conflict has severely damaged the nation's infrastructure, economy, and institutions, leaving large segments of the population in deep poverty. Fragmented and politically divided governments have hindered the effective delivery of public services in education and healthcare, resulting in a declining quality of life and increasing social inequality. These challenges are further exacerbated by a lack of competitiveness, insufficient job opportunities, and a pervasive informal economy.

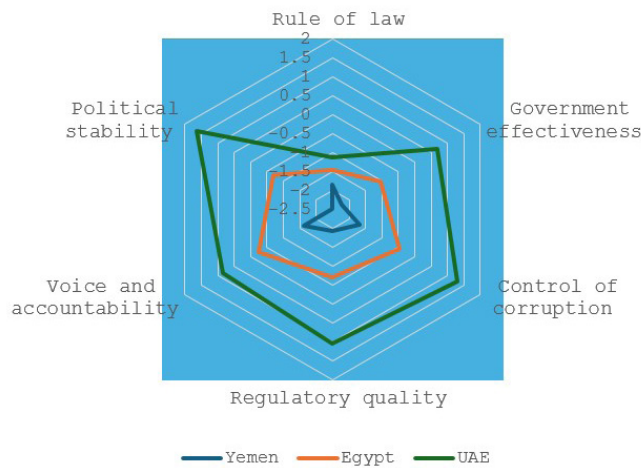
Labour market indicators in Yemen (2023), as presented in Figure 1, demonstrate a high level of inefficiency, evidenced by significant unemployment rates and very low female labour force participation (see the figure for additional indicators).



**Figure 1: Labour market indicators in Yemen (2023)**

Source: ILO, 2024

Furthermore, the lack of robust governance structures underlines the effectiveness of policies aimed at supporting young entrepreneurs, making it difficult for them to access resources or formalise their ventures. Figure 2 presents institutional indicators for Yemen in 2022 and compares them to those of Egypt and the United Arab Emirates. Yemen's performance in good governance indicators is significantly weaker than that of other Arab countries. Additional institutional indicators reveal substantial challenges: the Corruption Perceptions Index (CPI) score is only 16 out of 100, indicating a high level of corruption; the political rights index score is 7, and the civil liberties index score is 6 (with 7 representing the weakest rating and 1 the strongest in these indices).

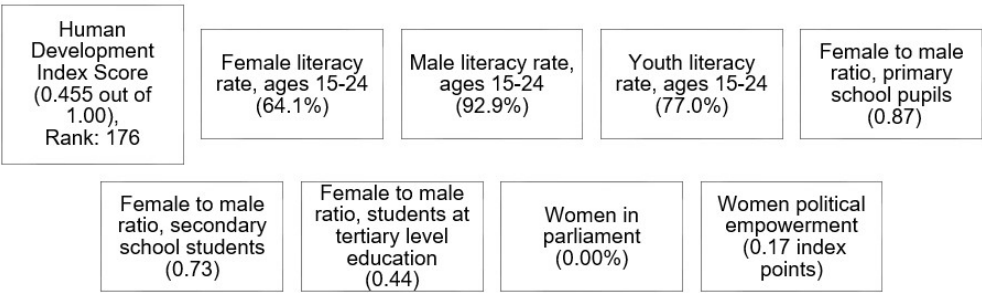


**Figure 2: Good Governance Indicators in Arab Countries in 2022 (Values Range: -2.5 (Weak) to 2.5 (Strong))**

Source: WGI - World Bank 2024

Youth empowerment requires a supportive technological and financial environment. In Yemen, significant challenges have impeded the financial system’s capacity to promote youth empowerment, including inadequate financial infrastructure and restrictive lending practices. As a result, young entrepreneurs encounter substantial obstacles in obtaining loans and credit to start or expand their businesses.

Figure 3 illustrates the status of youth empowerment across education, health, gender equality, and political participation. The graph indicates that access to education is particularly limited for females compared to males. It also shows minimal political participation among youth leading to a restricted influence over their business decisions.



**Figure 3: Empowerment Indicators in Yemen**

Source: Compiled from different international databases (ILO, 2024; World Bank, 2024; UNDP, 2024)



## DATA COLLECTION PROCEDURES AND DESCRIPTIVE ANALYSIS OF SURVEY DATA

The authors designed a structured questionnaire consisting of 16 questions to assess the challenges faced by Yemeni youth engaged in entrepreneurial activities. These questions cover the key variables used to evaluate the determinants of entrepreneurial success, specially focusing on youth aged 18-24 and women aged 18-35. The authors distributed the survey to 565 respondents in Yemen via mobile phone SMS, as youth in the country are heavy smartphone users. Table A-1 in the appendix presents the 16 questions posed to the participants.

### Demographics and General Characteristics of Participants

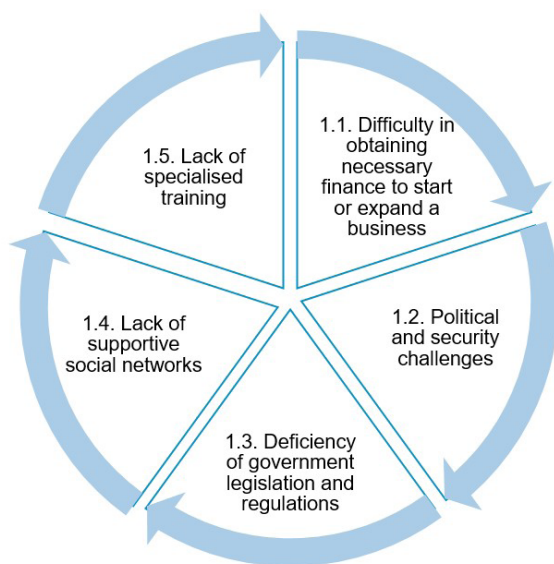
The study employed descriptive statistics and frequency distribution tables to summarise the demographic and general characteristics of the respondents, including age, gender, education level, etc. This approach helps identify general patterns within the data such as age distribution, gender breakdown and education levels.

Our results indicate that youth participants aged 18-24 account for 27.8% of the total respondents. The sample is fairly balanced between male and female participants, with males comprising 50.8% and females 49.2%. Additionally, 40% of the participants currently own a private project, which we will later use as a proxy for entrepreneurial success. Most participants hold diplomas or bachelor's degrees (approximately 90%), while the remainder possess MSc or PhD degrees. Unemployed participants make up 37.9% of the sample, with 25.8% employed in the public sector, 15.2% in the private sector, and 21.1% running their own businesses. Two-thirds (66.4%) of the participants describe obtaining necessary finance to start or expand youth projects in Yemen as “difficult or very difficult”, while only 7.2% consider it “easy or very easy”. This indicates that securing finance is a major challenge to youth empowerment in Yemen.

Participants who have not benefited from government or private financial support make up 88% of the total. Similarly, 81% of participants indicate that government legislation and regulations regarding youth empowerment are either “deficient or insufficient”. Most participants (approximately 90%) report that the political and security situations in Yemen negatively impact their business decisions highlighting the crucial role of political circumstances in entrepreneurial success in Yemen. In this context, 47.1% of participants have faced direct problems related to security or political stability in their work activities.

Regarding family support, 61.8% of participants received medium-to-high support for their entrepreneurial efforts reflecting positive social attitudes towards youth entrepreneurship. However, despite this support, Yemeni youth face challenges due to weak social networks that hinder these activities; 62% of participants consider social networks to be “weak or unavailable”. Additionally, a lack of training poses a significant obstacle for Yemeni youth in entrepreneurship, with 63.7% indicating they have not received specialised education or training programmes in this area.

Regarding the alignment of higher education with labour market requirements in Yemen, 83.7% of participants indicate that this alignment is satisfactory or better, suggesting that youth do not perceive it as an obstacle to empowerment. The digital skills of Yemeni youth appear to be adequate, enabling them to benefit from opportunities arising from the ICT revolution; 75% of participants report having sufficient digital skills for opportunities related to the Fourth Industrial Revolution. Financial challenges are identified as the most significant barriers to the entrepreneurial success of Yemeni youth, as confirmed by 82% of participants. Figure 4 summarises the main challenges facing youth in the field of entrepreneurship in Yemen based on the survey results.



**Figure 4: Summary of the main challenges facing youth in the field of entrepreneurship in Yemen according to the survey results**

Source: Survey results

### Descriptive Analysis of Youth Empowerment (Age Category 18-24) in Yemen

The age category of 18-24 years represents 27.8% of the total participants, accounting for 157 out of 565 survey respondents. One-third of these young individuals (33.8%) own a private project, compared to 38.8% in the 25-35 age group and 47.6% in the 35 and over category. Therefore, those aged 18-24 are less likely to own a private project than their older counterparts. This youth category also has the highest unemployment rate, with 56.7% unemployed, compared to 36.9% in the 25-35 age group and 20% in the 35 and over category. Accessing finance to start or expand a business is a challenge across all age groups, with difficulties rated at 65.6%, 63.5%, and 72.4%, respectively.

Effective legislation and regulations are essential for creating a supportive, fair, and secure environment that fosters business opportunities and innovation. However, 70% of young participants consider government legislation in Yemen to be inadequate. Higher levels of dissatisfaction with government policies are observed among older youth participants, with 85% and 86% expressing dissatisfaction in the 25-35 and 35 and over age groups, respectively. This underscores the need for government policy adjustments to enhance legislation and regulations aimed at youth empowerment in Yemen. Furthermore, 88% of young participants indicate that political and security issues negatively impact their business decisions, with similar or higher percentages reported by other age groups. These findings suggest that political instability significantly affects youth entrepreneurial decisions in Yemen.

At the societal level, family support is stronger among younger individuals than in older age groups, with 71% receiving support compared to 55.5% and 62.8% for the 25-35 and 35 and over age groups, respectively. However, 56.7% of young participants reported that social networks supporting youth entrepreneurial activities are either “not available” or “weak”, while higher percentages of older age groups noted similar issues. These results indicate a general lack of sufficient social networks across all youth age categories. Additionally, 63.5% of younger participants indicated they are unlikely to receive specialised educational programs while participants in other age categories reported slightly higher rates of access.

Fortunately, young Yemenis generally possess good digital skills that enable them to capitalise on opportunities arising from the ICT revolution, with 73.2% describing their digital skills as “good, high, or very high”. Participants from other age groups reported similar levels of proficiency.

Three-quarters of younger participants (75.8%) view financial challenges as the most significant obstacle facing youth entrepreneurship in Yemen. This sentiment is shared by more than 84% of participants in older age group.

## Descriptive Analysis of Women’s Empowerment in Yemen

Empowering women in entrepreneurship is vital for achieving inclusive development and establishing resilient communities in Yemen. Women represent 49.2% (278 participants) of the sample, while men account for 50.8% (277 participants). Moreover, 43.5% of female participants report currently owning a private project compared to 35.9% of male participants. This disparity is largely due to the higher employment opportunities available to young men, leading young women to focus more on establishing private projects.

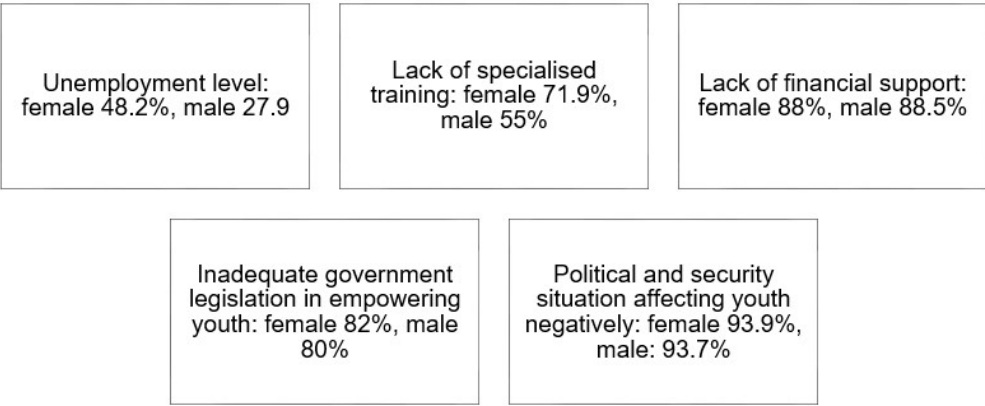
The unemployment rate is higher among females than males; the questionnaire results reveal that 48.2% of female participants are unemployed compared to 27.9% of male participants. These findings demonstrate a significantly high unemployment rate among women indicating a low level of empowerment.

Specialised training is largely unavailable for females. A significant 71.9% of female participants reported that they have not received special entrepreneurial training, compared to 55.7% of male participants. Consequently, young women face greater challenges than men in accessing specialised training in entrepreneurship.

Financial support from public and private sources for young women is also rare, impacting both young men and women. Only 12% of female participants and 11.5% of male participants received financial support from these sources. Both young females and males face difficulties in obtaining financial support to start or expand a business, with rates of 62.6% for females and 70% for males. Additionally, the lack of adequate government legislation affects both genders similarly, with 82.2% of females and 80.2% of males reporting this issue.

Survey participants have received comparable levels of education and demonstrate strong digital skills, confirmed by 74% of females and 76% of males. However, family support is higher for female entrepreneurs with 66.5% reporting support compared to 57.1% of males.

Inadequate social networks affect both females and males with 56% of females and 68% of males affected. Political instability has negatively impacted participants equally, with 93.9% of females and 93.7% of males reporting this effect. Figure 5 illustrates the key indicators of low empowerment among young women in Yemen based on the survey results.



**Figure 5: Key Indicators of Low Empowerment of Young Women in Yemen**

Source: Authors calculation from the survey results

### Descriptive Analysis of Youth Entrepreneurial Success in Yemen

This section discusses the key factors that explain and predict youth entrepreneurial success based on survey results. In this study, owning a private project is regarded as an indicator of the entrepreneurial success of Yemeni youth.

Our survey results show that the majority of Yemeni youth without projects view financial challenges as the most significant obstacle to their entrepreneurial aspirations, with 84.5% citing this issue. In contrast, 78.6% of those who own projects also identify financial challenges as their primary concern. Additionally, 35.5% of youths without a business project have received specialised entrepreneurial training, while 37.5% of project owners have received similar training.

Political and security challenges pose major obstacles for young entrepreneurs in Yemen, with 93.8% of youth both with and without projects indicating that the political and security situation negatively impacts their business decisions. Among those who own business projects, 54% report experiencing security problems in their activities. Most Yemeni youth without a business project do not benefit from government or private support, with 92.7% indicating a lack of assistance. In contrast, only 18.8% of those with business projects have benefited from such support.

Government regulations also represent a significant barrier to starting a business in Yemen. Among those without a business project, 78.3% view government regulation as “deficient” or “not sufficient”, while this perspective is shared by 85.7% of those who own projects. Furthermore, obtaining financing to start or expand a business is challenging; 68.3% of those without a business regard access to finance for start-ups as either “difficult” or “very difficult”, compared to 63.4% of those with business projects.

Regarding social factors affecting empowerment, 58.9% of individuals without a business report receiving family support in their entrepreneurial pursuits, compared to 66.1% of those who own businesses. Conversely, social networks to support young entrepreneurs are lacking; 59.5% of those without business projects view social networks as unavailable compared to 66.1% of those with projects. Most participants, 83.3% of those without projects, consider the quality of higher education to be “sufficient” or “more than sufficient”, compared to 84.4% in the other group. Only 10.3% of participants with higher education own a business project. In contrast, 73% of those without business projects rate their digital skills as good, high or very high, compared to 77% in the other group.

## REGRESSION ANALYSIS

We aim to identify the characteristics that indicate young people’s ability to establish or run a business in Yemen and use these characteristics to recognise the main indicators of entrepreneurial success. The study employs binary logistic regression to examine the factors influencing entrepreneurial success in Yemen. The dependent variable, defined as ownership of a business project, is binary (yes vs no), making this technique ideal for modelling dichotomous outcomes. This regression method predicts the likelihood of entrepreneurial success based on several independent variables, including access to finance, age, gender, education, political stability, social networks, family support, digital skills, and specialised entrepreneurial training. The research technique allows us to isolate the specific impacts of each of these factors. In logistic regression, the predicted dependent variable

(the entrepreneurial success indicator) is a function of the probability that a particular subject will fall into one of the categories. We used the statistical package SPSS to conduct our analysis.

The primary objective of this analysis is to identify the best predictors of entrepreneurial success in Yemen. By examining odds ratios and significance levels, the regression model will reveal which variables most significantly influence the probability of entrepreneurial success. Expected outcomes include insights into the magnitude and direction of each predictor's impact; this could lead to practical policy recommendations for enhancing entrepreneurial opportunities for Yemeni youth.

## Results of the Binary Regression Model

Our dependent variable is the participant's current ownership of a private business. The independent variables (predictors) include nine factors: the participant's age, financial support, entrepreneurship education, gender, digital skills, family support, political and security situation, education level, and government legislation and regulations.

The Omnibus tests of model coefficients indicate that the overall model is statistically significant,  $\chi^2(23) = 70.386$ ,  $p < 0.001$ . The Hosmer-Lemeshow test is employed to assess the null hypothesis that predictions made by the model fit perfectly with observed group memberships. A chi-square statistic is computed by comparing the observed frequencies with those expected under the linear model. A non-significant chi-square indicates that the data fit the model well. The chi-square value is 0.375, which is not significant, indicating that the model fit is adequate.

We conduct the "null model" analysis for the variables in the model equation. This test assumes that the model equation includes no predictors but the intercept only. The test results reject this null model showing Wald statistics of 23.875 and a significance level of ( $p < 0.001$ ).

**Table 1: Test of Model Effectiveness**

Observed			Predicted		
			currently own a private project		Percentage Correct
			No	yes	
Step 1	Currently own a private project	No	284	57	83.3
		Yes	131	93	41.5
	Overall Percentage				66.7

Notes: The cut value is 0.500

Source: Authors' calculation from the survey results

Tests of model effectiveness were conducted to compare the predicted classification against the actual classification. This included an analysis of overall percentage (accuracy), sensitivity, and specificity. The results demonstrate the model's efficiency as shown in classification Table 1.

- **Accuracy (Overall Percentage):** This value represents the overall accuracy of the model, indicating how often it correctly predicts outcomes. With the independent variables included, the model accurately predicts 66.7% of cases.
- **Sensitivity:** This statistic assesses how well the model identifies positive cases (i.e., the ability to predict “Yes” when the actual outcome is “Yes”). The model accurately predicted that 41.5% of participants who currently own a private project also own a private project.
- **Specificity:** This statistic measures how well the model identifies negative cases (i.e., it measures the ability to predict “No” when the actual outcome is “No”). The model predicted that 83.3% of participants who do not currently own a private project do not own one (see the “Percentage Correct” column in the “No” row of the observed categories).
- **Positive Predictive Value:** This is the percentage of correctly predicted cases with the observed characteristic compared to the total number of cases predicted to have that characteristic. It is calculated as  $100 \times (93 \div (57 + 93))$ , resulting in 61.7%. Thus, of all cases predicted to own a project, 61.7% were correctly predicted.
- **Negative Predictive Value:** This is the percentage of correctly predicted cases without the observed characteristic compared to the total number of cases predicted not to have that characteristic. It is calculated as  $100 \times (284 \div (131 + 284))$ , resulting in 68.4%. Therefore, of all cases predicted not to own a project, 68.4% were correctly predicted.
- **Overall Percentage of Logistic Regression:** The overall percentage is 66.7%.

**Table 2: Regression Results: Significant Variables**

	<i>B</i>	<i>S.E.</i>	<i>Wald</i>	<i>Df</i>	<i>Sig.</i>	<i>Exp(B)</i>
Age			9.193	2	0.010	
Age (2)	0.748	0.266	7.931	1	0.005	2.114
gender (1)	-0.352	0.198	3.168	1	0.075	0.704
Financial support(1)	1.265	0.299	17.838	1	<0.001	3.542
Legislation and regulations			7.906	3	0.048	
Legislation and regulations(2)	-0.867	0.325	7.133	1	0.008	0.420
Political and security situation			8.630	4	0.071	
Political and security situation(1)	-0.529	0.263	4.046	1	0.044	0.589
Family supports			8.826	4	0.066	

Source: Authors calculation from the survey results

The Wald statistic is used to test the significance of each predictor variable in the model. It assesses whether the corresponding coefficient (*B*) for a predictor is significantly different from zero, indicating an effect. The significant predictors of entrepreneurial success for Yemeni youth shown in Table 2 are discussed below.

Age is significant at the 0.01 level, with a Wald statistic value of 9.19, indicating a strong impact on the dependent variable, as the estimated coefficient is considerably far from zero relative to its standard error. Specifically, age is significant for the “24-35” category, and has a positive coefficient and an  $\exp(B)$  value of 2.11. This indicates that the odds of entrepreneurial success (the “yes” category) are 2.11 times greater for this age group compared to others.

Gender (1), which represents male participants, is a significant predictor of project ownership with a significance level of 0.005, despite its negative sign. This suggests that the probability of owning a company decreases for male participants, likely due to their higher likelihood of being employed in the private or government sectors. Additionally, financial support (1), indicating that the participant answered “yes” to receiving private or public support, is a significant predictor at a level of less than 0.001 and carries a positive sign, reflecting a very high level of significance. The  $\exp(B)$  for this variable is 3.5, meaning that the probability of owning a project is 3.5 times higher for participants with financial support compared to those without it. Therefore, having financial support is a strong predictor of business success.

The variable related to legislation and regulations (2) is a significant predictor of entrepreneurial success. The negative coefficient indicates that those who perceive legislation as “not sufficient” have decreased probability of owning a project. The variable concerning the political security situation is marginally significant at the level of 0.071. However, it is highly significant for the category (1), which answers “yes” to facing problems in their business related to political and security situations, with a significance level of 0.044 and a negative coefficient of 0.589, suggesting that political and security conditions negatively affect entrepreneurial success. The family support variable is also a marginally significant predictor of entrepreneurial success in Yemen with a significance level of 0.066.

Insignificant predictors of entrepreneurial success in Yemen include the level of education, participation in specialised educational programmes in entrepreneurship, and sufficiency of digital skills.

The previous descriptive and regression analyses revealed that government regulations significantly hinder the success of young entrepreneurs in Yemen. Furthermore, political instability and conflict-related disruptions have adversely affected youth entrepreneurial decisions, with 93.8% of young people, both those with and without projects, acknowledging this impact. Conversely, some social factors, such as family support, have a positive effect on the entrepreneurial aspirations and activities of young Yemenis, while others, such as supportive social networks, are less significant. The findings also show that young entrepreneurs encounter considerable challenges in accessing financial resources, with 84.5% identifying financial difficulties as the primary obstacle to achieving their entrepreneurial goals. Overall, female entrepreneurs face more challenges than their male counterparts across various aspects of their entrepreneurial activities.



## Policy Implications of Research Findings

The research findings reveal several key policy implications aimed at fostering a more supportive environment for entrepreneurial activities among young Yemenis:

- **Prioritising Access to Finance Improvements:** Government policies should enhance access to financial resources for youth, including bank loans, microfinance initiatives, government grants, venture capital, crowdfunding, and angel investments, with particular focus on women entrepreneurs. Policy-makers should encourage private sector investment and implement banking reforms to reduce borrowing requirements for young entrepreneurs. Additionally, the government can support crowdfunding efforts by establishing legal frameworks, launching public-private crowdfunding platforms, raising awareness, providing training programmes on effective crowdfunding strategies, and offering seed funding for promising youth-led businesses.
- **Enhancing Entrepreneurial Education and Training:** Policies should prioritise the integration of entrepreneurship into the national education curriculum and the expansion of vocational training programmes, especially for women entrepreneurs. Public-private partnerships can be utilised to provide mentorship, incubators, and skill-building initiatives specifically designed for young entrepreneurs.
- **Strengthening Institutional Support and Removing Regulatory Barriers:** Streamlining business registration processes, reducing bureaucratic costs, ensuring start-up support and protections, and enhancing governance practices can create a more conducive environment for young entrepreneurs in Yemen.
- **Addressing Political Instability and Enhancing Security:** Addressing issues related to political instability and security is essential for supporting youth entrepreneurship and minimising disruptions in decision-making. The current study highlights the significant impact of these factors.
- **Strengthening Social Networks:** The research emphasises the importance of social networks and family support for the success of youth entrepreneurs. Policies targeting the youth sector should promote community-based initiatives, networking platforms, and youth entrepreneurship associations. Additionally, raising awareness, sharing success stories, and showcasing role models can further stimulate entrepreneurial activities.

## CONCLUSIONS

Youth entrepreneurship is a critical driver of inclusive, sustainable economic growth in the Republic of Yemen, providing valuable solutions to many of the country's pressing challenges. This study examined the constraints faced by Yemeni youth in achieving success in entrepreneurial

activities and evaluated these challenges using both qualitative and quantitative research methods. It employed a field survey approach to gather primary data on the issue from November 2023 to August 2024.

The survey included a total of 565 participants, with youth aged 18-24 representing 27.8% of the total interviewees. The sample was fairly evenly distributed between male and female participants, with males accounting for 50.8% and females 49.2%. Descriptive analysis revealed that the main challenges facing youth in entrepreneurship in Yemen were as follows: difficulty in obtaining necessary financing to start or expand a business, political and security challenges, deficiencies in government legislation and regulations, lack of supportive social networks, and insufficient specialised training.

The age group of 18-24 years represented 27.8% of the total number of participants. This group was less likely to own a private project compared to other youth categories and had the highest unemployment rate, with 56.7% unemployed, compared to 36.9% among those aged 25-35, and 20% for those aged 35 and over. Additionally, 70% of young participants viewed government legislation in Yemen as deficient or insufficient. Furthermore, 73.2% described their digital skills as “good, high, or very high”, a rating shared by participants from other age groups. Notably, three-quarters of younger respondents (75.8%) identified financial challenges as the most significant barrier to youth entrepreneurship in Yemen.

The unemployment rate was higher for females than for males. The questionnaire results indicated that 48.2% of female participants were unemployed, compared to 27.9% of male participants. Specialised training was largely unavailable for females. Only 12% of participants received financial support from the public and private sectors.

The survey results revealed that the majority of Yemeni youth without projects viewed financial challenges as the most significant obstacle to their entrepreneurial aspirations, with 84.5% expressing this opinion.

The study employed binary logistic regression to examine the factors influencing entrepreneurial success in Yemen. This research technique allowed us to isolate the specific impacts of each factor. In logistic regression, the predicted dependent variable (the entrepreneurial success indicator) reflected the probability that a particular subject would fall into one of the categories. We used the statistical package SPSS to conduct our analysis. The results indicated that significant predictors of entrepreneurial success for Yemeni youth included age, gender, financial support, government legislation and regulations, the political and security situation, and family support. Insignificant predictors included education level, specialised training in entrepreneurship, and digital skills. Overall, this study highlights the nature of youth entrepreneurship in Yemen and offers a roadmap for stakeholders to strengthen support systems and catalyse sustainable development through the untapped potential of Yemeni youth.

## Policy Recommendations

- Enhance access to financial support
- Strengthen legislative and regulatory frameworks
- Address political and security challenges
- Leverage family and community support
- Reform educational and training systems
- Build resilience in the digital economy

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## Appendices

**Table (A-1): Survey Questions**

Question No.	Field	Question Statement
Q1	General information about participants	Age
Q2		Gender
Q3		Do you currently own a private project?
Q4		Educational level
Q5		Type of job
Q6	Financial challenges	How do you rate the ease of obtaining necessary finance to start or expand youth projects?
Q7		Have you benefited from any governmental or private financial support programmes for entrepreneurship?
Q8	Institutional challenges	Do you think that government legislation and regulations empowering youth in entrepreneurship are sufficient?
Q9	Political and social challenges	How do political and security situations in Yemen affect your business decisions?
Q10		Have you faced direct problems in your business related to security or political stability?
Q11		To what extent do you feel that your family supports your entrepreneurial activities?
Q12		Are there sufficient social networks supporting youth entrepreneurship success?
Q13a	Education and training challenges	Have you received specialised educational programmes in the field of entrepreneurship?
Q13b		Have you received specialised training programmes in the field of entrepreneurship?
Q14		How do you rate the quality of higher education alignment with labour market requirements in Yemen?
Q15	Digital skills	Do you have sufficient digital skills to allow you to benefit from the opportunities of the ICT industrial revolution?
Q16	The most important challenge	What are the most important challenges facing you in the field of entrepreneurship?

Source: Constructed by Authors

## BIOGRAPHY



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