



A Market Study:

Rural Income Development in Yemen

ERRY III

2023



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List of Abbreviations

AML	Anti-Money Laundering
ERRY	Emergency Response and Resilience in Yemen
EU	European Union
FAO	Food and Agriculture Organization
FGD	Focus Group Discussion
HH	Household
HHS	Household Survey
IDP	Internally Displaced Person
ILO	International Labour Organization
JP	Joint Programme
KII	Key Informant Interview
MFI	Microfinance Institution
MSME	Micro, Small, and Medium Enterprises
NGO	Non-Governmental Organization
PWD	People with Disabilities
SFD	Social Fund for Development
SIDA	Swedish International Development Cooperation Agency
SME	Small and Medium Enterprise
SMEPS	Small and Medium Enterprise Promotion Service
UN	United Nations
UNDP	United Nations Development Programme
WFP	World Food Programme
WHO	World Health Organization
YCB	Yemeni Commercial Bank
YER	Yemeni Rial



2. EXECUTIVE SUMMARY

Yemen is grappling with a profound humanitarian crisis, with 69% of its population in desperate need of aid and protection due to ongoing conflict, economic turmoil, and rampant food insecurity. There are 4.5 million internally displaced individuals, and about 17 million people face severe food scarcity, including 2.2 million malnourished children below five years old and 1.3 million malnourished expectant and breastfeeding women.

To address these challenges, a joint programme titled "Supporting Resilient Livelihoods, Food Security, and Climate Adaptation in Yemen (ERRY III)" was launched in March 2022 for a three-year duration. The programme, funded by the European Union and the Government of Sweden, is a collaborative effort between UNDP, FAO, ILO, and WFP, and operates in seven vulnerable governorates. The programme's focal points are bolstering the autonomy and resilience of distressed communities by generating economic opportunities, enhancing food production capabilities, reconstructing communal assets, supporting agricultural value chains, promoting gender equality, and facilitating access to solar energy. Furthermore, it seeks to fortify the capacity of local institutions for gender-sensitive service provision and improve access to basic amenities.

This market study report is a component of ERRY III and concentrates on rural income development. The report aims to comprehend and analyse the necessities and opportunities for training, microbusiness sectors, self-employment, and micro-entrepreneurship, particularly for women and youth in selected rural communities. The key objectives encompass understanding educational levels, skills, and training requirements, examining market prospects for economic activities, evaluating market capacities in target areas, scrutinizing value chains in key sectors, analysing available funding sources for rural businesses, and evaluating the utilization of mobile technology for financial transactions.

The study was executed across different regions in Yemen employing a mixed-methods approach. It offers an extensive exploration of literacy and training needs, an evaluation of value chains and micro-income activities, an investigation into potential sectors and income-

generating activities, an analysis of obstacles in accessing capital, and an inquiry into factors influencing the failure or success of income-generating projects.

This market study employed a mixed-method approach to gather, triangulate, and validate data from multiple sources to achieve its objectives. The study encompassed both primary and secondary data collection methods, which included documentation review, questionnaires, Focus Group Discussions (FGDs), Key Informant Interviews (KIs), and market observations. These methods were complementary and involved active participation from programme staff, beneficiaries, and key stakeholders.

- Literature Review and Secondary Data Analysis: A thorough review of existing literature, project documents, market assessments, and reports was conducted. Notably, resilience plans developed by community committees provided valuable insights into the local context.
- Household Survey: Conducted across Yemen with 1,100 households (76% Male, 24% Female) participating, this survey assessed resilience capacity, food security, access to services, income levels, training priorities, and specific needs and challenges of vulnerable groups, with an emphasis on women's empowerment. It also evaluated access to financial services and gathered data on training priorities and barriers.
- Focus Group Discussions (FGDs): A total of 22 FGDs were conducted in this study, including separate groups for men and women. FGDs helped in collecting qualitative data and capturing diverse opinions and perspectives on various topics.
- Key Informant Interviews (KIs): 110 KIs were carried out with market actors, local authorities, microfinance institutions, community leaders, etc., to gain deeper insights into self-income and livelihood activities, business opportunities, challenges faced by microenterprises, and potential sectors for growth.
- Market Observation: Employed to validate findings from other tools and to gain real-time insights into market dynamics, supply and demand, and potential business opportunities.
- Data Analysis: Utilized both paper-based and mobile data collection tools. Mobile data collection offered advantages such as automated skip logic, mandatory questions, and minimized human error. Tools underwent rigorous review and pilot testing to ensure accuracy.

This report is instrumental in providing critical insights for rural income development and economic empowerment in Yemen. It will serve as a valuable resource for ERRY III's interventions, ensuring that training, support, and resources are adeptly targeted to ameliorate livelihoods, food security, and climate resilience in the rural communities under consideration.

The analysis of literacy and training priorities for entrepreneurial potentials in targeted rural areas reveals significant findings and statistics. Men & women disparities in education levels are evident, with higher illiteracy rates among females. While elementary education participation is relatively equal, women exhibit lower participation rates in technical diploma programmes and university education.

Income sources and economic activities in the targeted regions are diverse, with notable statistics. Farming activities have an average participation rate of 12%, with relatively equal involvement between genders. Honey production and sales show an average participation rate of 6%, indicating consistent engagement. Approximately 22% of individuals are engaged in

their own Micro, Small, and Medium Enterprises (MSME), reflecting a relatively equal distribution of entrepreneurship opportunities.

Challenges in accessing training opportunities are prevalent, particularly for females. A significant portion (78%) of the population across regions faces difficulties in accessing these opportunities, with women consistently facing higher levels of difficulty compared to males.

The analysis also highlights gender disparities in income sources, with men having a more diverse range of income sources. Notably, women excel in the agricultural sector, while men have higher earnings in honey production and MSME ownership. Addressing these disparities is crucial for gender equality and economic development.

Financial decision-making roles within households exhibit variations between genders, requiring further examination to promote gender equality at the household level.

Efforts are needed to address challenges hindering women's participation in training and empowerment programmes. Improving market access, transportation, childcare facilities, and challenging societal norms are essential for women's empowerment.

The analysis emphasizes the need for comprehensive interventions that encompass education, financial support, technical training, and business management skills. Access to capital, education, and healthcare are identified as common priorities for women's empowerment.

Women in targeted rural areas engage in income-generating activities, such as selling products, providing services, farming, and livestock breeding. Lack of capital is a primary obstacle, highlighting the importance of financial resources. Shorter durations of engagement for women suggest additional barriers or limitations.

Comprehensive training programmes in business setup and management are desired, with specific areas identified, including business planning, financial management, human resources management, and marketing and sales.

Addressing the identified challenges and providing necessary support and training can enhance economic opportunities, increase labour market participation, and foster sustainable development in targeted rural areas.

The analysis of factors influencing the practicability of skilled-based training reveals significant findings and statistics that shed light on the feasibility of entrepreneurship and the barriers faced by individuals in targeted rural areas.

The data shows a high level of interest in starting one's own business among the respondents, with an average of 37% expressing a strong inclination towards entrepreneurship. This interest is consistent across various districts, indicating a widespread desire for self-employment and business ownership. When considering the men & women breakdown, both men and women show considerable interest, with 46% of women and 37% of men indicating their desire to start a business. These statistics highlight the potential for fostering entrepreneurial ecosystems and promoting self-employment opportunities in the targeted rural areas.

Support from family and the community plays a significant role in facilitating self-employment opportunities. On average, 38% of individuals reported receiving support to pursue self-employment. Financial support was the most common form of assistance, with an average of

34% of respondents receiving this kind of support. Educational support, including training and skill development programmes, was also mentioned as a crucial form of assistance.

However, individuals face barriers that hinder their participation in skilled-based training and self-employment schemes. Lack of capital emerged as the most prevalent barrier, with an average of 77% of respondents reporting this challenge. Limited access to markets was cited by 58% of respondents on average, indicating the need for improved market opportunities. Information gaps regarding available training programmes and self-employment opportunities were reported by a significant number of respondents, suggesting the importance of better communication channels and outreach efforts.

Time constraints were mentioned as a barrier by a smaller percentage of respondents, indicating the need for flexible training schedules that accommodate individuals' existing responsibilities and commitments. Gender-related constraints were reported by a limited number of respondents, highlighting the importance of ensuring equal opportunities for both men and women in training and self-employment initiatives.

When examining the business ideas individuals would like to pursue, agriculture emerged as the most common idea, mentioned by 14% of respondents on average. Crafts and textiles (11% on average) and food and beverage (32% on average) were also popular choices. These statistics reflect the entrepreneurial potential and creativity within the community, indicating a readiness to embark on business ventures if provided with the necessary support, resources, and opportunities.

To facilitate entrepreneurship and overcome the identified barriers, comprehensive interventions are needed. Financial support was considered crucial by 50% of respondents on average, indicating the importance of access to capital for starting and sustaining businesses. Technical support and access to markets were also identified as essential factors, each mentioned by 27% of respondents on average. By addressing these challenges and providing targeted support in areas such as business planning, financial management, marketing, and sales, individuals can gain the necessary skills and knowledge to enhance their entrepreneurial endeavours.

Overall, the findings and statistics highlight the importance of addressing the identified barriers and providing the necessary support and training to enable individuals in targeted rural areas to pursue their entrepreneurial aspirations. By promoting entrepreneurship, it is possible to enhance economic opportunities, increase labour market participation, and foster sustainable development. These insights are invaluable for informed decision-making, policy formulation, and the development of training programs that empower individuals and contribute to the economic growth and prosperity of the region.

Furthermore, the analysis highlights the importance of access to markets for rural microenterprises. Limited market access was identified as a significant challenge, hindering business growth and expansion. Entrepreneurs face difficulties in reaching larger markets and connecting with potential customers, thereby limiting their sales and revenue potential.

To address this challenge, interventions should focus on improving market linkages, establishing supply chains, and enhancing marketing and distribution networks. This can be achieved through collaborations with relevant stakeholders, such as wholesalers, retailers, and online platforms, to facilitate market access for rural businesses.

Moreover, the analysis emphasizes the need for skills development and capacity building among rural entrepreneurs. Enhancing entrepreneurial skills and knowledge in areas such as business planning, financial management, marketing, and product development can contribute to the long-term success of microenterprises.

Training programmes tailored to the specific needs of rural entrepreneurs, particularly women and youth, can empower them with the necessary tools and competencies to effectively run their businesses. These initiatives can also foster innovation, improve productivity, and enhance competitiveness within the rural business sector.

Additionally, the analysis highlights the importance of fostering a supportive ecosystem for rural entrepreneurship. This includes providing mentorship, networking opportunities, and access to business support services. Engaging local communities, government agencies, and non-profit organizations can contribute to creating an enabling environment that nurtures and sustains rural businesses.

It is crucial to address the specific challenges faced by women and youth entrepreneurs, such as limited access to resources, gender biases, and lack of opportunities. Tailored interventions and initiatives should be developed to promote inclusivity and equality in rural entrepreneurship, enabling women and youth to fully participate and contribute to economic growth and development.

The analysis of microcredit channels for rural businesses and financial literacy in Yemen provides important insights into the availability of financing options and the financial behaviours of individuals in rural communities.

The data reveals that microfinance institutions or credit programs are the most common source of financing, utilized by 76% of respondents. This highlights the role of microcredit in providing access to capital for micro-enterprises in rural areas. Commercial banks with special lending programs are also utilized by 30% of respondents, indicating the presence of financial institutions catering to the needs of rural businesses.

However, challenges in accessing loans persist, with only 46% of loan applicants successfully obtaining the requested financing. The most common reasons for loan application rejections include insufficient collateral, high interest rates or fees, inadequate feasibility studies, and lack of credit history or low credit score. These barriers reflect the challenges faced by rural entrepreneurs in meeting traditional lending requirements.

In response to the challenges, a significant portion of respondents (34%) resort to informal loans from friends, relatives, private money lenders, or credit from equipment and materials suppliers. This highlights the reliance on informal sources of financing due to limited access to formal financial institutions.

Efforts should be made to address these challenges and increase access to microcredit for rural entrepreneurs. This can include initiatives to relax collateral requirements, provide financial literacy training to improve feasibility studies and credit management skills, and establish credit scoring systems to assess creditworthiness beyond traditional credit history.

The data also reveals a strong interest in loans for equipment purchases (50%) and working capital (50%). These findings underscore the importance of targeted loan programs that cater to the specific needs of rural micro-enterprises. Financial institutions should design loan

products that align with the financing requirements of rural businesses, facilitating equipment acquisition and working capital management.

Furthermore, the analysis highlights the importance of financial literacy and the utilization of formal banking services. While a small percentage of respondents have bank accounts, credit services, or deposit/savings accounts, the majority save money at home (78%). This indicates a need to promote financial education and encourage individuals to utilize formal banking services to enhance their financial management practices and access a wider range of financial products and services.

The data also suggests potential opportunities for digital financial services, as 12% of respondents use mobile payment apps or e-wallets for basic payments and money transfers. The high ownership of smartphones (75%) indicates a favourable environment for digital financial inclusion. However, barriers to smartphone ownership, such as affordability and lack of knowledge or skills, should be addressed to ensure broader access to digital financial services.

In addition, the analysis highlights the receipt of foreign remittances by 7% of respondents. These remittances serve various purposes, including investment and personal expenses. The preferred method for receiving foreign remittances is through money exchangers, although satisfaction levels with this method vary.

Overall, the findings emphasize the importance of expanding microcredit channels, promoting financial literacy, and encouraging the use of formal banking services and digital financial solutions in rural areas. By addressing barriers to access and enhancing financial knowledge and skills, rural businesses can have better opportunities for growth and contribute to the overall economic development of Yemen.

On a general note, rural income-generating projects in Yemen face various challenges that can lead to failure. These challenges include financial illiteracy, lack of entrepreneurial skills, external factors and market conditions, inadequate market research and planning, insufficient capital and cash flow problems, ineffective marketing and customer acquisition, political instability and conflict, limited access to resources, poverty and lack of capital, weak infrastructure and services, and environmental challenges. Understanding and addressing these challenges are crucial for increasing the chances of success for rural projects. Seeking guidance from mentors or industry experts can provide valuable support in overcoming these obstacles. On the other hand, factors contributing to the sustainability of income-generating rural projects in Yemen include resilient local communities with traditional knowledge and skills, support from non-governmental and international organizations, market opportunities, diversification of income sources, and community collaboration and networks. These factors play a crucial role in ensuring the continuity and long-term success of rural projects in Yemen, despite the challenging environment.

In addition to the above stated, the market study reviewed different value chains and the document provides market observation results along with relevant recommendations.



3. INTRODUCTION

Yemen continues to face a severe humanitarian and protection crisis, exacerbated by the protracted conflict that began eight years ago. A staggering 21.6 million people, comprising 69% of the population, require humanitarian assistance and protection, according to Humanitarian Action (2022)¹. Economic collapse, heightened poverty rates, and the breakdown of national social protection systems have worsened the already dire food insecurity situation. Inadequate basic service delivery, damaged infrastructure, limited supplies and personnel, and weakened public systems further hamper efforts to address the crisis. Displacement affects 4.5 million individuals, while an estimated 17 million people (54% of the population) experience high levels of food insecurity, including 2.2 million malnourished children under the age of five and 1.3 million acutely malnourished pregnant and lactating women, as stated by the World Food Programme.

To build upon the progress and lessons learned from the previous phases (ERRY I and ERRY II), the joint programme "Supporting Resilient Livelihoods, Food Security, and Climate Adaptation in Yemen (ERRY III)" was initiated. Co-funded by the European Union (EU) and the Government of Sweden this three-year programme (March 2022 - Feb 2025) is jointly implemented by UNDP, FAO, ILO, and WFP. Targeting seven vulnerable governorates—Hajjah, Hodeidah, Al-Mahwit, Sada'a, Lahj, Abyan, and Taiz—the programme aims to enhance the self-reliance of vulnerable people and communities by creating economic and employment opportunities, strengthening productive capacities for food security, restoring community assets, supporting agricultural value chains, promoting gender equality and women's economic empowerment, and facilitating access to solar energy. Additionally, the joint programme aims to improve local institutions' capacity, support prioritized projects for gender-sensitive service delivery, and enhance access to basic services.

¹ UNOCHA, Humanitarian action: Yemen, 30 November 2022. Available at: <https://humanitarianaction.info/article/yemen-0>

The interventions under ERRY III focus on enhancing rural community resilience and building the capacity of crisis-affected communities to manage local risks and shocks, thus promoting increased resilience and self-reliance. The overall objective is to empower crisis-affected communities to effectively handle local risks and shocks, fostering resilience and self-reliance.

This document presents the market study report for rural income development under the "Supporting Resilient Livelihoods, Food Security, and Climate Adaptation in Yemen (ERRY III)" joint programme. The objective of this report is to provide insights into the training needs, microbusiness sectors, potential self-employment, and micro-entrepreneurship opportunities for women and youth in targeted rural communities.

The primary aim of this assignment is to gain a better understanding of the training needs, microbusiness sectors, potential self-employment, and micro-entrepreneurship opportunities for women and youths in targeted rural communities. To achieve this aim, the study has the following specific objectives:

- Identify current levels of education, training, skills, training priorities, and skill development needs among the target population.
- Conduct a market opportunity study to gather comprehensive information on existing and potentially viable economic activities suitable for self-employment and entrepreneurial endeavours.
- Assess the market capacity in the targeted districts and provide recommendations on subdistricts with potential for establishing and expanding micro and small businesses.
- Conduct a value chain study for promising sectors, focusing on health, solar, beekeeping, pottery, food processing, meat and poultry, fisheries, and handloom and textile chains.
- Analyse the financing sources available for rural businesses and survey the current and future plans of financial institutions in providing services to underserved individuals in rural and remote areas.
- Examine the perspectives of both financial institutions and beneficiaries regarding donor grant schemes designed for small businesses and gather their inputs for improving the delivery of such schemes.
- Identify and analyse the challenges that limit financial institutions from providing credit and financial services to farmers and other rural applicants.
- Assess the level of mobile penetration and the use of mobile money applications for financial payments and other financial services among the target population.

The study was conducted across various regions in Yemen, using mixed method approaches.

The document encompasses several subsections that shed light on various aspects of the market study. These subsections include an examination of literacy rates and training priorities for entrepreneurial potentials, an analysis of the value chain structure and prevailing micro-income activities in rural areas, an exploration of potential sectors, income-generating activities, and subdistricts for economic empowerment development, an assessment of the challenges related to access to capital and the landscape of financial services delivery in rural markets, and an investigation into the factors that contribute to the failure or success of rural income-generating projects.

In conclusion, this report aims to provide valuable insights into rural income development and economic empowerment opportunities in Yemen. The findings can contribute to the design and implementation of interventions under the ERRY III Joint Programme, enabling effective targeting of training, support, and resources to enhance livelihoods, food security, and climate adaptation in the targeted rural communities.



4. METHODOLOGY

For the purpose of achieving the main objectives of this study, a mixed-method approach was employed to triangulate and facilitate the validation of data and conduct cross-verification from multiple data sources. The methods used included documentation review, questionnaires, Focus Group Discussions (FGDs), Key Informant Interviews (KIIs), and market observations. These methods and tools were considered complementary rather than hierarchical. The study also adopted a participatory approach by involving programme staff, beneficiaries, and relevant key stakeholders, including local authorities, project partners, and community leaders.

The market study design involved the collection of data from both primary and secondary sources. The following methods were utilized:

- **Literature Review and Secondary Data Analysis:** This included analysing key project documents, previous market assessments, available literature, as well as other relevant reports and research studies.
- **Primary Data Collection:** The Market Study Team employed a mixed-methods approach, combining qualitative data collected from Focus Group Discussions (FGDs), Key Informant Interviews (KIIs), and market observations, along with quantitative data collected through questionnaires.

Desk Review:

In the desk review conducted for this study, a comprehensive range of sources were utilized to gather relevant information. These included reports and studies published by various agencies, relevant literature on the subject matter, and the resilience plans developed by community committees for different sub-districts under the supervision of the Social Fund Development (SFD). These resilience plans were shared by UNDP, providing valuable insights into the local context and community-led initiatives. By incorporating these diverse sources of information,

the desk review aimed to establish a solid foundation of knowledge and understanding to inform the subsequent stages of the market study.

Household Survey (HHS):

The Household Survey (HHS) was conducted across Yemen to collect primary data from potential targeted beneficiaries and households in various regions. The survey questionnaire was developed to assess the level of resilience capacity, food security, access to basic services, and income of the households. It also aimed to gather data on training levels and priorities, including capabilities, education, qualifications, income, and skills of potential participants. The survey focused on understanding the specific needs and priorities of women in terms of empowerment, the challenges they faced in accessing training and empowerment interventions, and the income and livelihood needs of vulnerable groups, including internally displaced persons (IDPs) and persons with disabilities (PWDs). The survey also aimed to capture information on skill-based training priorities, self-employment plans and ideas, and the required equipment and tools.

Furthermore, the survey collected data on factors influencing the feasibility of skill-based training, such as participants' interest, motivation, commitment to pursuing self-employment projects after training, family and community support (especially for women's training and entrepreneurship), barriers that needed to be addressed, and suggestions from participants and local leaders. It provided insights into the occupations and skills of men and women in the community.

Additionally, the survey assessed the availability and equality of opportunities to access financial services, including bank accounts, credit services, deposit or savings accounts, and familiarity with digital and mobile financial practices. It captured data on financial institutions' initiatives to facilitate banking and financial services in the targeted areas.

The household survey was conducted across Yemen, with a total of 1,100 households participating in the study (76% Male, 24% Female). The respondents were categorized into different groups, including the host community, internally displaced persons (IDPs), marginalized groups, and returnees.

Focus Group Discussions (FGDs):

Focus Group Discussions (FGDs) were conducted as part of the research methodology to gather qualitative data and complement the quantitative findings. The FGDs involved selected beneficiaries and/or community members from each targeted district. The sampling frame, developed during the inception phase, guided the selection of participants for each FGD.

Each FGD consisted of approximately 6 to 10 participants who shared similar backgrounds or experiences, allowing for more focused and in-depth discussions. The study team maintained a neutral stance during the discussions, encouraging participation from all invited individuals. The FGDs provided a platform for participants to express their opinions, ideas, and perspectives, which could sometimes differ or align with each other.

Two separate FGDs were conducted—one with men participants and another with women participants. Each FGD was facilitated by one enumerator while another enumerator took notes to ensure comprehensive documentation of the discussions.

In total, 22 FGDs were conducted for this study, with 11 FGDs conducted with men participants and 11 FGDs conducted with women participants. The group size ranged from 6 to 10 participants, ensuring a diverse range of perspectives and insights were captured.

Key Informant Interviews (KIIs):

Key Informant Interviews (KIIs) were conducted to gather qualitative and in-depth data from individuals who hold key insights and perspectives on various aspects of the assignment. The interviews aimed to obtain a comprehensive understanding of the different factors and perspectives involved. A wide range of key informants were selected, including market actors, value chain actors, microfinance institutions, cooperatives, local authorities, project partners, program team members, community leaders, and community committees.

The KIIs provided valuable cross-sectoral, inclusive, and gender-focused data on major self-income and livelihood activities, sector segmentation and mapping by business size (with a focus on microenterprises and lead firms), potential business sectors and industries for rural growth, income activities for women and promising sectors for women entrepreneurship and micro start-ups, and non-agricultural activities such as crafts, along with their economic viability and equipment needs. Furthermore, the KIIs collected data on suggested income-generating projects and activities that could be considered for further support and enhancement. They helped in understanding and analysing under-utilized raw materials and production inputs available in the community.

The KIIs also aimed to assess the challenges faced by rural microenterprises, barriers to entrepreneurship for youth and women, ways to facilitate linkages and opportunities for self-employment, and priorities for small grants and financing, including asset and equipment procurement and working capital needs.

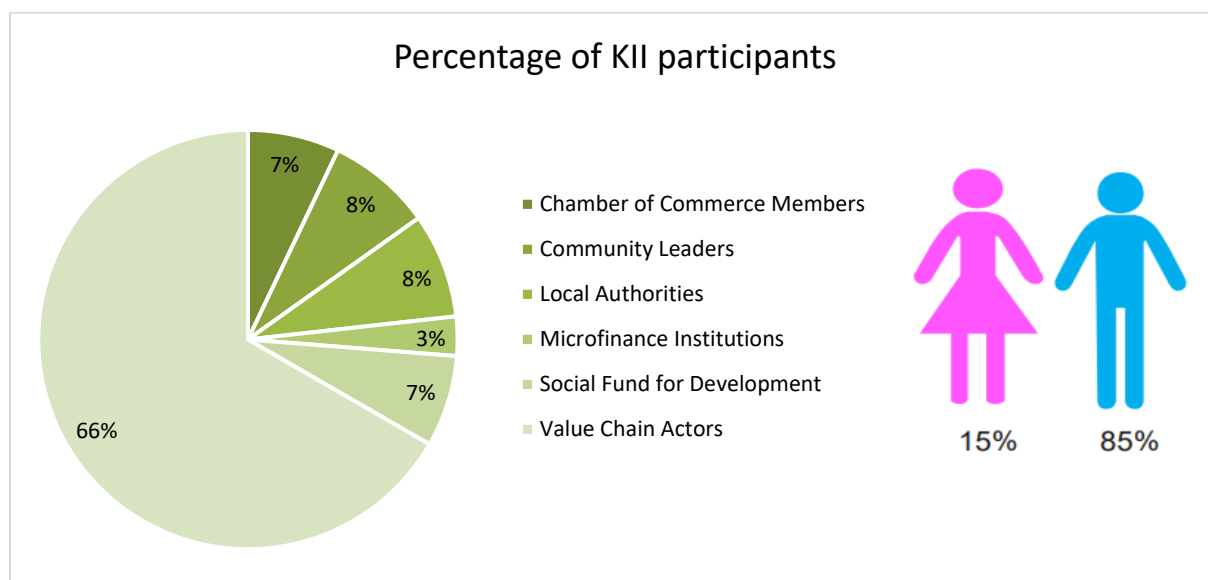


FIGURE 1: PERCENTAGE OF KII PARTICIPANTS

In total, 110 KIIs were conducted in this study. The interviews involved engaging with community leaders, local authorities, microfinance institutions, the Social Fund for Development (SFD), chamber of commerce representatives, value chain actors, community committee members, school managers, health centre managers, directors of the education office in the district,

directors of the district office, and other relevant stakeholders. The insights and perspectives gathered through these interviews provided valuable insights for the market study.

Market Observation:

The market observation tool served as a foundational tool for the market assessment. Its purpose was to validate the findings obtained from the previous tool, providing additional insights into key areas within the identified value chains. This tool focused on assessing gender-related business opportunities, the level of goods supply and demand, and prioritizing sectors based on economic opportunities within the target areas. Furthermore, it provided an initial understanding of sectors that were declining and those that showed promising potential.

The market observation tool involved conducting simple observations within a market setting at different times throughout the day. This approach allowed for gathering first-hand information and capturing real-time market dynamics. The tool provided a qualitative perspective that complemented the quantitative data collected through other methods, enhancing the overall understanding of the market landscape and opportunities.

Data Analysis:

The data analysis process began following the finalization of the data collection tools, including the Household Survey (HHS), Key Informant Interviews (KIIs), Focus Group Discussions (FGDs), and Market Observations. To ensure data quality, the MIS Analyst designed both paper and pen versions and electronic versions of the tools. The electronic versions were programmed into the Kobo Toolbox mobile data collection software and loaded onto smartphones and tablets.

The utilization of mobile data collection offered several advantages over paper-based tools. The scripters incorporated skip logic and filter logic into the tools, enabling a streamlined interviewing process for enumerators. Mandatory questions could be set, reducing the likelihood of missing data. Close-ended questions and their response options were assigned entry codes in the data collection software, linking them to the corresponding English versions of each question through numeric codes in the final dataset. This automated process minimized potential human error and facilitated the subsequent steps of data cleaning and analysis.

To ensure the accuracy and effectiveness of the scripted tools, a meticulous review was conducted, and pilot testing was performed prior to data collection. This ensured the correct implementation of skip logic, appropriate wording of questions, and the resolution of any technical glitches that arose.

Although smart devices were the primary method for data collection, paper versions of the tools were also prepared as backup alternatives in case restrictions on smart device usage were encountered.

The comprehensive preparation and programming of the data collection tools, along with meticulous review and piloting, laid the foundation for a robust and efficient data analysis process.



5. FINDINGS

The findings presented in this section provide insights into various aspects related to rural income development and economic empowerment under the "Supporting Resilient Livelihoods, Food Security, and Climate Adaptation in Yemen (ERRY III)" joint programme. The data collected through the market study encompassed multiple dimensions, including literacy and training priorities for entrepreneurial potentials, the value chain structure and dominant micro-income activities in rural areas, potential sectors and income-generating activities for economic empowerment, and challenges related to accessing capital and the landscape of financial services delivery in the rural market.

Literacy and training priorities for entrepreneurial potential

An analysis of the data reveals notable differences in education levels between women and men across the specified subdistricts. The data indicates that there is a higher prevalence of illiteracy among women compared to men in several subdistricts.

When considering elementary education, the data suggests a relatively equal distribution between genders in most subdistricts. This indicates a relatively balanced participation of both genders at this level of education. However, disparities start to emerge in higher education levels.

There are variations in the attainment of high school education between women and men. Differences in technical diploma programs also exist between genders. This discrepancy indicates a higher level of men participation in technical vocational programmes.

Moreover, the data highlights variations in university education between women and men. This indicates a gender disparity in university enrolment, with men exhibiting a higher participation rate in tertiary education.

In summary, gender differences exist in education levels across the specified subdistricts. Women tend to have higher illiteracy rates compared to men, while at the elementary education level, participation is relatively equal. However, disparities emerge in higher education levels, with women having higher participation rates in high school education but lower participation rates in technical diploma programs and university education.

Income sources:

In ERRY III targeted regions, the main sources of income for the population are diverse and encompass various economic activities. Men are often engaged in occupations such as fishing, agriculture, livestock activities, construction work, and technical trades. They play a significant role in sectors like fishing, where they participate in activities like fish processing and sales. They are also involved in farming, cultivating crops such as wheat, corn, vegetables, and coffee. In addition, men contribute to the economy through activities like animal husbandry, raising goats, sheep, cows, and poultry, as well as selling them in markets.

Women are also involved in a range of income-generating activities, including handicrafts, sewing, embroidery, henna application, hairdressing, and sales. They often utilize their skills in sewing and embroidery to produce various products for sale, such as clothes, handicrafts, and accessories. Women are also engaged in agriculture, participating in activities like vegetable cultivation, fruit production, and grain farming. Additionally, some women contribute to the household income through occupations like incense making, perfume production, and food preparation.

The income sources in these regions are predominantly based on daily wage work, where people are paid for their work on a daily basis. However, there are also permanent sources of income, such as owning livestock or having a shop. It is important to note that the ongoing conflict in Yemen has had a significant impact on the economy, leading to low-income levels for both men and women.

In summary, the population in these regions engages in a wide range of economic activities to sustain their livelihoods. Men often contribute through sectors like fishing, agriculture, livestock activities, and construction, while women are involved in activities such as handicrafts, sewing, and agriculture. The income sources are mainly based on daily wage work, but some sources of income are permanent. The economic challenges posed by the conflict in Yemen have affected the income levels of the community, highlighting the need for support and development initiatives in these regions.

Interestingly, no significant differences were observed between sectors or men /women participation rates in the cash transfers from institutions such as NGOs and UN. This indicates that cash transfers are relatively evenly distributed across the regions and genders.

Farming activities were found to be a common source of income, with an average participation rate of 12%. Women exhibited a slightly higher participation rate (12%) compared to men (11%), suggesting a relatively equal involvement in agricultural pursuits. This highlights the importance of farming as a prevalent economic activity in these regions.

Honey production and sales, on the other hand, had a lower overall participation rate, averaging around 6%. No significant disparities were observed between sectors or men / women participation rates, indicating a relatively consistent engagement in this particular income-generating activity.

Livestock activities were found to be relatively common among the analysed population, with an average participation rate of 8%. Similar to other categories, no significant differences were observed between sectors or men / women participation rates in livestock-related endeavours.

The data also showed that approximately 22% of individuals were engaged in their own Micro, Small, and Medium Enterprises (MSME). Notably, there were no substantial disparities between sectors or men /women participation rates in this category, suggesting a relatively equal distribution of entrepreneurship and self-employment opportunities.

Regarding remittances or assistance from friends and family, the data indicated an average participation rate of 4%. As with previous income sources, no significant differences were observed between sectors or men /women participation rates, pointing to a relatively consistent pattern of financial support from personal networks.

Skilled labour or vocational skills were pursued by approximately 24% of individuals, demonstrating a significant proportion engaged in this category. Similar to other income sources, no significant differences were found between sectors or men /women participation rates in skilled labour or vocational skills, indicating a balanced distribution of such economic activities.

Unskilled labour was found to have an average participation rate of 5%. Notably, no significant disparities were observed between sectors or men/women participation rates in this category, suggesting a relatively equal involvement in unskilled labour across the analysed regions.

The data indicated a relatively low participation rate in fishing activities, averaging around 6%. However, similar to other income sources, no significant differences were observed between sectors or men/women participation rates in fishing, indicating a consistent pattern of engagement in this economic activity.

Other income sources, such as salaries from the government, community support, pensions/retirement benefits, dairy processing activities, and employment in the private sector exhibited relatively low participation rates across Yemen. No significant disparities were observed between sectors or men/women participation rates in these categories, highlighting a similar level of involvement regardless of men, women, or sector.

Overall, the analysis suggests that there are no substantial differences in the distribution of income sources and economic activities between sectors or men/women participants in Yemen. However, it is important to note that these findings are based on the provided data and may not represent the entire population or account for other factors that could influence participation rates. Further research and exploration would be necessary to gain a comprehensive understanding of the economic dynamics and factors influencing income sources in these regions.

Monthly average income:

The analysis of monthly average income by the head of the household (HH) reveals a general trend of variations between women and men across the districts.

The findings show that there is a mixed pattern in terms of average monthly income between women-headed and men-headed households. In some cases, women-headed households tend to have a higher average monthly income compared to men-headed households. This suggests that women who lead households may have better income prospects or access to economic opportunities.

On the other hand, in certain cases, households with men heads tend to have higher average monthly incomes. This indicates that there may be an income disparity between genders, with men earning more than women. It suggests that men may have greater access to higher-paying jobs or income-generating activities.

However, in some cases, there is no significant difference in average monthly income between women-headed and men-headed households. This suggests a more balanced income

distribution between men and women, indicating that women and men may have relatively similar income opportunities and access to resources in those circumstances.

The data provided reveals insights into the monthly average income sources for men and women in rials. Men appear to have a broader range of income sources as compared to women. Specifically, men have an average income of 133,000 rials from honey production and sales, 118,750 rials from owning MSMEs, and 102,308 rials from fishing. Data for women in these sectors is not available, indicating possible disparities in work participation or reporting in these fields.

In contrast, women outperform men in the agriculture sector. In farming activities, women earn an average of 88,684 rials compared to 86,681 rials for men. In livestock activities, women earn an average of 81,848 rials compared to 71,628 rials for men. This suggests that women might be more involved or efficient in these areas.

In the realm of entrepreneurship, men owning micro, small, and medium enterprises (MSME) earn slightly more, with an average income of 118,750 rials compared to 115,044 rials for women. This marginal difference of 3,706 rials could be due to various factors such as investment size, nature of businesses, or market dynamics.

Regarding external financial support, men receive more remittances and assistance from friends and family, averaging 63,750 rials, whereas women receive an average of 53,571 rials. This difference of 10,179 rials might imply that men have higher reliance or access to external financial support networks. However, in the case of institutional support such as cash transfers from NGOs or the UN, the gender gap is narrow, with men receiving 45,143 rials and women receiving 44,167 rials.

Interestingly, women have an exclusive presence in dairy processing activities, earning an average income of 96,111 rials, whereas no data is available for men in this sector. This suggests that dairy processing might be a sector where women have carved a niche for themselves or where socio-cultural factors play a significant role.

Furthermore, men earn 70,345 rials in skilled labour, 59,902 rials in unskilled labour, and 55,750 rials from government salaries. Additionally, men receive 48,636 rials in pensions or retirement income and 38,333 rials from community support. There is no data available for women in these areas, which again points to possible participation or reporting gaps.

In summary, the data showcases disparities between men and women in income sources. Men have a more diverse range of income sources, with notable earnings in honey production (133,000 rials) and MSME ownership (118,750 rials). Women are particularly proficient in the agricultural sector, with earnings of 88,684 rials in farming and 81,848 rials in livestock activities and have a stronghold in dairy processing with an average income of 96,111 rials. The marginal difference in entrepreneurship (3,706 rials) and similarity in institutional support (976 rials) might suggest areas where men and women parity is closer. The absence of women data in several sectors points to either a lack of participation or a reporting gap. Addressing these disparities could be vital for equality and economic development.

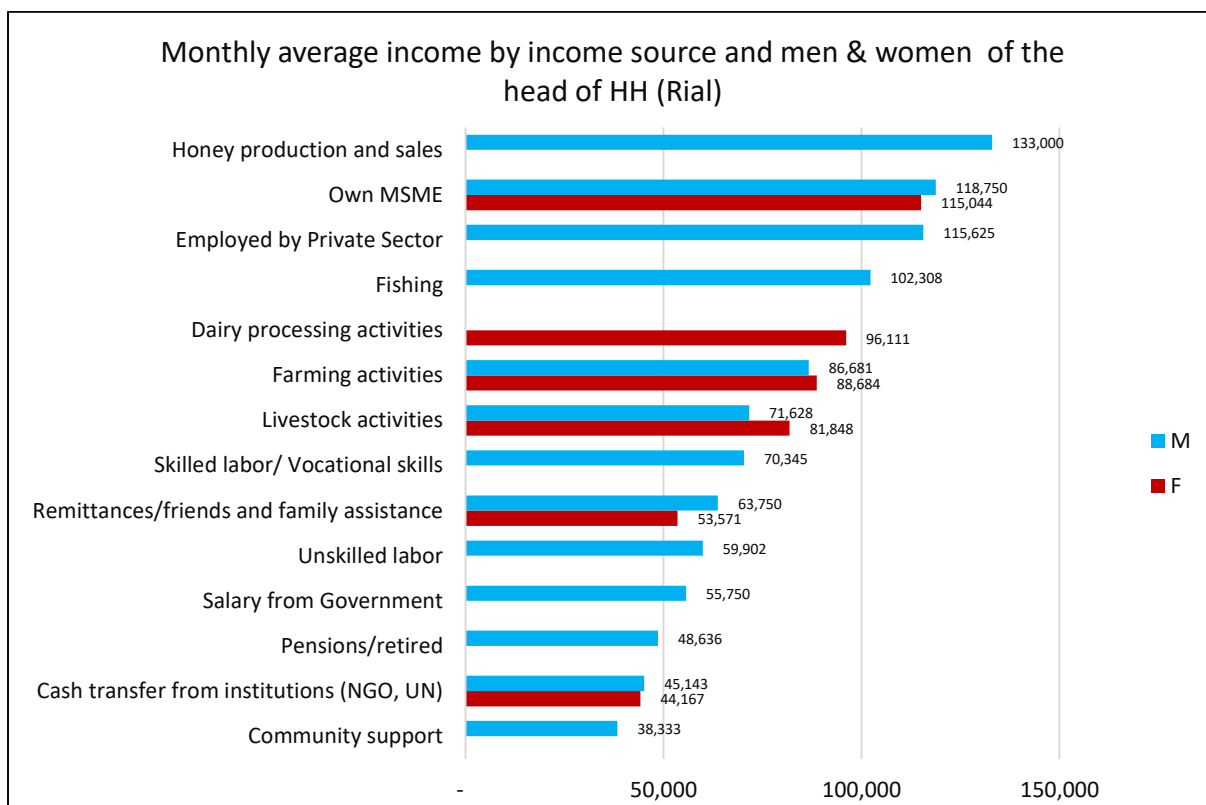


FIGURE 2: MONTHLY AVERAGE INCOME BY INCOME SOURCE

Responsibility for day-to-day financial decisions:

The analysis of the data reveals variations in the distribution of responsibility for day-to-day financial decisions within households across different regions, without mentioning specific districts. The average percentages provide insights into the overall trends observed.

Across the regions, an average of 92% of women and 90% of men take responsibility for daily financial decisions within their households. This indicates a relatively high level of involvement from both men and women in financial decision-making processes.

However, there are notable disparities in some areas. In specific regions, men exhibit a higher level of responsibility, while women have a lower proportion of involvement in financial decision-making. On average, 89% of women and 92% of men take responsibility in these regions, highlighting the differences in roles when it comes to managing day-to-day finances.

Conversely, in other regions, the distribution of financial decision-making responsibilities is more balanced between genders. Both women and men have relatively equal involvement, with an average of 93% of women and 94% of men taking responsibility for daily financial decisions.

These findings suggest that while there are variations in the distribution of financial decision-making roles between women and men across the analysed regions, overall, there is a considerable level of participation from both men and women. However, further examination of the underlying factors contributing to these disparities is necessary to promote equality in financial decision-making processes at the household level.

Analytically, it's apparent that a substantial proportion of individuals of both men and women across different regions engage in estimating their monthly expenses, though there are variances between women and men, and across regions.

Household expenses estimation:

The analysis reveals variations in the rates at which women and men estimate monthly expenses within households across different regions. On average, a significant number of individuals engage in estimating monthly expenses, with slight variances observed.

In summary, the majority of individuals across the regions analysed are engaged in estimating their monthly expenses, indicating a sense of financial planning and management. However, there are disparities in some areas, and the degrees of engagement vary across regions. This data is crucial for understanding the financial behaviours and practices across different demographics and could be significant for policy-making and financial literacy programmes.

Challenges in accessing training and empowerment interventions:

As for the challenges in accessing training opportunities, a significant portion of the population (78%) across regions indicates challenges in accessing these opportunities. When examining the gender breakdown, it becomes apparent that women generally face higher levels of difficulty in accessing training and empowerment interventions compared to men. Across most regions, the percentage of women facing challenges is consistently higher than that of men. This suggests that there may be underlying factors that hinder women participation in training and empowerment programmes.

One common challenge reported by both women and men is a lack of financial resources. However, the percentage of women citing this challenge is consistently higher than that of men. This indicates that financial constraints disproportionately affect women when it comes to accessing training programmes. This disparity can be attributed to various factors, such as limited economic opportunities and financial independence for women.

Another significant challenge reported by both men and women is a lack of information. While the overall percentage for this challenge is relatively lower compared to the lack of financial resources, there are noticeable differences between women and men. In some regions, men have a higher percentage of challenges related to a lack of information, indicating that access to information and awareness about available training opportunities may be more limited for men in those areas.

The analysis also highlights other challenges that individuals face in accessing training, such as a lack of time, perceived unfair selection processes, and transportation difficulties. Although the overall percentages for these challenges are relatively low, there may be regional variations in the prevalence of these barriers.

When examining the responses regarding the priorities for women's empowerment, there are notable differences between women and men in terms of their perspectives and priorities.

Access to capital emerges as a significant priority for both women and men, indicating the importance of economic empowerment for women in these communities. However, there are differences in the percentage of women and men prioritizing this aspect. Women consistently have a higher percentage than men, suggesting that women face greater challenges in accessing financial resources and capital for economic activities.

Access to education is another priority that is mentioned by both women and men, although the percentages vary. Overall, women tend to prioritize access to education more than men, indicating the significance of educational opportunities for women's empowerment. This aligns

with the global trend of recognizing education as a key factor in empowering women and enhancing their social and economic status.

Access to healthcare services is also mentioned as a priority, particularly by women. This reflects the importance of ensuring adequate healthcare services for women's well-being and their ability to actively participate in their communities. The higher percentage among women may indicate that they face specific healthcare challenges that need to be addressed.

Interestingly, access to leadership positions is not prioritized significantly by either women or men in these communities. This suggests that there may be limited awareness or opportunities for women to engage in leadership roles, or it may indicate a broader perception of roles within these societies.

Overall, the analysis reveals that while there are common priorities for women's empowerment across these communities, there are notable differences between women and men in their perspectives. Women tend to prioritize economic aspects, such as access to capital, while also recognizing the importance of education and healthcare. These findings highlight the need for tailored interventions and initiatives that address the specific challenges faced by women in accessing financial resources, education, and healthcare, in order to promote their empowerment and equality within these communities.

Furthermore, women experience additional challenges in accessing training and empowerment interventions within their communities.

One common challenge reported by women and men is the inability to access the market. This obstacle prevents women from effectively showcasing and selling their products or services, limiting their economic opportunities. The percentages for this challenge vary across regions, indicating that the market accessibility issue affects women to different extents in different communities.

Another challenge highlighted by both women and men is the lack of access to transportation. This limitation poses a barrier for women to attend training programmes or access resources and opportunities that may be available in distant locations. The percentage of women and men reporting this challenge varies, suggesting that transportation difficulties impact women's access to training and empowerment interventions to different degrees across regions.

The lack of childcare facilities is identified as a challenge by women and men, albeit to a lesser extent. This issue particularly affects women who have caregiving responsibilities, as the absence of adequate childcare options can limit their ability to engage in training programs or pursue empowerment opportunities. The percentages for this challenge vary across regions, indicating that the availability and accessibility of childcare facilities differ among communities.

A noteworthy challenge highlighted by both women and men is the lack of opportunities. This refers to the limited availability of programmes, resources, and support systems that facilitate women's access to training and empowerment interventions. The percentages for this challenge vary across regions, suggesting that the presence of opportunities for women's empowerment may differ across communities.

Societal norms and expectations emerge as a significant challenge faced by women across all regions. This refers to the cultural and social expectations placed on women, which can restrict their participation in training and empowerment initiatives. The percentages for this challenge are consistently higher for men, indicating that societal norms and expectations exert greater pressure on women and create additional barriers to their empowerment.

Regarding women's needs and priorities, it is crucial to provide training centres in schools across the district, which can offer training, rehabilitation, support, and grants to enable women

to enter the workforce. Integrating women into various fields through education and job opportunities is essential. Financial support can also play a significant role, particularly for young people and poor families, by providing equipment for fishermen or manufacturing equipment for women to improve their livelihoods.

Empowering women through training, grants, and capital support is necessary to enable them to open and sustain their projects. Prioritizing widowed, divorced, and vulnerable women in training programmes that provide machinery, equipment, and raw materials is vital. Community awareness-raising efforts can encourage women's participation in income-generating activities and their contribution to the well-being of their families.

In summary, the analysis reveals that women face various challenges that impede their access to training and empowerment interventions. These challenges include limited market access, transportation difficulties, lack of childcare facilities, limited opportunities, and societal norms and expectations. It is crucial to address these obstacles in order to create a more inclusive and supportive environment for women's empowerment. Efforts should be made to improve market accessibility, provide transportation solutions, expand childcare services, increase opportunities, and challenge restrictive societal norms, ultimately enabling women to fully participate in training and empowerment interventions across these communities.

Current self-employment projects:

In various districts in Yemen, the local labour markets exhibit distinct characteristics and economic activities. Self-employment projects play a crucial role in these communities, providing income-generating opportunities and contributing to the livelihoods of individuals. The projects undertaken by community members vary based on local needs and preferences.

One common trend is the engagement of women in self-employment projects. They are involved in activities such as embroidery, sewing, henna application, selling clothes, hairdressing, and providing bridal preparation services. Women also participate in producing handicrafts, such as palm leaf products and pastries, which are sold locally. Their active participation in the local economy highlights their entrepreneurial spirit and their contribution to the community.

On the other hand, men are engaged in various occupations that include agriculture, coffee cultivation, and sales, as well as technical work like mobile phone maintenance and sales, solar installation and sales, and electronic tool maintenance. Some men also work in sectors such as fishing, livestock farming, beekeeping, and vegetable and fruit sales. These projects reflect the diverse range of skills and activities pursued by men to support their families and generate income.

Certain projects are prevalent across districts, regardless of the specific location. For instance, agriculture and animal husbandry are common income-generating activities in several districts. Additionally, crafts such as tailoring, embroidery, and handicraft production hold importance in the local labour markets. The sale of locally made products, whether it be textiles, food items, or palm leaf products, plays a significant role in sustaining the local economy.

In terms of preferences, communities often prioritize projects that provide immediate financial returns and stability. This preference stems from the need to cover essential needs and secure a steady income source. Consequently, income-generating projects related to markets, agriculture, fishing, and small-scale trade are highly favoured. Supporting and empowering individuals in these fields can enhance their economic prospects and contribute to community development.

While some districts showcase a diverse range of income-generating projects, others may face limitations in their local labour markets. In such cases, individuals may have to seek employment opportunities in neighbouring districts or governorates. However, despite these challenges, the entrepreneurial spirit remains strong, with individuals actively engaging in self-employment projects and small-scale enterprises to sustain their livelihoods.

In conclusion, the local labour markets in Yemen's districts exhibit a range of self-employment projects that contribute to the communities' economic well-being. Women and men participate in various activities based on local needs, preferences, and available resources. The preference for projects with immediate financial returns reflects the communities' need for stability. Despite limitations in some districts, the resilience and resourcefulness of individuals drive them to explore self-employment opportunities and create sustainable livelihoods.

Levels of capabilities, education, qualification, and skills:

In the targeted rural areas, the level of capabilities, education, qualification, income, and skills of potential participants varies across the regions.

Participants in these areas exhibit a range of capabilities and educational backgrounds. This includes individuals with varying levels of education, from those who are illiterate to those who have obtained bachelor's degrees. The local markets in these regions reflect this diversity, providing opportunities for individuals with different skill sets and qualifications.

However, it is important to note that some regions may face challenges such as high illiteracy rates and limited access to education and training opportunities. These factors can contribute to a lack of certain skills and qualifications in the local labour market, impacting the income and economic prospects of potential participants.

In some areas, the focus is more on practical experience and the ability to perform job tasks effectively rather than formal education. This means that individuals who have acquired skills through hands-on work experience may be considered skilled, despite not having formal educational qualifications.

Support and improvement initiatives are provided to individuals in certain regions, particularly to graduates from universities and institutes. These efforts aim to enhance their living conditions and provide opportunities for further economic growth. Additionally, training programs may be available to develop skills in specific industries or income-generating activities.

Needs and priorities of women in terms of women's empowerment:

Analysing the different needs and priorities of women in terms of women's empowerment and how these can be integrated into training programs, as well as the challenges impeding women's access to training and empowerment interventions in rural areas, reveals important insights.

To integrate women into the labour market, it is crucial to provide job opportunities, equipment, tools, seminars, and platforms for expressing their opinions. Psychological support can also be beneficial in encouraging women to engage in training and develop skills that contribute to their family's income. Additionally, societal acceptance and financial empowerment are necessary for women to thrive in the labour market.

Women's engagement in income-generating activities:

The analysis of women's engagement in income-generating activities in the targeted rural areas provides valuable insights into their economic participation and the challenges they face. The

participation rates of women range from 19% to 35%, while men's participation rates range from 18% to 38%. This suggests that both men and women are actively involved in income-generating activities, although there is some variation.

When examining the specific projects and activities women have been engaged in, it becomes evident that they often focus on selling products and providing services. Women commonly sell clothing, cosmetics, perfumes, bags, and dresses. Additionally, they participate in activities such as selling food, sewing, incense and perfume making, and livestock breeding. These income-generating activities reflect the diverse skills and entrepreneurial spirit of women in the rural areas.

In terms of reasons for discontinuing these income-generating activities, the primary obstacle identified by both women and men is the lack of capital, with percentages ranging from 38% to 60%. This highlights the importance of access to financial resources for sustaining and expanding their businesses. Other reasons mentioned include the lack of market demand, personal factors such as health or family circumstances, and external challenges such as high prices of operational materials, limited market opportunities, and adverse events like conflict and natural disasters.

The duration of engagement in these income-generating activities also varies among women and men. Women tend to have shorter durations of engagement, with the majority falling within the 1–2-year range. This suggests that women may face additional barriers or limitations that result in shorter periods of activity. On the other hand, men show a more even distribution across different durations, indicating a more sustained and consistent involvement in income-generating activities.

The data reveals a diverse range of micro income-generating enterprises being run by both women and men in the targeted rural areas. Women show a higher participation rate in such activities, ranging from 15% to 56%, compared to men, who range from 11% to 26%.

The projects undertaken by men include agricultural land rent, real estate rent, agricultural projects, beekeeping and selling honey, livestock breeding, carpentry, fishing, selling fish, home appliances maintenance, solar energy maintenance and installation, selling solar energy tools, mobile maintenance, selling mobiles, passenger bus services, refrigeration and air conditioning maintenance, selling foodstuffs, running a cafeteria, selling clothes, selling toys, selling building materials, selling marine equipment, and selling vegetables and fruits.



The projects undertaken by women encompass a wide spectrum of economic sectors. These include agricultural projects, livestock breeding, hairdressing, incense and perfume production, photography, selling foodstuffs, making cakes, and selling pastries, selling dairy products like milk,

cheese, and ghee, selling pickles, selling clothes, and engaging in sewing, embroidery, and wool work.

The wide variety of micro income-generating enterprises reflects the entrepreneurial spirit and diverse skills of women in these rural areas. It is evident that women are engaged in various sectors, including agriculture, livestock, food production, services, and crafts.

It is important to recognize the significant contribution of women to the local economy through their involvement in these income-generating activities. By supporting and empowering women in these ventures, their economic participation can be further enhanced, leading to improved livelihoods and economic development in the rural areas.

Furthermore, the diversity of enterprises also presents an opportunity for knowledge sharing and skills development among women. Training programmes that focus on enhancing business management skills, marketing strategies, and financial literacy can further empower women to effectively run and expand their micro-enterprises. Access to capital, market linkages, and supportive networks are also vital for sustaining and scaling these income-generating activities.

To ensure the success and sustainability of these enterprises, it is important to address challenges such as limited access to markets, capital constraints, and technical know-how. Tailored support programs that consider the specific needs of women in different sectors can foster their continued engagement and growth.

Overall, the data highlights the significant presence of micro income-generating enterprises led by women in the targeted rural areas. By recognizing and addressing their diverse needs, providing targeted support, and promoting an enabling environment, these enterprises can serve as a catalyst for women's empowerment and economic development in the communities.

Training needs and priorities:

Moreover, approximately 35% of respondents reported receiving support or training for their past income-generating activities. The type of support varied, with 75% of participants mentioning technical support as their primary form of assistance. This included training related to production or sales, indicating the importance of acquiring specific skills and knowledge in running their enterprises. Financial support was mentioned by 7% of respondents, highlighting the need for capital to establish and sustain their businesses. Marketing support was mentioned by 11% of participants, emphasizing the significance of effective marketing strategies.

When asked about the potential benefits of business set up and management training, a majority of respondents (76%) expressed that it would be very helpful or somehow helpful for their enterprises. This indicates a recognition of the importance of acquiring business management skills to enhance their operations and increase profitability.

Regarding specific areas of business set up and management training, respondents identified several key areas. Developing a business plan was highlighted by 21% of participants, indicating the need for guidance in strategic planning and goal setting. Financial management was deemed important by 13% of respondents, reflecting the desire to improve financial planning and budgeting. Human resources management, including aspects such as team building and staff management, was mentioned by 17% of respondents, underscoring the need for effective personnel management practices. Marketing and sales were also identified as crucial areas for training, with 50% of participants recognizing the importance of enhancing their marketing skills to expand their customer base and increase sales.

The findings indicate that there is a demand for comprehensive training programmes that address various aspects of business setup and management. By providing support in

developing business plans, financial management, human resources management, and marketing and sales strategies, individuals engaged in micro income-generating enterprises can enhance their knowledge and skills, leading to improved business performance and long-term sustainability.

In conclusion, the analysis of the data reveals valuable insights about the local labour market, income-generating activities, women's empowerment, and the need for training programmes in the targeted rural areas.

The data highlights the diverse income sources and economic activities present in these areas. From selling products such as clothing, food, and handicrafts to engaging in agricultural projects, livestock breeding, and services like hairdressing and maintenance, individuals in these communities demonstrate an entrepreneurial spirit and a willingness to engage in various income-generating endeavours. This wide range of activities reflects the economic diversity and potential for growth in these rural areas.

However, several challenges hinder women's access to training and empowerment interventions. Factors such as limited education, social norms, customs, and geographic barriers restrict their participation. Addressing these challenges requires targeted interventions that provide education, raise awareness, and promote inclusivity, empowering women to actively participate in the labour market and income-generating activities.

The findings also underscore the importance of providing support and training to individuals engaged in income-generating activities. While some respondents reported receiving support and training, there is a need to expand and enhance these efforts. Technical assistance, financial support, marketing guidance, and training in business setup and management are crucial for fostering the growth and sustainability of micro-enterprises.

Moreover, the data reveals the potential benefits of business set up and management training. Respondents expressed a strong belief in its usefulness, particularly in areas such as developing business plans, financial management, human resources management, and marketing and sales. Customized training programmes addressing these specific needs can enhance entrepreneurial skills, improve productivity, and promote successful business ventures.

In summary, the findings emphasize the importance of comprehensive interventions that encompass education, financial support, technical training, and business management skills to empower individuals in the targeted rural areas. By addressing the challenges, providing necessary support, and delivering relevant training, it is possible to enhance economic opportunities, increase labour market participation, and foster sustainable development in these communities.

Factors influencing practicability of skilled-based training

Interest and motivation of the participant in starting their own businesses:

While looking at the factors influencing the practicability of skilled-based training, it is



noteworthy to consider the high level of interest in starting one's own business among the respondents. The data reveals that a significant percentage of individuals express a strong inclination towards entrepreneurship, with a substantial proportion indicating a "very interested" response. This enthusiasm is consistent across various

districts, suggesting a widespread desire for self-employment and business ownership.

The breakdown of the responses between men and women indicates that both show considerable interest in starting their own businesses, although there are slight variations. Generally, women exhibit a strong interest in entrepreneurship, with a substantial percentage expressing their desire to start a business. Men also show a high level of interest, although the percentage is slightly higher among women in some districts. These findings underscore the potential for fostering entrepreneurial ecosystems and promoting self-employment opportunities in the targeted rural areas.

Furthermore, it is important to note that a significant portion of respondents still express some level of interest, even if not categorized as "very interested." This indicates a potential pool of individuals who may benefit from skilled-based training programs that can provide them with the necessary knowledge and skills to start and manage their own businesses.

The data highlights the need for tailored training programmes that address the specific interests and aspirations of individuals in these areas. By offering training in areas such as business planning, financial management, marketing, and sales, participants can gain the necessary skills and knowledge to enhance their entrepreneurial endeavours. Additionally, providing support in areas such as technical assistance, mentorship, and access to capital can further increase the feasibility and success of these business ventures.

Family and community support:

While analysing the support received from family and the community to pursue self-employment, it is evident that a significant percentage of individuals have received support in their entrepreneurial endeavours. The data reveals that a considerable portion of respondents have received support from their family and community, indicating a positive environment that encourages and facilitates self-employment opportunities.

The types of support provided by family and community members predominantly include financial assistance, educational support, and psychological support. Financial support is the

most common form of assistance, with a substantial proportion of respondents indicating that they have received financial backing to pursue self-employment. This support plays a crucial role in enabling individuals to start and sustain their own businesses by providing the necessary capital for investment and operational expenses.

Educational support is another significant form of assistance received by individuals in their entrepreneurial pursuits. This includes training, education, and skill development programmes that equip individuals with the necessary knowledge and competencies to succeed in their chosen business ventures. Such support from family and the community helps individuals acquire the essential skills and expertise needed to effectively manage their businesses and navigate the challenges of entrepreneurship.

Psychological support, characterized by encouragement, motivation, and belief in one's abilities, also plays a role in facilitating self-employment. This type of support boosts individuals' confidence, resilience, and determination to pursue their entrepreneurial aspirations. It contributes to a supportive and nurturing environment that fosters the growth and success of self-employed individuals.

The data shows that both men and women have received support from their families and communities to pursue self-employment, although there may be slight variations in the percentages. This indicates that support for entrepreneurship is not limited to men only or women only and that both are encouraged to explore and engage in entrepreneurial activities.

The availability of support from family and the community highlights the importance of a supportive ecosystem for fostering entrepreneurial endeavours. By providing financial assistance, educational opportunities, and psychological support, families and communities contribute to the success and sustainability of self-employment initiatives. This support system not only empowers individuals to pursue their entrepreneurial dreams but also enhances the overall economic growth and development of the targeted rural areas.

Factors affecting participations in trainings and self-employment schemes:

While looking at the factors influencing the practicability of skilled-based training and self-employment schemes, it is evident that a significant proportion of individuals face barriers that hinder their participation in such initiatives. The data reveals that a majority of respondents, both men and women, have encountered challenges that impact their ability to engage in training and self-employment opportunities.

The primary obstacles reported by participants include a lack of financial resources, which emerged as the most prevalent barrier. This indicates that individuals face difficulties in accessing the necessary capital to invest in their businesses or participate in training programmes. Insufficient financial resources limit their ability to acquire equipment, raw materials, or enrol training courses, thus impeding their progress in entrepreneurship.

Another significant barrier identified is the lack of information. Many respondents reported a dearth of knowledge about available training programmes and self-employment opportunities. This highlights the need for improved communication channels and outreach efforts to ensure individuals are well-informed about such initiatives. By addressing this information gap, more individuals can be encouraged to participate and benefit from these programmes.

Time constraints were also reported as a barrier by a smaller percentage of respondents. Balancing existing responsibilities and commitments with training or self-employment activities can be challenging, particularly for individuals with family or work obligations. Addressing this barrier requires flexible training schedules and supportive mechanisms that accommodate individuals' time constraints.

Gender-related constraints were reported by a limited number of respondents. Some individuals highlighted the issue of bias, with women being prioritized and registered for training and self-employment schemes while men face exclusion. This points to a potential disparity in access and opportunities based on gender. It is important to address such biases and ensure equal opportunities for both men and women in training and self-employment initiatives.

Despite the identified barriers, it is worth noting that the data indicates a lack of suggestions or measures received from the local community and leaders to address these challenges. This highlights the need for increased support and engagement from community stakeholders to develop strategies and interventions that alleviate the barriers faced by individuals in pursuing self-employment and accessing training opportunities.

Business Ideas:

While analysing the data, it is apparent that a significant proportion of individuals have business ideas that they would like to pursue to start micro projects. This indicates a potential entrepreneurial spirit within the community. The most commonly mentioned business ideas include agriculture, crafts and textiles, food and beverage, manufacturing, services, and other diverse ideas.

Among the respondents, agriculture emerged as a popular business idea, with individuals expressing an interest in engaging in agricultural activities. This demonstrates a recognition of the potential in the agricultural sector for income generation and sustainable livelihoods.

Crafts and textiles also garnered significant interest, with a considerable number of respondents expressing a desire to pursue businesses related to crafts and textile production. This highlights the importance of traditional craftsmanship and the market potential for handmade products.

The food and beverage industry also attracted interest, with respondents considering opportunities such as opening restaurants, cafes, or food stalls. This aligns with the demand for diverse culinary experiences and indicates a recognition of the potential profitability in the food and beverage sector.

Additionally, manufacturing businesses, which involve the production of various goods, were mentioned as potential ideas by respondents. This indicates a recognition of the value of manufacturing and the potential for job creation and economic growth through local production.

Other business ideas mentioned encompassed a wide range of sectors and activities, reflecting the diverse entrepreneurial aspirations within the community. It includes services such as consulting, beauty salons, transportation, and more.

Overall, the data highlights the entrepreneurial potential and creativity among individuals, with various business ideas spanning multiple sectors. The presence of these business ideas indicates the readiness and interest of individuals to embark on entrepreneurial ventures, provided they have the necessary support, resources, and opportunities to pursue their ideas.

On average, 42% of individuals expressed an interest in starting their own businesses, with 46% of women and 37% of men indicating their interest.

When asked about the barriers to participating in training and self-employment schemes, an average of 71% of respondents reported facing challenges. Lack of capital was the most prevalent barrier, mentioned by 77% of respondents on average. This was followed by a lack of access to markets, cited by 58% of respondents on average.

In terms of the support received from family and the community, an average of 38% of individuals reported receiving support to pursue self-employment. Financial support was the most common type of assistance, with an average of 34% of respondents receiving this kind of support.

Regarding the business ideas individuals would like to pursue, agriculture emerged as the most common idea, mentioned by 14% of respondents on average. Other popular business ideas included crafts and textiles (11% on average) and food and beverage (32% on average).

When asked about the main reasons for not starting their businesses yet, lack of capital was the primary obstacle, mentioned by 77% of respondents on average. Lack of access to markets and a lack of knowledge or skills were also significant barriers, cited by 34% and 9% of respondents on average, respectively.



In terms of the support needed to help people establish their own projects, financial support was considered crucial by 50% of respondents on average. Technical support and access to markets were also identified as essential factors, each mentioned by 27% of respondents on average.

These average percentages provide an overview of the trends and patterns observed across the surveyed districts. They highlight the common challenges and needs expressed by individuals interested in pursuing self-employment and starting their own businesses. Addressing these challenges and providing the necessary support can contribute to fostering entrepreneurship and economic growth in the region.

In conclusion, a significant portion of respondents expressed an interest in starting their own businesses, while also facing barriers such as a lack of capital, limited access to markets, and insufficient knowledge or skills. The support needed to facilitate entrepreneurship includes financial assistance, technical support, and access to markets. These findings underscore the importance of addressing these challenges and providing targeted support to empower individuals in pursuing their business ideas and fostering economic growth in the region

Rural business and production value chain

The analysis of the rural business and production value chain reveals several important aspects. Firstly, it identifies the major self-income and livelihood activities in rural areas, providing insights into the primary sectors that contribute to the local economy. This understanding is crucial for developing targeted interventions and support programmes.

Additionally, the segmentation and mapping of sectors based on business size, with a focus on microenterprises and related lead firms, offers valuable information about the structure and dynamics of the rural business landscape. This segmentation helps in identifying specific challenges and opportunities associated with different business sizes and tailoring interventions accordingly.

The analysis also highlights potential business sectors and industries that have growth potential in rural contexts. Identifying these sectors can guide policymakers and stakeholders in directing resources and efforts towards areas that can drive economic development and create job opportunities.

Moreover, the study focuses on women entrepreneurship and micro start-ups, recognizing the importance of empowering women and promoting equality in rural areas. By identifying different income activities and promising sectors for women, the analysis contributes to fostering an enabling environment for women's economic participation and entrepreneurship.

Non-agricultural activities, such as crafts, are also explored in terms of their economic viability and production equipment needs. This information can guide the development of strategies to support and enhance these activities, thereby diversifying income sources in rural communities.

The analysis further suggests specific income-generating projects and activities that can be considered for further support and enhancement. These recommendations provide valuable insights for local stakeholders and policymakers in prioritizing resources and designing targeted interventions.

Additionally, the assessment of under-utilized raw materials and production inputs available in the community highlights opportunities for value addition and resource optimization within the rural business sector. Leveraging these resources can contribute to increased productivity and competitiveness.

However, the analysis also identifies various challenges hindering the activities of rural microenterprises and limiting entrepreneurship, particularly for youth and women. Understanding these barriers is crucial for devising effective strategies and support mechanisms to address them, enabling a more conducive environment for business growth and entrepreneurship.

Firstly, there is a strong interest in obtaining loans for equipment purchase. This indicates the importance of acquiring necessary machinery, tools, and resources to enhance business operations and productivity. By securing loans specifically for equipment purchase, entrepreneurs can access the necessary capital to invest in essential assets.

Additionally, working capital loans are highly sought after by business owners. This type of loan is crucial for covering day-to-day operational expenses, managing cash flow, and seizing growth opportunities. Entrepreneurs recognize the significance of having adequate working capital to sustain their businesses and drive expansion.

It is worth noting that the interest in equipment purchase loans is evenly split among the surveyed individuals, while the interest in working capital loans is higher among men

respondents. This difference might reflect variations in business needs and priorities between men and women.

The availability of these loan options can significantly support business growth and development, enabling entrepreneurs to overcome financial barriers and invest in critical areas of their operations. Access to capital is vital for stimulating entrepreneurship, job creation, and economic progress in rural areas.

To meet the diverse needs of entrepreneurs, financial institutions and support organizations should design loan programs that cater to both equipment purchases and working capital requirements. Additionally, providing financial literacy and business management training can empower entrepreneurs to make informed decisions regarding loan utilization, repayment, and overall financial management.

Major self-income and livelihoods activities

Traditionally, Yemeni society is characterized by a conservative structure and adherence to customs and traditions, where roles and expectations result in women being primarily responsible for household duties, while men are seen as providers and decision-makers. However, in recent years, there has been a noticeable shift in Yemeni society, with women increasingly taking on new roles and contributing significantly to their households' income and overall well-being. Both men and women participate in various activities across different sectors to generate self-employment income and livelihoods. The following is a summary of prevailing activities in the sectors of health, solar, beekeeping, pottery, food processing, meat and poultry, fishing, handloom and textile, agriculture, and handicrafts:

- **Health sector (all districts):**

One of the primary challenges in rural areas is the shortage of women nurses and community midwives, which hampers the provision of healthcare services to women. Customs and traditions make it difficult for women healthcare professionals to establish their own clinics in rural areas or the main markets of these regions. Furthermore, limited funding sources and a lack of sufficient patient volume pose additional obstacles. The residents in rural areas face difficulties in accessing healthcare services due to long distances, leading to unfortunate consequences such as higher mortality rates, particularly among pregnant women. This issue is observed in districts like Bani Al Awam, Nijrah, Al Maqatirah, and Ash Shaghadirah, where challenging terrain and high transportation costs exacerbate the problem. In some areas, such as Tuban, Al Ma'afer, and Al Madaribah, the healthcare sector is underrepresented, with only small clinics available. To address these challenges, it is essential to enhance the healthcare sector in rural areas by focusing on improving income generation opportunities, infrastructure, and establishing programmes aimed at attracting women nurses and community midwives to work in these underserved regions.

- **Solar Energy Sector (all districts):**

The solar energy sector is currently a significant source of income generation, driven by the growing reliance on solar-generated electricity and its expanding use in various sectors. Wholesale and retail stores that sell solar energy supplies can be found in all marketplaces within the study districts, and these businesses are thriving. However, to sustain and further develop this sector, there is a need for specialized technical professionals skilled in solar energy installation and maintenance. These professionals, particularly the youth, play a crucial role as part of the basic workforce, contributing to the sector's income generation potential.

- **Beekeeping sector (In Tawilah, Al Maqatirah, Al Madaribah, Ash Shaghadirah, Bani Al Awam, Nijrah, Bajil, Ahwar, Lawdar):**

Beekeeping is a traditional practice that has been passed down through generations, serving as a livelihood activity for many families. In beekeeping, men typically handle the technical aspects such as hive management, honey extraction, and equipment maintenance. However, women also play an active role in various stages of the honey production process, with a particular focus on caring for honey colonies. Beekeeping is an inclusive activity that both men and women engage in across all districts, enabling them to manage beekeeping operations and produce honey and other bee-related products.

Participation in beekeeping can involve tasks such as establishing bee colonies, collecting honey, and selling honey-based products. While beekeeping exists in all districts, the opportunities and training needs for developing this sector may vary. It is important to provide

appropriate training and support to beekeepers, particularly in areas where the potential for growth and development in the sector is high. By fostering the beekeeping sector, individuals, both men and women, can enhance their income generation and contribute to the production of quality honey and related products.

- **Pottery sector (Bajil, Lawdar and Tuban):**

Pottery holds a significant place in Yemeni culture, representing a forgotten craft that was once deeply intertwined with daily life and revered as an artistic expression. Yemeni pottery serves as a testament to the cultural and artisanal heritage of diverse regions in the country. Despite the challenges and societal changes over time, pottery continues to be an integral part of Yemen's cultural identity.

The process of pottery-making involves several stages, with men typically involved in various aspects of production, particularly in the preparation of clay. Skilled craftsmen focus on shaping large vessels and creating essential forms such as water jugs and filters. The Tihama regions are renowned for their engagement in pottery, showcasing their expertise and craftsmanship.

The pottery sector shows great promise in Lawdar, where a few dedicated craftsmen continue to practice this art form. Similarly, the Tuban district specializes in the creation of pottery jars, contributing to the preservation and development of this traditional craft. Despite its current limited presence, the pottery sector holds significant potential for growth and revitalization, providing opportunities for artisans to showcase their skills and contribute to the preservation of Yemen's rich cultural heritage.

- **Food industry sector (all districts):**

Throughout the country, women have long held the responsibility of cooking, meal preparation, and the creation of baked goods and pastries, which have played a crucial role in generating income. These culinary practices rely on traditional methods that have been passed down through generations, resulting in the creation of delicious foods such as cakes, Bint Al-Sahn, Al-Lahoh, Kodam, and Al-Oshar. While men also participate in these industries, their involvement is relatively less noticeable, and they participate particularly in the production of industrial foods sold in markets and popular restaurants, primarily in the northern regions.

Within the districts, numerous bakeries can be found, specializing in the sale of bread and various types of local cakes. However, despite the inherent potential for growth and the opportunity to enhance the quality of baked goods and pastries, women and girls predominantly operate within a limited framework, constrained by the absence of marketing initiatives. As a result, the broader market remains largely untapped, preventing the full realization of the sector's potential.

Efforts should be made to address these limitations and provide support to women and girls engaged in the culinary industry. By implementing marketing strategies and empowering them with the necessary skills and resources, these aspiring entrepreneurs can expand their reach, improve the quality of their products, and ultimately thrive in the market. Such advancements would not only enhance the livelihoods of women and girls but also contribute to overall economic growth and cultural preservation.

- **Meat and poultry sector (all districts):**

The meat and poultry sector holds immense significance as one of the leading industries that sustains and supports a significant portion of the Yemeni population, including the areas under study. This sector encompasses various activities, including animal rearing, distribution, and the sale of a diverse range of meat and poultry products. Its crucial role in providing livelihoods stems from the interplay between agriculture and livestock breeding, as agriculture provides fertile environments, diverse herbs, and nutritious feed for the animals. This integrated process contributes to the sustainability of rural economies and communities.

Once the animals are raised, they undergo processing in slaughterhouses, where they are transformed into a wide array of meat and poultry products through various stages such as slaughter, packaging, and distribution. These processes require a skilled and specialized labour force to ensure the production of high-quality products. Furthermore, the sector extends beyond the production stages, encompassing a broad network of intermediaries, including wholesale and retail traders, distributors, and restaurants. These stakeholders play essential roles in transportation, storage, and the sales of meat and poultry products.

Within Al Ma'afir district, poultry farms are prevalent, forming a complete supply chain within the meat and poultry sector. This concentration of poultry farms contributes to the region's economic growth and provides significant employment opportunities throughout the supply chain.

In conclusion, the meat and poultry sector serves as a vital pillar of livelihood for a substantial portion of the Yemeni population, particularly in rural areas. The targeted districts, such as Al Ma'afir, Bajil, Lawdar, Ahwar, and Al Madaribah, stand out for their abundant poultry and livestock farms. This sector's robust presence generates employment opportunities across the entire supply chain, fostering economic development within local communities.

- **Fishing sector (Ahwar, Bajil, and Al Madaribah):**

The fishing sector holds a significant and indispensable role in Yemen, particularly in the coastal areas of Al-Ararah Al Madaribah, Ahwar, and Bajil. These regions boast favourable conditions for fishing activities, with abundant marine resources available. Fishing has deep roots in the cultural heritage of the local communities, and it has been a traditional profession passed down through generations, providing a vital source of income and economic stability for many years.

The fishing sector not only supports the fishermen themselves but also creates indirect employment opportunities for various individuals involved in the value chain. Fish processors, traders, and suppliers are among those who benefit from the fishing industry. This interdependent network contributes to the local economy and helps sustain the livelihoods of many individuals.

However, despite its pivotal role, fishermen in these areas face challenges due to the lack of modern methods and equipment. Traditional tools such as small wooden boats, hand nets, and simple fishing lines are still commonly used. While these methods have served the communities for centuries, they are no longer optimal in terms of maximizing profitability and efficiency.

To further enhance the fishing sector's potential and address these challenges, there is a need for the introduction of modern fishing techniques and equipment. Upgrading the tools used in fishing operations can significantly improve productivity, increase catch volumes, and open up new opportunities for economic growth. By embracing innovation and adopting modern fishing practices, fishermen in these areas can maximize their profitability and ensure a sustainable future for the fishing industry in Yemen.

- **Handloom and textile sector:**

In the Lawdar area of Abyan Governorate, the textile and weaving (ma'awiz) sector has emerged as a significant source of self-generated income for both men and women. This development has gained momentum in recent years, largely driven by the ongoing conflict, which has created a need for alternative livelihood options. Hand-sewing and spinning have become essential activities through which people sustain themselves and support their families. Weaving, in particular, has become a prevalent and practical profession among both men and women in Lawdar.

Many families have established home-based weaving and sewing workshops, while others have set up factories where skilled women utilize their expertise to craft various textile products. These products encompass traditional clothing like ma'awiz, as well as household items such as curtains, bedspreads, and decorative materials. Handmade locally produced textiles have experienced an upsurge in demand, both within and outside the districts, due to their quality and competitive pricing. The popularity of ma'awiz garments, in particular, has generated high demand, ensuring a steady income for women involved in sewing.

With the increasing demand for handmade and locally produced textiles, coupled with the limited number of factories, competition among individuals working in the weaving and sewing industry has intensified. Craftsmen strive to enhance their skills and innovate in design to meet the evolving tastes and preferences of customers. The textile market presents opportunities for both men and women to showcase their creativity, establish their brands, and achieve sustainable income.

Moreover, the textile sector in Lawdar has provided support for business operations. For instance, stores selling sewing machines, fabrics, and other sewing accessories have emerged, creating additional employment opportunities for the local communities. These businesses serve as valuable resources, providing the necessary equipment and materials for those involved in weaving and hand-spinning, thereby facilitating the sector's growth.

In conclusion, weaving in Lawdar, and sewing and hand-spinning in other districts have become pivotal primary activities within the textile and weaving sector. These occupations have become essential sources of self-generated income and livelihood for both men and women across various areas. Their prominence has been further amplified by the ongoing conflict, which has presented alternative opportunities for sustainable livelihoods.

- **Agricultural Sector:**

1. **Cash Crops:**

- a. **Sesame:**

In the Bajil and Al Madaribah districts, sesame cultivation plays a vital role in providing income and livelihoods for the population. Sesame is a versatile crop that thrives in arid and semi-arid regions, making it suitable for cultivation in these areas, especially as they have warm and suitable climates. Farmers engage in sesame cultivation, which includes land preparation, seed sowing, and crop care until harvest. Sesame seeds are harvested, dried, and processed for a variety of uses, including oil production, food ingredients, and cosmetics. Income generated from sesame cultivation helps sustain the livelihoods of many individuals and families in these districts.

- b. **Coffee:**

Coffee cultivation is presented in the districts of At Tawilah, Nijrah, Ash Shaghadirah, and Bani Al Awam. These areas provide suitable climatic and environmental conditions

for coffee plant cultivation. Yemeni farmers hold coffee beans in high regard that are harvested, dried, and processed afterward. The produced coffee is mainly consumed internally at the household and village level. Coffee cultivation provides a source of income for farmers who sell their products directly within the same sub-district.

2. Vegetable Cultivation:

a. Red onion:

High-quality red onion cultivation is considered a prominent economic activity in the Al Madaribah and Tuban districts. Farmers in these areas focus on onion cultivation, which is in high demand locally and in the wider market, even reaching regional export markets. Onion cultivation includes soil preparation, onion bulb planting, and providing proper care throughout the growing season. The onions are left to grow until they are harvest-ready, at which point they are harvested, dried, and stored for resale. Income generated from high-quality red onion cultivation is an important source of self-income and livelihood for the population in these districts.

b. Tomatoes, courgettes, and peppers:

In the Bajil, Lawdar, and Ahwar districts, vegetable cultivation such as tomatoes, courgettes, and peppers is prevalent, and in the Al Maqatirah district, home gardens are a common means of self-income and livelihood. Both men and women engage in vegetable cultivation, using available land to grow these crops. The vegetables harvested from these lands are consumed by farmers, distributed, and sold in local markets, providing a reliable source of income.

3. Fruit Cultivation:

a. Lemon:

Lemon cultivation in the Al Madaribah district is considered a primary activity for income generation. Farmers in this area engage in lemon cultivation, benefiting from the suitable climate and soil conditions. Lemon trees are planted, cared for, and managed carefully to ensure good fruit production. Once lemons mature, they are harvested and sold in local markets, contributing to the livelihoods of the relevant farmers.

b. Watermelon and cantaloupe:

The areas of Bajil, Lawdar, and Ahwar are known for their fruit cultivation, particularly watermelon and cantaloupe. The warm climate and fertile soil in these areas support the growth of these fruit crops. Farmers plant watermelon and cantaloupe, ensuring proper irrigation and care throughout the growing season. When the fruits mature, they are harvested and sold in local markets, providing income for farmers, and contributing to the local economy.

c. Strawberry:

In Lawdar district, high-quality strawberry cultivation has become a prominent source of self-income and livelihood. Farmers in this area focus on producing exceptional quality strawberries, using modern farming techniques and equipment. This cultivation process includes carefully selecting suitable land, preparing the soil, and implementing proper irrigation methods. Additionally, farmers may use advanced techniques such as hydroponics or protected cultivation to improve and maintain the desired strawberry quality. Strawberries are often sold directly to consumers, local markets, or even exported to other areas.

d. Mango:

The areas of Bajil, Al Madaribah, and Lawdar are known for their climate and suitable soil conditions for mango cultivation. Local farmers have taken advantage of this and made mango cultivation an important economic activity in the region. They plant different types of mangos, including popular varieties such as Samaka, Qalb Al-Thawr, Timor, and Barakani, and provide necessary care such as pruning and pest control, and ensure sufficient irrigation. Mango is often sold in local markets, exported to other areas, or processed into value-added products such as mango pulp or mango-based desserts.

e. Papaya:

The areas of Al Maqatirah are known for their suitable climate and fertile soil, making them ideal for papaya cultivation. Local farmers in these areas cultivate papaya as an important means of income generation. They plant different varieties of papaya, using agricultural practices such as land preparation, seed selection, proper irrigation, and pest control. Mature papayas are harvested and sold in local markets or supplied to fruit processing industries for further distribution and use.

4. Grain cultivation in all regions:

Grain cultivation is widespread and practiced in various regions. Farmers plant different grains (wheat, corn, barley), which serve as a valuable source of self-income and livelihood for many agricultural communities during the rainy season. Farmers use techniques such as seed selection, proper soil management, irrigation, and pest control to ensure good grains harvest. The harvested grains are then sold in local markets or even exported to other areas.

5. Legume cultivation:

Legume cultivation, such as lentils and beans, thrives in the At Tawilah region. Farmers in this area rely on legume cultivation to generate income and sustain their livelihoods. They engage in activities such as land preparation, seed selection, crop rotation, and effective pest management to ensure a good legume harvest. The harvested legumes are sold only in local markets within the district and are used as ingredients in traditional dishes.

6. Jasmine (Fol) cultivation:

Jasmine cultivation has emerged as a prevalent source of income for both men and women in various regions of Yemen, particularly in the Bajil and Tuban districts. Jasmine cultivation not only provides sustainable income opportunities but also creates employment opportunities for many people from different governorates. In Bajil and Tuban, jasmine cultivation is a long-standing tradition deeply rooted in local culture. The favourable climate and fertile soil in these areas create ideal conditions for jasmine plant growth. The cultivation process involves planting jasmine seeds or seedlings in carefully prepared fields and providing them with adequate sunlight and water. Skilled farmers participate in caring for the plants, ensuring their proper growth and development.

Jasmine is highly valued for its fragrant flowers, which are widely used in decoration, especially in weddings and events, as well as in the production of perfumes, cosmetics, and traditional herbal medicines. Local demand for jasmine has led to a profitable market for farmers in Bajil and Tuban. Therefore, jasmine cultivation has become a

primary source of income, not only for large-scale commercial farmers but also for small-scale farmers who cultivate jasmine on a smaller scale.

7. Henna cultivation:

Cultivating henna trees can be a profitable activity in Al Madaribah district, providing opportunities for generating self-income and creating livelihoods for the populations in these districts. Henna, also known as *Lawsonia inermis*, is a flowering plant with high-value leaves that produce a natural dye widely used for decoration, hair colouring, and various cultural, and festive celebrations. Once henna trees mature and begin producing leaves, it becomes necessary to establish mills for grinding the leaves into a fine powder. These mills will serve as important infrastructure for processing the harvested henna leaves, ensuring high-quality powder.

Availability of henna grinding machines will not only benefit farmers but also open up opportunities for marketing and trade. The processed henna powder can be packaged and sold in local and regional markets. With a strong marketing strategy, henna tree cultivation and henna powder production can become a sustainable source of income for the populations in the district. This activity has the potential to create employment opportunities in the agriculture, grinding, packaging, distribution, and marketing sectors. Moreover, it can empower women in the community since henna-related activities often involve intricate and artistic designs, a traditional skill possessed by many women.

Overall, henna tree cultivation, alongside the establishment of henna mills, can transform Al Madaribah district into a thriving centre for henna production. By providing self-income opportunities and creating livelihoods, this activity can uplift the local community, empower individuals, and contribute to the economic growth of the region.

These agricultural activities contribute significantly to the local economy, provide employment opportunities, and ensure sustainable livelihoods for the populations in these regions.

8. Handicrafts:

Handicrafts play an important role in providing employment opportunities and generating income for citizens in all rural areas, including the manufacture of the palm tree products and seashell accessories in Ahwar, the production of baskets in Tuban, Bajil, and Nijrah, the production of household tools and palm leaf hats in At Tawilah, and the manufacture of incense in Bajil and Lawdar. The production of traditional perfumes, such as Oud, is also prevalent in many regions such as Bajil, Al Maqatirah, Al Madaribah, At Tawilah, and Al-Ma'afir.

Market Characteristics

Markets are characterized by various aspects, outlined below.

- **Market diversity:**

Markets in Yemen exhibit a diverse range of types and offerings. Specialized markets, such as beekeeping and honey markets, cater to specific industries and products, reflecting the importance of traditional practices like honey production. Women's markets emphasize the empowerment of women entrepreneurs and the availability of a wide range of products targeted towards women. Fish markets highlight the significance of coastal areas and the abundance of marine resources in supporting local economies. Livestock markets serve as key trading platforms for animal products. General commodity markets provide a wide array of goods and services to meet the diverse needs of communities. This diversity of markets signifies the rich economic landscape and cultural heritage of Yemen.

- **Market size and reach:**

The size and reach of markets vary across districts. Some markets serve small-scale communities within a particular village, focusing on meeting the immediate needs of local residents. Other markets have a larger scope, attracting customers from neighbouring villages or even covering all villages within a district. These larger markets act as central hubs, fostering economic activities, and facilitating trade between different communities. They provide opportunities for traders to expand their customer base and reach a wider market.

- **Market participants:**

Markets involve a range of participants involved in the trading process. Producers, including farmers, beekeepers, and craftsmen, bring their products to the market for sale. Suppliers play a crucial role in sourcing and distributing goods to meet the demand of the market. Wholesalers act as intermediaries, purchasing goods in bulk and supplying them to retailers. Retailers, including small business owners and vendors, directly interact with customers and provide essential goods to the local population. The presence of a diverse range of sellers highlights the dynamic nature of markets, where multiple economic actors contribute to the local trade ecosystem.

- **Financial services:**

The presence of commercial banks and microfinance institutions (MFIs) in certain markets reflects efforts to provide financial services to support economic activities. Commercial banks offer services such as opening current and savings accounts, providing loans, and offering financial advice. These services facilitate access to capital for businesses and individuals, supporting investment, expansion, and economic stability. MFIs, on the other hand, cater to the needs of micro and small enterprises by providing specialized financial products such as microloans, savings accounts, and grants. Access to these financial resources encourages entrepreneurship, empowers individuals, and contributes to local economic growth.

- **Support from NGOs:**

The involvement of international or local non-governmental organizations (NGOs) in certain markets indicates support for micro, small, and medium enterprises (MSMEs). These NGOs play a crucial role in providing financial and non-financial services to entrepreneurs and businesses. They offer services such as loans, grants, training programmes, and capacity-building initiatives. By providing access to capital, knowledge, and skills, NGOs contribute to the growth and development of MSMEs, fostering economic empowerment and sustainable livelihoods.

- **Market accessibility:**

The data suggests that markets in different districts attract participants from both within and outside the district. Traders and customers come from neighbouring villages, other districts, and even broader regions to engage in economic activities in these markets. This indicates the significance of these markets as trading centres that facilitate economic exchange and contribute to regional integration. The ability of markets to attract participants from a wider geographic area showcases their importance as economic and social meeting points, stimulating economic interactions and fostering trade networks.

- **Economic impact:**

Markets have a significant economic impact on local communities. They not only provide essential goods and services to meet the needs of the population but also generate employment opportunities throughout the value chain. From producers and suppliers to wholesalers, retailers, and small business owners, markets contribute to local economic growth, income generation, and poverty reduction. The economic activities in markets create a ripple effect, positively influencing other sectors and supporting the overall development of the districts.

In summary, the diverse nature of markets, varying in size, reach, and offerings, reflects the rich economic landscape and cultural heritage of Yemen. The presence of financial institutions and NGOs in markets strengthens access to financial services and support for businesses. Markets act as economic and social hubs, attracting participants from within and outside the district, fostering economic activities, and contributing to regional integration. Ultimately, markets play a crucial role in driving local economic growth, supporting livelihoods, and promoting sustainable development in Yemeni districts.

The market study also looked into each sector specifically and the following section provides the description of each sector separately:

The accessories manufacturing sector encompasses the production and sale of various accessories. This non-formal activity is predominantly carried out by individuals, including both men and women participants, skilled laborers, and university graduates. It is worth noting that the data provided does not specify the level of participation for different demographic groups. The activity primarily takes place in the participants' homes, indicating a decentralized and home-based nature.

In terms of the source of goods or raw materials, the data suggests that participants acquire their supplies from another district. This indicates a level of inter-district trade and highlights the need for supply chain coordination. The participants in this sector are involved in producing and selling accessories, requiring specific skills such as sales management, marketing, communication, and financial management.

Furthermore, the data does not mention the existence of a business association or cooperative union specifically for the accessories manufacturing sector. This absence may imply a lack of collective representation or shared support mechanisms among participants in this sector.

It is essential to recognize that various factors can impact the sustainability or failure of activities within the accessories manufacturing sector. These factors can include workforce-related challenges, skills and capacity limitations, difficulties in accessing raw materials and financing, as well as challenges in supply, production, services, market, distribution, demand, storage, packaging, transportation, fuel, electricity, and family or cultural barriers. The absence of specific challenges hinders a comprehensive analysis of the sector's strengths and weaknesses.

In the agriculture sector, various activities are practiced by different groups of people in different governorates and districts of Yemen. For example, the cultivation and sale of vegetables and grains, such as red onions, local grains (wheat, corn, barley), and other vegetables, are common activities. These activities are primarily carried out by individuals, including both men and women participants, skilled labourers, and university graduates.

The target market for these agricultural products varies based on the specific crop. However, it can be assumed that the local market within the governorate or district is the primary target, with potential expansion to neighbouring areas or even other governorates.

Certain skills are required for successful participation in these agricultural activities. These skills include knowledge of modern farming methods, understanding of agricultural pesticides and fertilizers, knowledge of seasons for planting, marketing skills, and proficiency in using agricultural equipment and devices.

Challenges in these agricultural activities include issues related to manpower availability, lack of experience in establishing small projects, financial matters, marketing, technology utilization, and operating machinery and equipment.

Other challenges mentioned in the data include difficulties in accessing raw materials, financing, supply, production, services, the market, distribution, demand, storage, packaging, transportation, fuel, electricity, and family or cultural barriers. However, these challenges are not elaborated upon in detail.

The services provided within the agriculture sector are primarily focused on cultivating and selling agricultural products. However, the data does not specify additional services related to marketing, training, equipment provision, or other support.

In terms of income generation, working in these agricultural activities is seen as an opportunity for both men and women youth. The data mentions that through buying and selling, income can be generated. However, it is emphasized that sufficient experience in the field is required.

The beauty, hairdressing, wedding, engraving, and henna sectors encompass various activities related to personal care, aesthetics, and cultural traditions. This sector predominantly involves women practitioners, including skilled laborers and university graduates. The activities within this sector mainly revolve around offering services or selling items and goods.

One prominent activity in this sector is the production and sale of henna. Henna holds significant cultural and artistic value, with its application being an integral part of traditional ceremonies and celebrations. Practitioners in this activity require special skills, such as concentration, experience in adjusting henna components, knowledge of quality standards, and the ability to meet customers' needs.

Another activity in this sector is the selling of local henna. This non-formal household-based activity primarily involves females. Although the level of required skills is comparatively lower, a moderate level of proficiency in henna design and drawing is still necessary.

Engraving and henna constitute yet another activity within this sector. It entails the creation of intricate designs through the art of engraving and the application of henna. This activity is typically practiced by women who possess specialized skills in engraving.

In terms of income generation, these activities have the potential to provide financial returns, especially when catering to the demand for henna during weddings, events, parties, and other occasions. The market for henna products and services can be lucrative, particularly when women, children, and girls are the primary clientele. However, challenges related to workforce availability, skills and capacities, assets and kits, registration processes, financing, supply,

production, services, market dynamics, distribution, demand, storage, packaging, transportation, fuel, electricity, and family or cultural obstacles may affect the sustainability and success of these activities.

Beekeeping and honey production are activity practiced by individuals in various regions. They involve the production of honey and related products through the management of bee colonies. This sector attracts a diverse group of participants, including men and women youth, senior males, senior females, uneducated individuals, skilled laborers, and university graduates.

Beekeeping requires specific skills and knowledge to ensure the safety and well-being of the bees and the production of high-quality honey. Beekeepers need to have a deep understanding of beekeeping techniques, such as monitoring bee colonies, protecting bees from pests and diseases, and knowing when and how to move the colonies to grazing areas. Additionally, marketing skills are essential for selling honey and related products to the target market.

In some cases, international agencies and local NGOs have provided assistance to those working in the beekeeping sector. Organizations like the Food and Agriculture Organization (FAO) and the Adventist Development and Relief Agency (ADRA) have offered support in the form of solar panels and equipment, loans, grants, kits, equipment, and tools, as well as training opportunities. These forms of assistance aim to enhance the productivity and sustainability of beekeeping activities.

The success and sustainability of beekeeping as a business or activity depends on various factors. Some individuals have found success and continued their operations due to the profitability of selling honey. The high demand for honey and its related products allows beekeepers to generate income that can be reinvested in expanding their beekeeping operations or starting other projects.

However, there are challenges that beekeepers may face. Financing difficulties, such as a lack of access to capital or high interest rates, can hinder the establishment and growth of beekeeping activities. Additionally, the lack of advisory or consultancy services tailored to the specific needs of beekeepers can limit their ability to overcome obstacles and maximize their productivity.

Supply and demand dynamics also play a role in the sustainability of beekeeping. Monopolization of raw materials or goods by suppliers can create challenges, as well as competition from foreign goods. Market conditions, including seasonal or weekly markets, lack of regulation, and weak demand, can affect the profitability of beekeeping activities.

Furthermore, family and cultural factors may impact the participation and continuity of beekeeping. Cultural challenges or family obligations may restrict individuals from fully engaging in beekeeping activities.

The sector of cars, bicycles, mechanics, plumbing, electricity, and painting encompasses various activities related to automotive and mechanical services. It includes selling auto parts, selling motorcycle spare parts, bicycle mechanics, and car maintenance. These activities are predominantly carried out through non-formal micro projects or individual ventures, although some are formal small and medium enterprises (SMEs).

In this sector, individuals and small businesses engage in selling items or goods such as auto parts and motorcycle spare parts. They operate in workshops or shops, sourcing their goods either from within the village or from other districts or governorates. The demand and supply levels vary across different activities, with some experiencing high demand and others facing low demand.

Skills and expertise play a crucial role in this sector. Specialized knowledge and experience in areas such as selling auto parts, motorcycle maintenance, bicycle mechanics, or car maintenance are essential for practitioners. Skilled labour and university graduates often participate in these activities, utilizing their training and education to deliver quality services.

Entrepreneurs and workers in this sector rely primarily on their own resources and skills to sustain their businesses. This may present challenges in terms of access to capital, equipment, training, and other forms of support that could enhance their productivity and competitiveness.

Furthermore, the success and sustainability of these activities depend on various factors. Factors such as market demand, competition, pricing, quality of service, and profitability can influence the viability of individual businesses. Additionally, the availability of partnerships or small company groups can contribute to the success or failure of ventures within this sector.

In some cases, businesses associations or cooperative unions exist to support and represent the interests of participants in this sector. However, the availability and effectiveness of such associations vary across different locations. These associations may provide services and benefits tailored to the needs of producers, wholesalers, retailers, or brokers.

Challenges related to workforce, skills and capacities, assets and equipment, microenterprise registration, raw materials, financing, supply, services, market, distribution, demand, transportation, fuel, electricity, and family or cultural factors are common within this sector. Overcoming these challenges requires proactive measures such as addressing skills gaps, improving access to finance, facilitating market linkages, and providing supportive infrastructure.

In the construction sector, there are various activities related to construction and building. These activities include offering construction and building services, such as home-based activities, tile-making, and other vocational skills. The sector is predominantly practiced by skilled labourers, including men youth and university graduates. It is targeted towards customers who require construction and building services, such as individuals and businesses looking to construct or renovate their properties.

Participation in the construction sector often requires special skills and expertise. Individuals working in this sector need to possess knowledge of construction techniques, engineering skills, measurement skills, and proficiency in their specific area of specialization. These skills are crucial for delivering high-quality construction services.

In terms of associations or cooperative unions in the construction sector, it can play a significant role in supporting and representing the interests of construction professionals, providing networking opportunities, access to resources, and advocating for favourable policies and regulations. From the other hand, international or local NGOs may provide training, loans, grants, equipment, or other forms of support to promote sustainable and successful construction activities.

The sustainability or failure of construction activities depends on various factors. These factors include the demand for construction services, the supply, the competitiveness of the market, the quality of work delivered, pricing strategies, profitability, and the availability of skilled labor. The challenges related to the construction sector include a lack of manpower, limited experience in establishing small projects, financial management, marketing, technological skills, and operating machinery and equipment. Other challenges include difficulties in accessing financing, registering microenterprises, procuring raw materials, affording distribution costs, meeting market demands, and dealing with family or cultural constraints.

The fishery sector plays a significant role in the livelihoods of communities in various governorates of Yemen. Activities in this sector primarily involve fishing and selling sea products such as fish, shrimp, and other seafood items. It is a non-formal activity commonly practiced by individuals, including men youth, skilled laborers, and senior males. The activity takes place in coastal areas where fishermen venture out to sea to catch fish and other marine creatures.

The target market for fishery products includes local communities as well as regional markets. Fresh seafood is highly demanded due to its nutritional value and cultural significance. Fishermen often sell their products directly to consumers or supply them to retailers, wholesalers, and distributors. Fish markets and side street selling are common venues for selling seafood products.

Fishing in the sea requires specific skills and knowledge. Fishermen need to possess expertise in operating fishing equipment, understanding different types of fish, and preserving fish quality. Experience gained from seasoned fishermen and training programs are vital in acquiring these skills. However, the availability of training services in the fishery sector is limited, posing a challenge to skill development.

In terms of assistance, there are local and international agencies and non-governmental organizations (NGOs) that provide support to fishermen and fishery-related activities. These organizations offer training programmes, equipment, and financial assistance in the form of loans or grants. One notable organization is the Union of Fishermen, which supports fishermen by providing financial allowances and support for engines, boats, and sea equipment.

The sustainability of fishery activities depends on various factors. Challenges such as the availability of raw materials, high prices of equipment, and limited access to financing can hinder the growth and development of the sector. Additionally, the seasonal nature of the market, competition, and fluctuating demand pose challenges to fishermen's income generation.

In the fishery sector, the Yemeni Fishery Cooperative Union plays a significant role in supporting and representing the interests of fishermen and small companies. This cooperative union provides a platform for partnerships and collaborations, allowing fishermen to pool resources, share knowledge and experiences, and collectively address common challenges. By fostering a sense of community and facilitating cooperation, the Yemeni Fishery Cooperative Union contributes to the growth and success of the fishery sector in Yemen.

The food industry sector encompasses various activities related to selling foodstuffs, manufacturing, and selling pastries, cakes, and sweets, as well as selling chips (french fries) in Yemen. These activities are carried out by different groups, including young men and women, skilled laborers, and small business owners, both in formal and non-formal settings. The target market for these food products includes local communities within the same village or district, as well as customers from other districts, governorates, and even beyond Yemen.

Engaging in these food-related activities requires certain skills and knowledge. For example, selling foodstuffs or operating a grocery store requires basic business management skills, knowledge of market demand, and familiarity with the quality and pricing of goods. On the other hand, manufacturing pastries and sweets necessitates skills in drawing, sculpting, cleanliness, concentration, and patience. Selling chips may require skills in food preparation, hygiene, and customer service.

In terms of assistance, there are international and local NGOs and agencies that provide support to individuals involved in these activities. Some organizations offer financial assistance

in the form of loans or grants to help with the establishment or expansion of small businesses. They also provide training programmes to enhance skills and capacities of individuals in the food industry sector. Examples of such organizations include Al-Ittihad Foundation for Microfinance and the National Microfinance Foundation.

The sustainability of these food-related activities depends on various factors. Challenges related to workforce include the availability of manpower, particularly in terms of skilled labour, as well as the cultural barriers that may restrict the participation of certain groups. Skills and capacity challenges arise from the lack of training services or limited access to them, hindering the development and improvement of skills among workers.

Asset and equipment challenges involve difficulties in purchasing or affording the necessary machinery and equipment required for production or operation. Microenterprise registration may pose challenges due to complex processes, high fees, and a lack of facilities or support for small business owners. Availability and affordability of raw materials and goods, as well as financing issues, can also impact the success or failure of these activities.

Challenges related to supply, production, services, the market, distribution, demand, storage, packaging, transportation, fuel, electricity, and family or cultural factors may further affect the viability and sustainability of these food industry activities. These challenges include issues such as intense competition, unregulated markets, seasonal demand, high costs of transportation or fuel, limited access to electricity, and cultural or family restrictions on certain individuals' involvement.

While there might not be specific business associations or cooperative unions exclusively dedicated to these food industry activities, it is recommended to establish partnerships or groups of small companies. Collaboration and pooling of resources can help address common challenges, share knowledge and experiences, and improve the overall success of these activities.

The health and veterinary sector encompasses various activities aimed at providing healthcare services and veterinary care. Within this sector, two activities include providing veterinary services and operating pharmacies.

The activity of providing veterinary services involves offering services related to animal healthcare. It is primarily practiced by young men and women, skilled laborers, and university graduates. These individuals may possess special skills such as concentration, proficiency in the English language, knowledge of the required details, and precise movement. This activity is often conducted as a home-based business, with goods and raw materials sourced from within the village.

The target market for veterinary services includes local citizens who require assistance with the treatment and care of their livestock. However, it should be noted that cultural barriers exist, which prevent women from engaging in this work due to perceived conflicts with local customs and traditions. Despite these challenges, some individuals have found success and continued operating in this field.

Regarding support from international agencies or local/international non-governmental organizations (NGOs), organizations like the World Health Organization (WHO) and the Food and Agriculture Organization (FAO) may provide assistance to individuals working in this field.

Moving on to the pharmacy activities within the health and veterinary sector, they primarily involve selling pharmaceutical items or goods. This formal micro project is usually practiced by young men, skilled laborers, and university graduates. Pharmacies are typically established as physical shops, sourcing goods and raw materials from other governorates.

The target market for pharmacies varies in terms of demand level, with a high demand observed. Pharmacists operating in this field require specific skills, including a comprehensive understanding of different types of medications and experience in the field of medicine.

Challenges related to workforce availability, skills and capacities, assets and kits, microenterprise registration, raw materials and equipment, financing, and supply and production may be encountered in the pharmacy sector. These challenges could potentially hinder the sustainability and growth of pharmacy businesses. However, the income generation potential of this activity is perceived positively for both men and women youth, with opportunities for employment and entrepreneurship.

In the sector of incense, perfume, and jasmine, several activities were identified in different governorates and districts. These activities include the manufacture and sale of incense locally, selling jasmine (Fol), and producing and selling incense and perfume. Each activity has its own characteristics and challenges.

The manufacture and sale of incense locally is a non-formal individual activity practiced by both men and women youth, targeting customers within the governorate. Special skills required for this activity include incense and perfume-making experience, and marketing and project management skills. Organizations like Peace School Organization and Deem for Development Organization provide support to entrepreneurs in this activity. The challenges in this activity involve difficulties in financing, lack of advisory or consultancy services, and issues related to supply and demand. Despite these challenges, the incense industry is perceived as a source of monthly income, especially for those with knowledge and skills in making incense and perfumes.

Selling jasmine (Fol) is another activity in the sector, practiced as a non-formal household activity. It mainly targets customers within the local village. This activity is primarily carried out by men and women and is considered an opportunity for income generation, as it allows youth to work from home and create job opportunities for themselves. Challenges in this activity include a lack of distribution networks and the market being seasonal or not permanent throughout the year.

The livestock sector in Yemen plays a significant role in the economy, particularly in rural areas. It involves activities such as breeding and selling live cows, sheep, or goats. These activities are predominantly practiced as non-formal micro projects or household-based activities. The sector provides opportunities for various segments of the population, including men youth, women youth, senior males, and senior females.

In terms of skills and education, the livestock sector caters to a diverse workforce. It accommodates both uneducated individuals who possess practical knowledge and skills in raising small livestock and skilled laborers who have specific expertise in selecting the best herbs and caring for the animals. University graduates also participate in this sector, contributing their knowledge and understanding of different livestock types.

The livestock sector primarily operates through side street selling, where the products are directly sold to customers. The source of goods or raw materials varies, with some villages relying on supplies from other villages or districts within the same governorate. However, for some areas, the goods may come from multiple governorates or even the entire country.

Demand for livestock products is generally high, and the sector is considered profitable. Livestock breeders often face limited competition due to the high quality and competitiveness of their products. However, challenges related to supply and demand, as well as fluctuations in market prices, may affect profitability.

In terms of assistance and support, there are international agencies and international and local NGOs that have provided aid to those working in the livestock sector. The Food and Agriculture Organization (FAO) is one of the organizations that offer support by providing sheep, goats, cows, and other animals to beneficiaries.

While there is no mention of a specific business association or cooperative union for the livestock sector, there may be informal partnerships or small companies formed within the sector. The success of these partnerships is not explicitly mentioned, but it is recommended to establish partnerships to enhance cooperation and potentially overcome challenges collectively.

The manufacture and sale of mats/straw products in Yemen involves producing and selling various goods made from straw. This activity is primarily practiced as a vocation, offering income-generating opportunities for individuals. It is mainly a home-based activity, allowing individuals to work from their own homes.

The sector targets both the local and regional markets, with goods being sourced from other districts or even from different governorates within Yemen. The demand for straw products is generally medium to high, and the sector can be considered competitive. However, the quality and price levels of the products may vary.

Special skills are required for individuals engaged in this sector. These skills include precision, learning ability, attentiveness, time management, focused concentration, and having a safe space for work.

Challenges related to workforce and skills can arise, including a lack of manpower, limited experience in establishing small projects, financial matters, marketing, and the use of technology and social media. Furthermore, difficulties in accessing machines, renting suitable places, and preparing or furnishing shops or workshops may hinder the sector's growth. Additionally, challenges related to registration processes, availability and prices of raw materials, financing, supply and demand, distribution, and storage can impact the sustainability of this activity.

Despite these challenges, the manufacture and sale of straw products offer income generation opportunities for young men and women. The sector provides a decent financial return, especially during wedding seasons, holidays, and specific cultural events. It also contributes to the monthly income of individuals engaged in this vocation.

The manufacturing sector, specifically focusing on activities related to iron, aluminium, wood, furniture, and other related products, involves the production and sale of goods and is carried out in various forms, including non-formal small and medium enterprises (SMEs) and individual workshops.

The target market for these activities varies depending on the specific product being manufactured. It can include both local and regional markets, and in some cases, even extend beyond Yemen. The demand level for these products is generally medium to high, indicating a market need for these goods.

Engaging in these activities requires specific skills and expertise. For example, working in an aluminium workshop demands proficiency in using aluminium cutters, shaping, and handling aluminium, and knowledge of different types of aluminium. Skilled labour, including university graduates, often participate in these activities.

In terms of assistance, there may be agencies and international or local NGOs that provide support to individuals involved in these manufacturing activities. The types of assistance can include the provision of solar panels and equipment, loans, grants, kits, equipment, and tools,

as well as training programmes. These organizations aim to support the workers and enhance their productivity and sustainability.

The sustainability of these activities depends on various factors. Successful businesses in this sector benefit from a steady demand for their products, providing a regular income for individuals involved. However, challenges related to workforce availability, skills and capacities, access to assets and equipment, microenterprise registration, raw materials, financing, supply, production, services, market, distribution, demand, storage, packaging, transportation, fuel, electricity, and family/cultural challenges can hinder the sustainability of these activities.

The **poultry sector** encompasses activities related to producing and selling slaughtered poultry as well as breeding and selling live poultry. These activities fall under the category of producing and selling goods and are carried out in various forms, including non-formal individual businesses.

The target market for these activities varies depending on the specific product. The demand for poultry is high, and its products are typically sold in markets, and there is a need for marketing skills and financial management to effectively reach customers.

Engaging in these activities may require special skills and expertise. Breeding and selling live poultry may require skills in poultry management, project management, and communication with customers.

Successful businesses in the poultry sector benefit from a steady demand for their products, marketing skills, and effective financial management. However, challenges related to skills and capacities, assets, microenterprise registration, financing, supply, production, services, market, distribution, demand, storage, packaging, transportation, fuel, and electricity can hinder the sustainability of these activities.

In the mobile sector, the activity is focused on mobile maintenance and repair. It is predominantly a non-formal activity carried out by individuals who offer services related to producing and selling goods. This sector attracts mainly men youth. The target market for mobile maintenance and repair services is typically medium to high in demand, and the supply level is also relatively high.

Working in the mobile sector requires specific skills and expertise, particularly in mobile phone maintenance and programming. Professionals in this field should possess a mobile phone maintenance and programming certificate and have a high level of skills to effectively repair and troubleshoot various mobile devices.

The sustainability of the mobile sector depends on various factors. Successful businesses in this sector possess the necessary skills, experience, and technical knowledge to provide high-quality services. However, challenges related to financing difficulties, lack of advisory or consultancy services, supply and demand fluctuations, and family reasons may hinder the sustainability of individual businesses.

The pottery sector involves activities related to producing and selling pottery products. It can be pursued both as a vocation and in a non-formal micro-project form. The data indicates that both men and women youth engage in this sector, with a higher representation of skilled labour and university graduates.

The target market for pottery products can vary, but it is generally considered medium to high in demand. Pottery items are typically sold in shops, and marketing skills, knowledge of burning rates, and storage skills are crucial for success in this sector.

The sustainability of the pottery sector depends on factors such as skills, experience, access to resources, and market demand. Successful businesses in this sector possess the necessary skills in handling different types and shapes of pottery, patience, and a commitment to working at specific times. Challenges related to workforce availability, skills and capacities, financing, supply, production, services, market, distribution, and family/cultural challenges can impact the sustainability of pottery activities.

The solar energy sector involves the production, installation, and maintenance of solar energy systems. It is practiced by various groups, including non-formal micro projects, non-formal SMEs, and individual activities. The target market for this sector includes residential households, commercial buildings, and government institutions that aim to utilize renewable energy sources.

Working in the solar energy sector requires special skills such as sales and purchasing skills, product presentation skills, battery and panel inspection skills, and experience in establishing and managing a store. These skills are essential for effectively promoting and selling solar energy tools and supplies.

The main reasons for the sustainability of this activity include the increasing demand for clean and renewable energy sources, potential cost savings in the long run, and the positive environmental impact of solar energy systems. However, challenges such as high initial costs, lack of awareness, and limited access to financing can hinder the widespread adoption of solar energy.

The textiles, handloom, sewing, and embroidery sector involve activities such as sewing, producing, and selling clothes, as well as manufacturing and selling embroideries. It is practiced by various groups, including vocational workers, non-formal activities, and formal micro projects. The target market for this sector includes individuals, households, and businesses seeking clothing and embroidery products.

Working in this sector requires special skills such as sewing skills, design skills, knowledge of fabrics, and proficiency in clothing embellishment. These skills are crucial for creating high-quality garments and meeting customer demands.

There are organizations like Ba Thour Women's Association and the Yemeni Women's Union that provide assistance and support to individuals working in the textiles and sewing industry. They offer training programmes, loans, grants, marketing assistance, and defend the rights of workers.

The sustainability of this activity is driven by the continuous demand for clothing and embroidery products. It offers income-generating opportunities, particularly for women who can work from home and contribute to their family's financial well-being. However, challenges such as limited access to training services, lack of experience in financial matters and marketing, and cultural barriers may impact the success of individuals in this sector.

Potential business sectors and growth industries in rural contexts

Based on the above, potential business sectors and industries to grow in rural contexts are the following:

Health sector:

The healthcare sector plays a crucial role in ensuring the well-being and quality of life of individuals within the community. In the areas and districts of Bani Al Awam, Ash Shaghadirah, Nijrah, and Al Maqatirah, the healthcare sector holds great promises and should be considered a top priority for development. However, it is important to note that the recommendations

captured through responses are based on general information and may not reflect the current situation in these specific areas. One notable issue in these areas is the lack of small clinics for midwives. This gap can significantly impact the reproductive healthcare services for women and new-borns' health and safety. Establishing small clinics with qualified midwives can greatly improve the accessibility and quality of reproductive healthcare in the area. These clinics can provide basic services such as antenatal care, postnatal care, family planning, and assistance during childbirth. In addition to the lack of midwifery clinics, there is a shortage of specialized training opportunities for healthcare professionals in the study areas. Addressing this issue is of utmost importance to improve the overall quality of healthcare services. By organizing training programmes and workshops, healthcare workers can enhance their skills and knowledge in specialized areas such as obstetrics, gynaecology, paediatrics, and public health. These training initiatives can be organized in collaboration with reputable medical institutions and organizations, ensuring that healthcare specialists receive up-to-date and evidence-based training.

Additionally, it is important to realize that the challenges mentioned above may not be limited to the areas and districts of Bani Al Awam, Ash Shaghadirah, Nijrah, and Al Maqatirah. Similar issues may exist in other areas within the study regions. Therefore, prioritizing healthcare development throughout the region is necessary.

Investing in the healthcare sector has numerous benefits. Firstly, improved healthcare services lead to better health outcomes, reduced rates of illness and death among the population. This, in turn, enhances the overall quality of life and productivity of individuals, contributing to the social and economic development of the areas. Focusing on the healthcare sector can attract investment and create job opportunities. Establishing midwifery clinics and specialized training programs will require skilled healthcare professionals, administrative staff, and support staff. This will not only provide employment opportunities for local residents but also attract professionals from neighbouring areas, promoting economic growth. Prioritizing the healthcare sector aligns with the United Nations Sustainable Development Goals, specifically Goal 3, which aims to ensure healthy lives and promote well-being for all at all ages. By investing in healthcare, the districts can contribute to achieving this goal and demonstrate their commitment to the comprehensive development of their communities. The healthcare sector holds great promise as a top priority for development in the areas of Bani Al Awam, Ash Shaghadirah, Nijrah, and Al Maqatirah. Addressing the absence of midwifery clinics and the shortage of specialized training opportunities for healthcare professionals can significantly improve the accessibility and quality of healthcare services. By investing in the healthcare sector, these areas can improve health outcomes, promote economic growth, and contribute to the global sustainable development agenda.

Solar sector:

The solar energy sector has experienced significant growth and promising achievements in recent years. Solar energy has emerged as a source of clean, renewable, and sustainable energy, offering many benefits for both the environment and the economy. As a result, there has been increasing interest in harnessing solar energy in various sectors, including agriculture, due to its high energy requirements. In specific areas of Bajil, Ahwar, and Lawdar, where there is a great need for intervention in the solar energy sector, financial institutions and financing organizations have recognized the potential and offered facilities and concessional loans to support its growth. Agricultural areas often have a large availability of land, making them ideal for installing solar panels and generating solar energy. Solar energy can be used to power irrigation systems, machinery, and other agricultural processes, reducing reliance on traditional fossil fuels and lowering greenhouse gas emissions. By integrating solar energy into the

agricultural sector, farmers can benefit from a reliable and cost-effective energy source, leading to increased productivity and reduced operating costs.

Recognizing the immense potential of solar energy in agricultural areas of Bajil, Ahwar, and Lawdar, financing institutions have stepped forward to provide support and facilitate the growth of this sector. These institutions, such as banks, development agencies, and specialized renewable energy funds, understand the importance of renewable energy in achieving sustainable development goals and have designed their financial products to meet the specific needs of solar energy projects.



One of the main ways these financing institutions support the solar energy sector is by providing facilities and concessional loans. Facilities may include a range of financial services, such as credit lines, working capital loans, and project financing, to enable the development and expansion of solar energy projects. On the other

hand, concessional loans provide favourable terms and conditions, including low-interest rates and extended repayment periods, to make solar energy investments more attractive and affordable for agricultural stakeholders.

These financing institutions typically work closely with project developers, farmers, and other stakeholders to assess the feasibility of solar energy projects and provide tailored financial solutions. They understand the specific challenges faced by the agricultural sector, such as seasonality, volatile cash flows, and the need for long-term financing, and structure their offerings accordingly.

By opening up new opportunities for farmers and project developers in Bajil, Ahwar, and Lawdar, experienced financing institutions in the solar energy sector will enable them to access the capital necessary to invest in solar infrastructure, implement innovative solutions, and reap the benefits of generating clean and sustainable energy. Additionally, these financial institutions will also offer technical assistance, capacity building, and knowledge exchange to increase the effectiveness and efficiency of solar energy projects in these areas.

In conclusion, the solar energy sector holds great promise, particularly in agricultural areas such as Bajil, Ahwar, and Lawdar.

Jasmine cultivation:

Jasmine cultivation is promising in Tuban in Lahj and Bajil in Hodeidah Governorate, providing a unique opportunity for economic growth and development. With its numerous benefits and the development of a strong value chain, this sector can thrive and become a key driver of prosperity in the region. Some of the reasons why the jasmine cultivation sector in the Tuban and Bajil districts is highly promising include:

- Favourable climate and agricultural conditions
- High market demand and profitability

- Job creation and rural development
- Value chain enhancement

To fully realize the potential of the jasmine agriculture sector, it is essential to develop a strong value chain that ensures efficiency and maximizes returns. This can be achieved through various strategic initiatives, including:

- Improved agricultural practices:** The adoption of modern agricultural techniques, such as precision farming, organic practices, and integrated pest management, can enhance crop yield and quality. Training programmes and access to technological advancements should be made available to farmers to improve their productivity.
- Post-harvest infrastructure:** The development of adequate post-harvest infrastructure, such as drying facilities, sorting and grading centres, and storage facilities, is necessary to maintain the quality and shelf life of the harvested jasmine. This infrastructure should be strategically located to reduce transportation costs and post-harvest losses.
- Market linkages:** The creation of strong market linkages between farmers, wholesalers, retailers, and exporters is of utmost importance to efficiently distribute and market the jasmine. The establishment of cooperatives or associations for farmers can facilitate collective bargaining power and access to wider markets.
- Value addition:** Encouraging value addition processing of the jasmine can increase the value of the crop and open up new market opportunities. Supporting the establishment of small-scale processing units can enable local entrepreneurs and create a diverse range of jasmine-based products.

The jasmine agriculture sector in many regions of Taban and Bajil is highly promising for economic growth, job creation, and rural development. By leveraging the favourable climate, high market demand, and profitability of jasmine, together with strategic value chain development, this sector can thrive and bring prosperity to the region. It is crucial for stakeholders, including government agencies, agricultural organizations, and private institutions, to collaborate and invest in its success.

Henna tree cultivation:

In the Al Madaribah district of Lahj governorate, henna tree cultivation holds immense potential as a promising sector. This sector can thrive with the development of a strong value chain and the provision of grinding machines, which will greatly enhance the processing and overall productivity capabilities of the henna industry. Lahj Governorate's favourable climate and suitable soil conditions create an ideal environment for henna tree cultivation. The warm temperatures in the area and moderate rainfall provide the perfect conditions for healthy henna plant growth. Additionally, the local community possesses traditional knowledge and expertise in henna cultivation, passed down through generations, which can be harnessed to build a thriving industry.

The henna industry includes a wide range of activities, including cultivation, harvesting, drying, grinding, and processing henna leaves into a fine powder. Currently, one of the main challenges facing henna farmers and processors in Lahj Governorate is the lack of modern grinding machines, as grinding henna leaves manually is a labour-intensive and time-consuming process, limiting overall productivity and hindering sector growth.

The provision of grinding machines in the region will revolutionize henna processing methods. These machines will perform the grinding process, significantly increasing the efficiency and production of henna powder. With such machines available, farmers and processors can focus on expanding cultivation and improving other stages of the value chain, leading to a significant increase in productivity.

The benefits of a thriving henna industry in Lahj Governorate extend beyond economic aspects. Henna tree cultivation promotes environmental sustainability, as these plants require minimal water and can thrive in arid conditions. By encouraging henna cultivation, the region can contribute to soil conservation, prevent erosion, and preserve biodiversity.

Furthermore, the henna industry has significant cultural value. Henna has been an integral part of local traditions and celebrations for several centuries, applied in weddings, festivals, and celebrations. By supporting the growth of this sector, Lahj governorate can preserve its cultural heritage, promote tourism, and attract visitors interested in exploring the beauty and history associated with henna.

To fully realize the potential of the henna tree cultivation sector in Lahj Governorate, it is essential to focus on developing the value chain. This includes providing support and training to farmers, promoting sustainable agricultural practices, establishing efficient processing facilities, and facilitating market linkages. By integrating these efforts, the sector can experience growth, generate employment opportunities, and contribute to the social and economic development of the region.

In conclusion, the henna tree cultivation sector in the Al Madaribah region of Lahj Governorate holds immense promise for economic development and cultural preservation. The provision of grinding machines to enhance processing capabilities is an important step towards realizing this potential. By creating a strong value chain, Lahj Governorate can witness the flourishing of the henna industry, benefitting the local community and the wider region.

Lemon farming sector:

The lemon farming sector, with a focus on solar-powered wells, has tremendous potential for speculation and is expected to become a promising and prosperous sector in agriculture. This is due to the many benefits it offers, from sustainable energy practices to the development of a strong value chain. Solar energy has emerged as a game changer in various industries, and agriculture is no exception. The use of solar energy to supply wells with the necessary energy for lemon cultivation brings many advantages. Firstly, it reduces dependence on traditional fuel-based energy sources, leading to a significant reduction in greenhouse gas emissions and mitigating the effects of climate change. In addition, solar energy is renewable and abundant and easy to access, making it a cost-effective and sustainable solution for operating agricultural processes. Therefore, utilizing solar energy to operate wells can enable lemon farmers to ensure steady and reliable water supplies for their crops. This is particularly important in areas suffering from water scarcity or unreliable electricity grids. Solar-powered wells eliminate the need for expensive diesel generators or grid connections, providing farmers with an affordable and effective irrigation solution. The availability of consistent water supplies leads to improved crop yields and quality, and overall productivity, enabling farmers to effectively meet market demand.

Furthermore, the development of a strong value chain is essential for the growth and prosperity of the lemon farming sector. This requires improving every stage of the production and distribution process, from seed selection and planting to harvesting, packaging, and marketing. By investing in modern agricultural techniques, such as precision farming and sustainable practices, lemon farmers can improve crop quality, reduce waste, and increase profitability. In the value chain, solar-powered wells play a crucial role in ensuring reliable water supplies throughout the agricultural cycle. This allows farmers to maintain ideal growth conditions, resulting in healthier lemon trees and higher productivity. In addition, solar energy can be used for post-harvest processing, such as drying, juicing, and preservation of lemons.

This helps to extend the product's shelf life, enhance its value, and expand opportunities for value-added products.

To fully realize the potential of the lemon farming sector, collaboration between various stakeholders is vital. This includes partnerships between farmers, solar energy companies, government agencies, and research institutions. Governance entities can provide incentives, grants, and favourable policies to encourage the adoption of solar-powered systems in agriculture for water extraction. Research institutions can contribute by developing improved lemon varieties, innovative agricultural techniques, and post-harvest processing methods. Furthermore, developing and accessing markets are critical to the success of this sector. Lemon farmers need access to reliable markets, both locally and internationally, to sell their products at fair prices. Government and industry associations can facilitate market linkages, provide market information, support branding, and promote high-quality lemon products. This helps to create sustainable market demand, ensuring the profitability and growth of lemon farming.

In conclusion, the lemon farming sector, with a focus on solar-powered wells, has tremendous potential and opportunities. By adopting solar-powered irrigation, farmers can reduce environmental impact, improve water availability, and enhance crop productivity. The development of a strong value chain, along with supportive policies and market access, will drive sector growth and contribute to its success. Thanks to the concerted efforts of all stakeholders, the lemon farming sector can thrive and become a profitable and sustainable industry.

Planting fruits such as cantaloupe, watermelon, and mango:

Planting fruits such as cantaloupe, watermelon, and mango in the districts of Ahwar and Lawdar in Abyan governorate and in Bajil in Hodeidah governorate holds promise for the agricultural sector. With proper investment and development of a strong value chain, this sector has the potential to thrive and make a significant contribution to the local economy.

One of the main reasons for the promising nature of fruit cultivation in these areas is the favourable climate conditions. Ahwar, Lawdar, and Bajil benefit from a warm climate with bright sunlight, making them ideal for the growth and development of fruit crops. The fertile soil in these areas enhances the suitability for fruit production, providing an excellent foundation for agricultural activities.

Cantaloupe, watermelon, and mango are highly demanded in both local and international markets. By focusing on these crops, farmers in the above-mentioned areas can take advantage of profitable opportunities and increase their income. Cantaloupe, watermelon, and mango are known for their refreshing flavours and nutritional benefits. The demand for these fruits remains high, both locally and internationally, making them attractive crops for cultivation. To fully harness the potential of this sector, it is necessary to invest in developing the value chain. The value chain that operates well includes different stages, including production, processing, packaging, transportation, and marketing. By enhancing each component of the value chain, farmers and producers can ensure the efficient delivery of high-quality fruits to consumers.

Regarding production, it is essential to support farmers in accessing improved agricultural practices, such as advanced irrigation techniques and the use of solar energy, pest control methods, and proper fertilizer. Training programmes and workshops can be organized to educate farmers about modern farming techniques, enabling them to maximize yields and produce high-quality fruits.

Facilities for post-harvest processing need to be established or improved in the region. These facilities may include sorting, grading, packaging units, as well as storage and cooling systems to maintain the freshness and quality of the fruits. Additionally, value-added processing techniques such as drying, juicing, or preserving can help extend the shelf life of the fruits and diversify the range of available products.

Effective transportation and logistics services are essential to connect farmers with consumers. Investing in well-maintained road networks and refrigerated transport vehicles will help reduce post-harvest losses and ensure timely delivery of fruits to markets. Furthermore, establishing strong market links and partnerships with wholesalers, retailers, and export companies can enable farmers to access a wider customer base and secure better prices for their products.

Marketing will play a vital role in promoting the fruits grown in Ahwar, Lawdar, and Bajil. Efforts should be made to create awareness about the quality and uniqueness of the fruits through branding and promotional activities. Participating in trade fairs, exhibitions, and agricultural events can help showcase the products to potential buyers, both locally and internationally. The establishment of cooperative associations or producer associations can also provide opportunities for collective marketing and enhance the negotiating power of farmers.

Finally, support from the government and investment is crucial for the development of this promising sector. Policies should be formulated to encourage private sector investments and provide financial incentives such as low-interest loans or grants to farmers and agricultural companies. Research and development initiatives can focus on introducing new types of fruits, improving crop yields, and developing innovative processing techniques.

In conclusion, planting cantaloupe, watermelon, and mango in Ahwar, Lawdar, and Bajil holds immense potential for economic growth and development. By investing in the value chain and implementing strategic measures to enhance production, processing, transportation, and marketing, this sector can thrive and achieve prosperity at the local level.

Palm frond weaving and mats:

The manufacturing of palm frond weaving, and mats holds immense potential as a promising sector that can thrive with the right opportunities for development and a solid value chain. This sector benefits from the abundance of raw materials, which is the palm fronds, and the local expertise in crafting complex and durable products from these natural resources.

Tuban, Bajil, and Lawdar, known for their flourishing palm groves and weaving industry, offer a sustainable and renewable source of palm fronds, which can be creatively repurposed to produce a wide range of useful and aesthetically pleasing products. The coffee trays, mats, and baskets made from palm fronds are not only environmentally friendly but also showcase the cultural heritage and traditional handicrafts of the region.

One of the key factors contributing to the potential success of this sector is the availability of skilled craftsmen who possess the knowledge and experience to transform palm fronds into beautiful and practical items. These artisans have honed their craft over generations, passing down their techniques and skills from one generation to the next. By providing support and training opportunities for these artists, the sector can develop and benefit from their creativity and expertise.

To truly thrive, the sector should focus on developing a strong value chain that includes various stages of production, marketing, and distribution. This includes establishing reliable channels for obtaining high-quality palm fronds, ensuring efficient processing, and manufacturing techniques, and implementing effective marketing and distribution strategies.

By streamlining the value chain, the sector can enhance productivity, reduce costs, and deliver high-quality products to both local and international markets.

Furthermore, to maximize the potential of this sector, it is necessary to explore innovative designs and product diversification. Traditional baskets, mats, and other products can be modernized and infused with contemporary trends, attracting a wider customer base, and tapping into new market segments. Collaborating with designers and architects can lead to fresh perspectives, resulting in unique and attractive products that cater to the evolving preferences of consumers. In addition to focusing on product development and marketing, the sector should also prioritize sustainable practices. Adopting environmentally friendly production processes, such as using natural dyes and minimizing waste, can enhance the sector's reputation as a responsible and ethical industry. This approach will not only appeal to environmentally conscious consumers but also open doors to markets that prioritize sustainability and ethical sourcing.

In conclusion, industries that rely on palm fronds in Tuban, Bajil, and Lawdar have the potential to become a thriving sector. By leveraging the abundance of raw materials, nurturing the skills of local artisans, developing a strong value chain, embracing innovation, and prioritizing sustainability, this sector can flourish and become a prominent contributor to the region's economy and cultural heritage.

Production of Taiz cheese:

The production of Taiz cheese in Bajil, Al Ma'afer, Ahwar, and Lawdar is primarily concentrated, with other districts having lesser potential for growth and development. By focusing on the utilization and development of untapped animal resources, the value chain within this sector can be strengthened, leading to its prosperity.

Some key points that need to be considered for value chain development include:

- **Utilizing animal resources:** The first step in developing the value chain for Taiz cheese production is to identify and utilize untapped animal resources. This includes assessing the existing animal wealth in the area and identifying suitable potential breeds for milk production. By encouraging and incentivizing local farmers to raise high-quality dairy cows or goats, the industry can ensure a steady supply of milk for cheese production.
- **Genetic improvement:** Another aspect to consider is genetic improvement of animal resources. This can be achieved through selective breeding programs or introducing superior breeds that adapt well to the local environment. By enhancing the genetic potential of livestock, the quality and quantity of milk produced can be increased, resulting in high-quality Taiz cheese.
- **Farm management and animal health:** Providing farmers with training and support in effective farm management practices, including animal nutrition, health, and hygiene, is of utmost importance. Proper nutrition practices, vaccination programs, and disease control measures can lead to significant improvements in overall animal health and productivity, ensuring a steady supply of high-quality milk.
- **Milk collection and processing:** To develop the value chain, it is essential to establish effective milk collection systems. This includes setting up milk collection centres or cooperatives where farmers can deliver their milk, ensuring safe handling and storage. Investing in dairy processing facilities equipped with modern technology will enable the production of high-quality Taiz cheese and increase productivity.
- **Quality control and standards:** To compete in local and international markets, Taiz cheese industry should adhere to strict quality control measures and comply with relevant food safety standards. Implementing quality assurance programs, conducting

regular tests, and obtaining certifications will build consumer confidence and open up export opportunities.

- **Marketing and market development:** Developing a strong marketing strategy is crucial for the growth of the Taiz cheese industry. This includes promoting the brand, packaging, and unique qualities of Taiz cheese. Engaging in market research, identifying target markets, and exploring export opportunities will expand the customer base and increase profitability.
- **Research and development:** Continuous investment in research and development is necessary for the sustainability of the sector and long-term innovation. Research institutions, government agencies, and industry stakeholders should collaborate to identify areas for improvement, explore new technologies, and develop value-added products related to Taiz cheese.

By focusing on these key areas and working to utilize and develop untapped animal resources, the Taiz cheese industry in Bajil, Ahwar, Lawdar, and other regions can prosper. This will benefit the local economy not only by creating job opportunities and increasing income for farmers and residents, but also by enhancing the region's reputation as a centre for producing high-quality Taiz cheese.

Promising sectors for women entrepreneurship and micro start-ups

In Yemen, women are increasingly participating in various income-generating activities and entrepreneurship, despite the challenges posed by ongoing conflict and social and economic instability. These income-generating activities provide opportunities for women to support their families and contribute to the local economy, while also promoting their empowerment more broadly.

1- Sewing and Embroidery

Sewing and embroidery can be a promising sector for women's entrepreneurship and small businesses, providing income-generating opportunities and a means to improve living conditions. This activity is easy to learn and available to everyone, making it suitable for women with different skill levels and backgrounds. Additionally, it can be applied in all governorates and study areas.

One advantage of sewing and embroidery as an income-generating activity is the availability of production inputs. Sewing requires basic equipment such as sewing machines, needles, threads, and fabrics, which are relatively inexpensive and easily accessible in most areas. On the other hand, embroidery requires embroidery hoops, needles, embroidery thread, and fabric, which are also widely available. These inputs can be purchased locally or obtained from nearby markets, reducing logistical challenges for ambitious entrepreneurs. There is also a market for selling products, which includes not only sewing and embroidery products but also other related items such as clothing, textiles, and decorative materials. Clothes and textiles are basic goods, and people constantly need new clothing, repairs, alterations, and decorative items. Sewing products such as dresses, robes, blouses, shirts, and pants are in demand for personal use, while items such as curtains, bedding, and tablecloths are purchased for both residential and commercial use. Embroidered products, including personal home decor, accessories, and gifts, also have high attractiveness and demand in the markets.

Demand for sewing and embroidery is particularly high in rural areas. People often rely on traditional crafts and hand tools. In addition, rural communities may have limited access to ready-made clothing stores or face challenges in affording them, making homemade clothing a practical and cost-effective alternative. By engaging in sewing and embroidery, rural women can meet this demand and generate income while meeting the needs of their local communities.

To create successful sewing and embroidery projects, it is important to consider some key factors. First, training programmes and skills-building initiatives can play a crucial role in providing women with the necessary techniques and knowledge. These programmes can be organized by local organizations, non-governmental organizations, or government agencies, providing women with an opportunity to learn or enhance sewing and embroidery skills. Access to microfinance and small business loans can also enable women to start sewing and embroidery projects. Financial support can help them purchase sewing machines, equipment, and raw materials, enabling them to begin production. Collaboration with local banks or women-focused financing institutions or agencies can facilitate the availability of these financial resources.

Sewing and embroidery offer great potential as income-generating activities for women in entrepreneurship and small businesses. The ease of access to this craft, along with the availability of production inputs and market demand, makes it an attractive option for women in various governorates or areas. By engaging in sewing and embroidery, women can not only

improve their living conditions but also contribute to the economic development of their communities.

2- Knitting

Knitting can be a promising sector for women's entrepreneurship and small businesses in the Lawdar district of Abyan Governorate. The craft of Maawaz knitting, a traditional Yemeni craft, can provide women in the area with an opportunity to generate income, improve their livelihoods, and support their families. Through this craft, women produce traditional Yemeni clothing made of yarn. Men widely wear these clothes in Yemen, and there is a high demand for them in various markets. The unique designs, vibrant colors, and cultural significance of Maawaz make it a sought-after product.

To involve women in this craft and turn it into a sustainable income-generating activity, several steps can be taken:

- **Skills development:** Provide training programmes and workshops for women in the Lawdar area to enhance their knitting skills. These programmes can focus on teaching traditional knitting techniques and quality control to ensure the production of high-quality Maawaz.
- **Access to resources:** Establish knitting centres or community workshops where women can access knitting materials such as yarns, needles, and other necessary supplies. By providing these resources, women can start their own knitting projects without significant financial barriers.
- **Business training and entrepreneurship:** Provide training programmes that focus on business skills, including basic accounting, marketing, and sales techniques. This will equip women with the necessary knowledge to effectively manage small knitting projects and increase their potential income.
- **Cooperative formation:** Encourage the formation of knitting cooperatives or women's groups where participants can pool their resources, exchange knowledge, and collectively market their products. By working together, the women can achieve greater success and sustainability.
- **Access to markets:** Facilitate the access of Maawaz products to markets by linking women's knitting projects to local markets. This can be achieved through collaboration with local factories.
- **Product diversification:** Encourage women to explore diverse designs and patterns to meet all tastes. By diversifying their product range, women can attract a wider customer base and increase their potential income.

By implementing these strategies, Maawaz knitting can become a profitable craft that improves the livelihoods of women and their families in the Lawdar district. The demand for Maawaz in the market, both within the governorate and in other areas, provides an excellent opportunity for women to establish small businesses and generate income. Furthermore, the cultural significance of Maawaz ensures its continued popularity and marketability, making it a sustainable income-generating activity for women in the long term.

3- Incense and perfume industry

The incense and perfume industry can be a promising sector for women's entrepreneurship and small businesses in the Tuban, Lawdar and Ahwar districts, as well as other targeted districts in the study. This industry provides many advantages that make it suitable for entrepreneurs, including ease of learning, minimal capital requirements, high demand in society, and easy access to raw materials.

Making incense and perfume involves blending various aromatic ingredients to produce fragrances used for personal, and cultural purposes. The demand for these products has been high for centuries and they continue to be popular among different communities.

One of the main advantages of this industry is that it does not require intensive training or a large amount of time to learn. Women can acquire the necessary skills and knowledge through short training programmes or even self-learning. They can start experimenting with different scent combinations and gradually refine their techniques. Through practice and experience, they can develop unique fragrances that attract a wide range of customers.

Another advantage is that the capital requirements for starting the project are relatively low. The basic equipment required includes mixing vessels, measuring tools, storage bottles, packaging materials, which can be obtained at reasonable prices, allowing women with limited financial resources to easily enter the industry.

Marketing incense and perfume is also relatively easy due to their popularity and demand in society. Women entrepreneurs can promote their products through various channels, such as local markets, social media platforms, and even by setting up their own small stores or booths. Participating in community events, festivals, and exhibitions can also help them reach a larger customer base.

4- Palm Leaf Mat and Hat Industry

Entrepreneurship and small businesses play a crucial role in empowering women and promoting economic growth in local communities. In the districts of Lawdar and Ahwar in Abyan Governorate and Bajil district in Hodeidah Governorate, the palm leaf mat and broom, hat, fan, and other products industry represents a promising sector for women to generate income. This craft is characterized by:

- **Ease of learning:**
The palm leaf mat and broom, hat, and other products industry is a skill that can be easily acquired. Women can quickly learn the techniques used to weave and shape the products with minimal training. The simplicity of the craft allows women to acquire the necessary skills within a short period, enabling them to start their own projects immediately.
- **Low capital requirements:**
One of the important advantages of this industry is the low capital requirements. The materials used in the palm leaf industry are easily available and usually do not incur any costs. Women can collect palm leaves from the local environment, ensuring a continuous supply without the need for large financial investments. In addition, the tools and equipment needed for handicrafts, such as needles, threads, and small hand tools, are cheap.
- **Strong market demand:**
Products made from palm leaves, including mats and others, have been popular for a long time, and the demand for them is increasing within local communities. These items perform essential functions in the home, making them necessary goods. By engaging in the production of palm leaf products, women can benefit from the current market with continuous demand, ensuring a stable customer base and regular income.
- **Easy marketing and sales:**
Products made from palm leaves have a high level of acceptance and recognition within the local community. Therefore, marketing efforts for these products are relatively direct. Women can leverage their current networks and connections to promote their products, using word-of-mouth marketing and local events.

5- Healthcare Sector and Small Clinics

In recent years, the healthcare sector in the study areas has deteriorated due to ongoing conflict, and significant efforts are being made to improve access to healthcare services, especially in remote and rugged mountainous areas such as the districts of Al Maqatirah, Bani Al Awam, and Nijrah. Realizing the importance of ensuring the quality of maternal and child health services in these areas, the establishment of small clinics for midwives is recommended. These clinics not only serve as income-generating activities but also as a means of providing basic care for mothers and children, especially in rural areas. The rugged mountainous areas pose multiple challenges when it comes to accessing healthcare facilities. The difficult terrain and limited infrastructure make it difficult for people to reach hospitals and healthcare centres in urban areas. Therefore, establishing small clinics within local communities becomes crucial to ensure the availability of healthcare services near those who need them.

Midwives play a vital role in caring for maternal and child health. With midwives present in these clinics, women in these areas can receive basic antenatal care, assistance in safe delivery, and postnatal support without the need to travel long distances or face challenges that can lead to the deterioration of maternal health and sometimes death.

In addition to providing healthcare services, the establishment of these small clinics can also serve as income-generating activities for midwives in the study areas, contributing to the economic empowerment of women in the region, providing them with professional growth opportunities and financial stability. The presence of midwives in these clinics can inspire and encourage other women to pursue careers in healthcare, promoting the local workforce and community development.

To ensure the success and sustainability of these small clinics, support from the government, healthcare organizations, and local communities is necessary. Sufficient funding, infrastructure, and continuous training programmes for midwives can help. Collaborating with community leaders and influential individuals can help break down barriers and promote the acceptance of services provided by midwives in rural areas.

6- Cheese and Dairy Products Industry



The food industry plays an important role in various areas, especially in areas where animal husbandry is prevalent, such as Bajil, Ahwar, and Lawdar. These areas have long-standing traditions in dairy production, including cheese and milk, which serve as essential sources of income for local communities. Furthermore, these activities have proven to be particularly beneficial for women, providing them with income-generating opportunities and economic empowerment.

In Bajil, the cheese and dairy industry will be suitable due to the abundance of livestock, including cows, goats, and sheep. Local women actively participate in this sector by participating in livestock rearing. They contribute to the entire value chain, from animal care to milking and processing milk into various dairy products. Encouraging women in Bajil to establish small-scale cooperatives will enable them to pool their resources, share knowledge, and collectively market their products. These cooperatives will be useful in improving the quality of dairy products and expanding their reach to markets.

Ahwar is another area where the cheese and milk industry will thrive and be promising. The favourable climate and fertile land in the area support the rearing of dairy animals.

In addition to Bajil, Ahwar, and Lawdar, the cheese industry will also be a source of income for women in other areas within the study area. In these areas, women's acquisition of skills contributes to improving their household income and overall economic development.

The cheese and dairy industry will not only provide financial benefits to women but also promote equality and empower women in these fields. By engaging in these income-generating activities, women gain economic independence, decision-making power, and a sense of pride in their contributions to their families and communities. Furthermore, women's success in the food industry could pave the way for increased recognition of their skills and abilities, leading to greater inclusivity in other economic sectors as well.

7- Cakes, confectionery, and pastries

The food industry, particularly the production of cakes, confectionery, and pastries, has emerged as an important activity for generating income for women in various regions including the targeted districts. This sector not only provides economic empowerment for women but also contributes to the overall economic development of local communities. With the availability of easily accessible and affordable inputs, women can establish successful businesses and generate income to support themselves and their families.

In the targeted districts, women readily take advantage of the opportunities available to them. They have honed their skills in the baking and confectionery industry. One of the main advantages of entering the cake and confectionery industry is the relatively low cost of entry, as the necessary ingredients and equipment are readily available in local markets at reasonable prices, allowing women to start small businesses with limited capital and establish themselves in the industry without significant financial barriers.

The food industry provides flexibility in production and marketing. Women can adapt their operations to suit their individual circumstances, whether they choose to work from home or establish small bakeries.

Demand for cakes, confectionery, and pastries is consistently high, especially during holidays, celebrations, and special occasions. By offering a variety of products and customizing them to meet specific customer requirements, women in the food industry can take advantage of this demand.

The establishment of their own businesses by these women will contribute to the economic development of their communities. They provide employment opportunities for others,

especially other women, and promote job creation and income generation at the local level. In addition, the revenue generated from these businesses will be circulated within the community, leading to increased economic growth.



To support the success of women's empowerment in the food industry, it is essential to provide them with access to training and resources. Educational programmes on baking techniques, recipe development, and business management can enhance their skills and provide them with the knowledge to efficiently manage their projects. Furthermore, initiatives that promote communication, guidance, and access to financial services can enable women to expand their businesses and explore new markets.

Recently, the production of cakes, confectionery, and pastries has emerged as a promising income-generating activity for women in various districts. With simple access to inputs and the ability to create unique products, women will find economic empowerment through entrepreneurship in the food industry.

8. Henna engraving

Henna engraving is a traditional art form that has been practiced for centuries in many cultures around the world. It involves applying intricate designs on the skin using a paste made from henna plant leaves. In recent years, henna engraving has gained popularity as a form of art, especially during special occasions such as weddings, festivals, and celebrations. This has led to an increased demand for women who can perform henna engraving, making it a vital income-generating activity for women in many communities within the study area.

Women can learn this skill through various means such as attending workshops, taking online courses, or even through informal training within their communities. Henna engraving does not require large resources or expensive equipment, making it accessible to women.

Flexibility is one of the key advantages of henna engraving as a means of generating income. Women can work from home and choose their work hours, and can cater to clients based on their availability, allowing them to balance their work and other responsibilities.

The demand for henna engraving is consistently high, especially during occasions such as weddings and engagements. Women and girls often decorate their hands and feet with henna designs to enhance their beauty and celebrate special moments.

Furthermore, henna engraving allows women to express their creative and artistic skills. They can create unique designs and experiment with different patterns and motifs, providing customized experiences for their clients. This artistic element adds value to their services and enables them to impose competitive prices.

By engaging in henna engraving as an income-generating activity, women in the study area can become financially independent and contribute to their family's income. It empowers them by allowing them to develop a valuable skill in demand that can be effectively monetized. To support and promote henna engraving, local authorities and organizations can organize training programs and workshops that focus on enhancing women's skills in the community. They can also facilitate access to resources such as henna supplies, assist with marketing, provide guidance, and enable women to create successful projects.

9. Livestock farming:

Livestock farming is an important activity in various regions of Yemen, especially in Ahwar, Lawdar, and Bajil. This activity represents an opportunity for women's empowerment and financial independence. Livestock farming offers many benefits and has the ability to change women's lives in these areas.

In these districts, women engage in livestock farming as a means of generating income. They raise different types of livestock, including goats, sheep, cattle, and chickens. Livestock farming is particularly suitable for women because it provides flexible job opportunities that can be managed alongside household responsibilities.

The income generated from livestock farming contributes significantly to women's empowerment and financial independence. It allows them to meet the educational and healthcare needs of their children and improve their overall standard of living. Additionally, through participation in this activity, women become major contributors to the local economy and play a vital role in ensuring food security in their communities.

10. Jasmine cultivation:

Jasmine cultivation represents a promising opportunity for women to establish a reliable source of income in the Bajil and Tuban regions. Jasmine cultivation not only enhances financial stability, but also allows women to actively participate in the agricultural sector and contribute to the local economy.

Bajil and Tuban are known for their favourable climatic conditions, which are suitable for jasmine cultivation. Women in these areas have recognized the potential of jasmine as a high-value cash crop. They engage in activities such as planting, nurturing plants, and harvesting jasmine flowers.

Jasmine cultivation provides several advantages for women in terms of income generation. The harvested flowers can be used in the production of essential oils and perfumes, which are in high demand in the market. Women can either sell fresh jasmine flowers or process them to extract essential oils, which can be sold at an excellent price.

Other non-agricultural activities

While agriculture has traditionally been an important sector in the Yemeni countryside, diversification into non-agricultural activities can bring many economic opportunities.

1- Handicrafts and artisanal products

Handicrafts and artisanal products in Yemen are an important non-agricultural sector, which contributes to the country's economy and provides livelihood opportunities for artisans. This sector includes a wide range of traditional crafts, including pottery, metalwork, weaving, basketry, wood carving, embroidery, and other crafts.

Demand for Yemeni handicrafts has historically been high due to the country's rich cultural heritage and unique craftsmanship. These products often feature intricate designs and creative shapes, as well as traditional techniques that attract both local and international customers. Yemeni handicrafts are highly valued for their authenticity, artistic value, and cultural significance, making them desirable items in both the local and global markets.

One of the advantages of the handicrafts sector in Yemen is the availability of raw materials. The country is rich in natural resources such as clay, metals, wood, and natural fibres, which are essential for various craft production processes. The local availability of these materials ensures a steady supply and reduces reliance on imported resources, making handicraft production economically viable.

While this sector primarily relies on traditional tools and techniques, there is also an increasing use of modern machinery and equipment in some craft processes. For example, pottery production now includes ovens and electric wheels to increase efficiency and productivity. However, the general use of machinery and equipment is relatively limited, and most artisans still rely on traditional tools and techniques, preserving the authenticity and cultural integrity of their craft.

Marketing and promotion play an important role in expanding the reach of Yemeni handicrafts to the market. Intensive efforts are being made to improve marketing strategies by leveraging digital platforms, establishing cooperative and craft associations, and participating in trade fairs. These initiatives help showcase Yemeni crafts to a wider audience, enhance their visibility, and increase their market value. The potential for exporting Yemeni handicrafts is significant considering the demand for unique and original handicrafts. However, various challenges should be addressed, including improving infrastructure, simplifying export procedures to cities and abroad, and creating effective commercial networks. Additionally, maintaining quality standards and complying with international regulations is essential for successful exports of handicraft products.

In terms of economic feasibility, the return on investment in the handicraft sector can be rewarding for skilled craftsmen. However, it is important to note that the industry faces many challenges. The impact of political instability, social unrest, and economic fluctuations in the country affects the growth and stability of the sector. Additionally, lack of access to financing, limited market information, and absence of supportive policies and infrastructure hinders the full potential of the sector.

The availability of skilled labour is of utmost importance to the handicraft sector. Craftsmen need training and specialized skills to produce high-quality handicraft products. Traditional knowledge is often passed down through generations, but formal training programs and vocational institutes can enhance craftsmen's skills, enable them to produce more complex designs, and meet diverse market requirements.

In conclusion, the handicraft sector and handicraft products in Yemen provide economic opportunities, provided there is sufficient demand, availability of raw materials, access to production equipment and machinery, effective marketing strategies, and export potential. Despite the challenges, investing in training and skills development can contribute to the growth and sustainability of this sector, while preserving Yemen's rich cultural heritage.

2- Renewable energy

The renewable energy sector has gained significant momentum in recent years as countries around the world strive to reduce carbon emissions and transition to sustainable energy sources. Yemen, like many other countries, has recognized the potential of renewable energy, particularly solar energy, in meeting its energy needs. Establishing a business that focuses on providing equipment for solar energy systems in Yemen can be economically viable due to several factors.

Demand for solar energy products in Yemen is high due to the country's solar resources and the need to diversify its energy supply. Solar energy systems provide a reliable and cost-effective alternative to traditional energy sources, especially in remote areas with limited access to the electricity grid and with continued power outages in large parts of the country. The high cost of electricity and power supplies from private generators also contributes to the increasing demand for solar energy systems, making it a viable business opportunity.

Availability of inputs is crucial for the success of the solar energy business. Yemen benefits from year-round sunlight, making it an ideal location for solar energy generation. The availability of solar panels, inverters, batteries, mounting structures, and other necessary components for solar energy systems is of paramount importance. While Yemen may face logistical and import challenges, partnering with reliable suppliers and ensuring a secure supply chain can assist.

Skilled technicians are required for the installation, maintenance, and repair of solar energy systems. Providing training programmes to develop a local workforce of skilled technicians can meet this growing need, especially in rural areas. These technicians can be employed in the solar energy sector and contribute to industry growth. Training programmes can focus on transferring technical knowledge related to solar panel installation, designing solar systems suitable for farmers and others, electrical wiring and extensions, system troubleshooting, and safety protocols.

Effective marketing and promotion strategies play a crucial role in the success of any business activity. Promoting the benefits of solar energy, such as reduced electricity bills, environmental sustainability, and energy independence, can help generate awareness and increase demand for solar energy products. Participating in marketing campaigns through various channels, including digital platforms, local media, and community outreach, can be helpful in building a strong customer base.

The business activity of providing solar energy equipment in Yemen can be financially rewarding. Relatively low operating costs and the potential for expansion can lead to attractive profit margins. Additionally, with the growth of the renewable energy sector, there may be opportunities for partnerships with the government, non-governmental organizations, and international organizations, leading to increased business prospects and financial incentives.

Engaging in the solar energy sector, whether through buying and selling solar energy products or providing installation and maintenance services, requires specialized knowledge and skills. Technical training programmes can provide individuals with the necessary expertise to excel in this field. These training programmes should focus on transferring knowledge about solar energy technology, system design, safety protocols, and customer service to ensure high-quality installations and customer satisfaction.

In summary, establishing a business that focuses on providing equipment for solar energy systems in Yemen can be economically viable. The level of demand for solar energy products depends on the country's need for clean and affordable energy sources. With abundant solar resources, availability of inputs, skilled technicians, effective marketing strategies, and the potential for attractive returns, the solar energy sector can thrive. Investing in training and skill

development programmes is necessary to ensure that the workforce is equipped with the necessary expertise to meet market requirements and provide high-quality services.

3- Food manufacturing and production sector

The food manufacturing and production sector plays a vital role in converting raw agricultural products into processed food products ready for consumption. This includes various activities such as food packaging, drying, and packaging, as well as cheese and bakery production, confectionery, and livestock farming. These non-agricultural activities are necessary to reduce losses, increase product lifespan, add value, and meet consumer demands.

One of the main aspects to consider when evaluating the economic feasibility of food manufacturing and production is the level of demand for products. Consumer tastes, dietary habits, and sophisticated food trends greatly influence the demand for locally produced food products. Intensive market research and analysis are necessary to identify and meet the specific needs of targeted consumers. By producing a diverse range of products, the food manufacturing sector can gain a wider market share and increase profitability.

The availability of raw materials is another critical factor. A sustainable and reliable supply of high-quality raw materials is essential for continuous production. This requires establishing strong relationships with farmers, suppliers, and distributors to ensure a steady supply chain. In some cases, food manufacturers may need to invest in agricultural practices or partner with local farmers to secure a reliable source of raw materials.

Production equipment and machinery are essential for efficient and consistent food manufacturing processes. Advanced machinery can simplify production, improve quality, and reduce costs. However, the availability of this equipment and the ability to bear its cost can vary depending on the region and the size of the operations. Smaller producers may rely on simpler machines, while larger projects can afford more complex technology.

Marketing is also a crucial aspect in the food manufacturing and production sector. Branding, packaging, and effective promotion are essential to differentiate products from competitors and attract consumers. Leveraging digital marketing platforms, creating distribution networks, and collaborating with retailers and wholesalers in particular are essential to successfully penetrate the market. Market research and consumer feedback also play an important role in developing products and marketing strategies.

Export potential is an important consideration for the food manufacturing sector. Accessing local markets outside of manufacturing regions can lead to significant revenue growth and create new job opportunities. Understanding target markets, cultural preferences, and import regulations is crucial for successful export ventures. Skilled labour availability is also essential in the food manufacturing and production sector. Production line workers, quality control staff, packaging experts, and food technologists are some roles that require specific training and skills. Continuous training programmes and professional development initiatives are necessary to enhance productivity, maintain quality standards, and keep up with technological advancements.

In conclusion, the food manufacturing and production sector as a non-agricultural activity encompasses various operations such as packaging, drying, packaging, cheese and bakery production, confectionery, and livestock farming. The economic feasibility of this sector depends on factors such as demand for products, availability of raw materials, production equipment, marketing strategies, export potential, labour availability, and training requirements. Through careful planning, market analysis,

investment in technology and skills, the food manufacturing sector can thrive and meet the evolving requirements of consumers.

4- Establishing small manufacturing units:

Establishing small manufacturing units in rural areas to develop industries such as textiles and handicrafts can create employment opportunities. In this regard, we should focus on:



- Demand for products: Textiles and handicrafts have a steady demand at the local level. People need clothing, home decor, and accessories, creating a market for products such as sewing, embroidery, and knitting. In addition, there is an increasing demand for unique handmade and sustainable products that rural artisans can meet.
- Availability of raw materials: Rural areas often have access to local resources that can be used in textiles and handicrafts. This availability reduces reliance on external suppliers and reduces the overall cost of production.
- Production equipment and machinery: Basic sewing machines, embroidery machines, knitting machines, and other related equipment are generally affordable and easily available for small-scale operations. In addition, some handicrafts can also use traditional hand tools and techniques, requiring minimal investment in machinery.
- Marketing: Establishing effective marketing channels is essential for success. Rural artisans can benefit from offline platforms to promote and sell their products. Local markets, handicraft fairs, and exhibitions can provide opportunities for direct sales. Online markets, social media platforms, and e-commerce sites can expand the reach and access to a wider customer base.
- Export potential: Handicrafts and textiles produced by rural artisans often have unique cultural and artistic value, making them attractive for export markets. By maintaining quality standards and exploring export opportunities, small manufacturing units can benefit from international markets and increase their revenue potential.
- Return on investment: The profitability of small manufacturing units depends on factors such as cost management, market demand, pricing strategies, and production

efficiency. Through proper planning and effective management, these units can generate a decent return on investment, providing sustainable livelihoods for rural communities.

- Availability of labour: Rural areas usually have a surplus of labour willing to engage in non-agricultural activities. By establishing small manufacturing units, employment opportunities can be created for individuals with different skill levels, from beginner workers to skilled artisans.
- Training and skills: While some basic skills may exist in rural communities, training and skills development programs can enhance the productivity and quality of the workforce. Government initiatives, vocational training institutes, and collaboration with international, local, or non-governmental organizations or industry experts can provide the necessary training to improve the skills of rural artisans and attract funding sources. In general, establishing small units in rural areas for textile and handicraft industries can be economically feasible. They utilize existing resources, benefit from market demand, and create employment opportunities outside the agricultural sector. However, proper planning, skills development, marketing strategies, and access to necessary resources and infrastructure are necessary for long-term success.

In general, establishing small units in rural areas for textile industries and handicrafts can be economically viable. They utilize available resources, benefit from market demand and create job opportunities outside of agriculture. However, proper planning, skills development, marketing strategies, access to necessary resources and infrastructure are essential for long term success.

To ensure economic viability of non-agricultural activities in Yemen's rural areas, several factors should be considered. These include developing infrastructure, accessing financing and credit, vocational training and skills development programs, market linkages, supportive government policies, and security. Furthermore, promoting entrepreneurship and providing technical assistance to potential business owners can enhance innovation and boost the viability of these activities.

Under-utilized raw materials and other production inputs

Under-utilized raw materials and other production inputs are available in communities as per following:

1. Sesame:

Sesame, a high-value and versatile crop, has enormous potential to generate income and enhance economic empowerment in the Bajil area of Hodeidah and the Al Madaribah district of Lahij. These areas have favourable climatic conditions and agricultural resources, providing an excellent opportunity for the growth of the sesame sector and creating employment opportunities along its value chain.

Sesame cultivation in these areas has many advantages. Firstly, the climate in both regions is suitable for sesame production, with the necessary temperatures, rainfall, and soil conditions. This favourable environment ensures high-quality crop productivity. Additionally, the Bajil and Al Madaribah regions have a long history of agricultural experience among their populations, making it easier to transfer knowledge and skills related to sesame cultivation.

Sesame farming can serve as a catalyst for economic development in these areas. Farmers in the Bajil and Al Madaribah regions can benefit from the high demand for sesame seeds, which are widely used in various industries such as sesame oil production and tahini production. Through proper training and access to improved farming techniques, farmers can increase their yields, leading to increased income.

Sesame oil production can be a promising means of generating income within the value chain. By establishing sesame oil mills in the Bajil and Al Madaribah regions, local entrepreneurs can add value to the sesame seeds produced by farmers. This can create job opportunities for individuals involved in the processing and packaging of sesame oil.

The growth of the sesame sector in these areas also has the potential to encourage local entrepreneurship. Farmers or individuals interested in starting their own businesses can explore opportunities in trading sesame seeds, processing oil, or even diversifying products by creating value-added products such as sesame snacks, desserts, or cosmetics. These projects will not only provide employment opportunities but also contribute to the comprehensive economic development of the two districts.

To fully benefit from the sesame sector, many stakeholders need to cooperate. The government can play a crucial role in providing support in the form of agricultural extension services, training programs, and access to credit facilities. Non-governmental organizations and international organizations can contribute by providing technical assistance, facilitating links with the market, and promoting the development of sesame cooperatives or associations.

The production of sesame and its value chain in the Bajil area of Hodeidah and the Al Madaribah district of Lahij carries enormous potential for income generation, economic empowerment, and job creation. Through proper support and cooperation, this sector can significantly contribute to the comprehensive development of these regions, benefiting both farmers and entrepreneurs involved in the sesame industry.

2. Coffee:

Coffee production can be an important opportunity for income generation and economic empowerment in the areas of At Tawilah, Nijrah, and Ash Shaghadirah. These areas have favourable conditions for coffee cultivation, including suitable climate, soil, and terrain, which are necessary for coffee plants to grow and develop.

Coffee farming offers many benefits to local communities, including increased income, employment opportunities, and overall economic growth. As one of the most important cash crops in these areas, coffee has the ability to drive agricultural development and transform the social and economic landscape.

Coffee production represents a significant opportunity for income generation in these areas. Coffee is a high-value crop and can provide farmers with a highly profitable source of income. The demand for specialty coffee is constantly increasing worldwide, and farmers can benefit from this trend by producing high-quality coffee beans. By focusing on quality and adopting good agricultural practices, farmers can command high prices for their coffee, thus increasing their income levels.

The coffee value chain offers a range of employment opportunities, from farming to processing and marketing. In the early stages, coffee farming requires labour-intensive activities such as planting, pruning, and harvesting. This provides employment opportunities for local farmers and agricultural workers, contributing to reducing unemployment rates in these areas. Additionally, as the coffee sector expands, there is a need for skilled labour in coffee processing, grading, packaging, and marketing, creating more job opportunities for local residents.

The growth of the coffee sector can also lead to economic empowerment in the communities of At Tawilah, Nijrah, and Ash Shaghadirah. By actively participating in coffee production, farmers can improve their income levels, financial stability, and overall quality of life. The additional income generated from coffee farming can be invested in education, healthcare, infrastructure development, and other basic services. Moreover, the economic empowerment resulting from coffee production can help reduce poverty and contribute to the sustainable development of these areas.

3. Fishing

Fishing has the ability to generate income and contribute to the economic empowerment of the population in the districts of Ahwar in Abyan and AlArah in Al Madaribah Lahij. These areas in Yemen have access to the Red Sea and the Arabian Sea, making them ideal locations for fishing activities. By developing the fishing sector and its value chain, the districts can create income-generating employment opportunities for fishermen and promote overall economic growth.

Both Ahwar and AlArah are strategically located along the coast, providing abundant fishing resources. The Red Sea and the Arabian Sea are renowned for their rich biological diversity, including various types of fish, crustaceans, and molluscs. The availability of these marine resources forms the basis for a thriving fishing industry.

To fully harness the potential of the fishing sector, it is necessary to invest in infrastructure development. This includes the establishment of modern fishing ports, landing sites, fish markets, and processing facilities. Adequate storage and refrigeration facilities should be provided to maintain the freshness and quality of the fish, enabling export opportunities and access to broader markets.

The introduction of modern fishing technologies and techniques can significantly enhance productivity and efficiency in this sector. Training programs should be implemented to educate local fishermen on sustainable fishing practices, resource management, and the use of advanced equipment. This can help improve the catch and reduce environmental impact.



Developing a strong value chain is essential to maximize the economic benefits of the fishing sector. This includes creating links between various stakeholders, such as fishermen, suppliers, wholesalers, retailers, and exporters. Strengthening the value chain will ensure that each participant has a role to play, leading to increased income opportunities for all stakeholders.

4. Phone maintenance and programming:

The profession of phone maintenance and programming provides great potential for generating income and economic empowerment for youth in different targeted districts in the study. With the increasing reliance on smartphones and other mobile devices in today's digital age, there is a growing demand for skilled individuals in phone maintenance and programming.

This includes repairing mobile devices, identifying, and fixing hardware and software issues, replacing faulty components, and ensuring smooth phone performance. Skilled technicians can offer a range of services such as screen replacement, battery replacement, data recovery, and software optimization.

Income generation:

Phone maintenance specialists can earn income through various means:

- a. Service fees: Technicians can charge customers for repair services based on the complexity of the problem and the required repairs or replacements. This can include pricing and fixed fees for specific services.
- b. Sales of spare parts: Phone maintenance specialists often stock and sell spare parts for different phone models. By providing original and high-quality components, they can earn additional revenue from selling these parts to customers or other repair technicians, given the absence of spare parts shops in the targeted districts.
- c. Maintenance contracts: Building relationships with local companies, organizations, or educational institutions can lead to maintenance contracts. Technicians can provide

regular phone maintenance services, ensure smooth operation of a large number of devices, and impose recurring fees.

Promoting economic empowerment:

Phone maintenance and programming can contribute to the economic empowerment of youth in the following ways:

- a. **Skill development:** By training youth in phone maintenance, they can acquire valuable technical skills, enhance their employability, and open doors to various job opportunities. This enables them to become self-reliant and financially independent.
- b. **Entrepreneurship opportunities:** Youth can establish their own phone repair shops and provide services to the local community. By becoming entrepreneurs, they can create job opportunities for others and contribute to the economic growth of their areas.
- c. **Boosting the local economy:** A thriving phone maintenance sector can attract customers from nearby areas, leading to increased economic activity. This can stimulate the growth of related businesses such as phone accessory stores, software shops, and e-commerce platforms, creating a positive multiplier effect on the local economy.

5. Solar energy systems maintenance and installation

Maintaining and installing solar energy systems is a growing and increasingly important field that provides many opportunities for income generation and economic empowerment, especially for youth. With the world embracing renewable energy sources to combat climate change and reduce reliance on fossil fuels, solar energy has emerged as a viable and sustainable option. This has led to an increasing demand for skilled professionals who can install, maintain, and repair solar energy systems in all the targeted districts in the study, especially with the growing number of citizens and farmers using solar energy systems.

One of the key advantages of this profession is its ability to generate income. As more individuals, companies, and government invest in solar energy, the solar installation and maintenance market continues to expand. This represents a great opportunity for youth to establish their own businesses or find employment in existing solar energy companies. They can offer services such as site assessment, system design, installation, monitoring, and maintenance of solar panels and related equipment.

The potential for economic empowerment through this profession is particularly evident in the targeted districts in the study. These areas, which are assumed to have limited access to reliable and affordable electricity, can benefit greatly from solar energy systems. By installing solar panels on rooftops, open spaces, or dedicated solar farms, these areas can harness clean and renewable energy, reducing their reliance on expensive and unreliable traditional energy sources. This transition not only improves access to electricity but also stimulates economic growth by providing reliable and cost-effective energy supplies to companies and industries.

The maintenance and installation of solar energy systems require a diverse set of skills, creating opportunities for engineers and technicians in the targeted districts. Youth with technical backgrounds, such as electrical or mechanical engineering, as well as those interested in receiving specialized training in solar energy system installation and maintenance, can become valuable assets in the renewable energy sector of these districts, offering their expertise to companies and communities seeking to adopt solar energy solutions.

In addition to direct employment, the solar energy systems profession can also promote entrepreneurial spirit among youth. With the continued demand for solar energy

installations, there is a growing market for independent solar energy contractors or small business owners who can offer their services to residential, commercial, and industrial customers. Young entrepreneurs can establish their own solar installation and maintenance businesses, contributing to local economic development and job creation. This not only generates income for themselves but also creates employment opportunities for others in their communities.

To fully realize the income generation and economic empowerment potential of this profession in the targeted areas, investment in education and training programmes is essential. By providing access to training and technical certifications, youth can acquire the necessary skills and knowledge to excel in this field. Government, non-profit organizations, and private sector entities can collaborate to develop vocational training programmes that offer specialized courses in solar energy system installation and maintenance. By providing youth with the experience needed to enter the renewable energy sector, these programmes can contribute to the economic empowerment of districts and raise the overall standard of living.

In conclusion, the maintenance and installation of solar energy systems represent a significant opportunity for income generation and economic empowerment, particularly for youth in the targeted areas. With the continued growth in demand for renewable energy solutions, skilled professionals in this field can find employment, establish their own businesses, and contribute to the development of their communities. By investing in education and training, government and organizations can unleash the full potential of this profession, ensuring that youth have the necessary skills and resources to succeed in the renewable energy sector.

Challenges that hinder activities of rural microenterprises

There are challenges that hinder activities of rural microenterprises and limit entrepreneurship for youth and women. The list is compiled below:

Challenges in the healthcare sector:

Small and medium-sized enterprises (SMEs) operating as midwives and owners of primary care clinics in rural areas of Yemen face numerous challenges that impede their operations and limit entrepreneurship opportunities for young people and women. These challenges can be categorized into different aspects, including the availability of raw materials and inputs, production, marketing, financing, and training and skills in the healthcare sector. Each of these areas presents specific obstacles that need to be addressed.

One major challenge is the availability of raw materials and inputs. Rural areas in Yemen often struggle to obtain necessary medical supplies and equipment, including basic first aid kits, medicines, and specialized tools for midwifery practices. Additionally, inadequate infrastructure, such as limited transportation networks and storage facilities, can cause delays in the delivery of essential resources to healthcare clinics, further impacting their availability.

Marketing is another area of concern for SMEs in the healthcare sector. Rural areas typically have smaller populations, making it challenging for midwives and clinic owners to access a large customer base. They often face difficulties in developing effective marketing strategies and accessing marketing channels to promote their services. Moreover, limited communication infrastructure and low literacy rates in rural areas hinder the dissemination of information about the healthcare services offered by these enterprises, making it difficult to attract potential customers.

Access to financing is a significant hurdle for community midwives, healthcare clinic owners, and pharmacies in rural Yemen. They often struggle to secure financing options such as loans or investment opportunities. Banks and financial institutions may be hesitant to provide funding due to perceived risks or the lack of collateral. Even when financing is available, high interest rates can increase the financial burden on SMEs, reducing their profitability and growth potential.

Furthermore, limited access to specialized training programmes poses challenges in acquiring the necessary skills and knowledge required to provide high-quality healthcare services. This lack of training opportunities affects the credibility of midwives and healthcare specialists and hinders their ability to gain people's trust.

To address these challenges, a comprehensive approach involving government initiatives, support from non-governmental organizations, and international support is necessary. Potential solutions include investing in infrastructure to improve transportation networks and storage facilities, establishing dedicated funds and financial plans to provide low-interest loans and simplify the loan application process, and promoting entrepreneurship and skill development through specialized training programs and workshops. Additionally, supporting marketing and promotional activities, enhancing supply chains through partnerships, and leveraging online platforms and social media can help overcome marketing and information dissemination challenges.

By addressing these challenges and implementing supportive measures, a more conducive environment can be created for SMEs in the healthcare sector in rural Yemen. This will empower midwives, healthcare clinic owners, and pharmacies, enabling them to provide essential healthcare services to their communities and promote entrepreneurship opportunities for youth and women in the region.

Challenges in the Handicrafts and Textiles Sector:

The handicrafts and textiles sector in rural areas of Yemen faces numerous challenges that hinder the activities of small and medium-sized enterprises (SMEs) and limit entrepreneurship opportunities, particularly for youth and women. These challenges span various aspects, including the availability of raw materials and inputs, production processes, marketing strategies, financing options, and training or skill development. A closer examination of these challenges reveals the following key issues:

- **Availability of raw materials and inputs:** SMEs in the sector encounter difficulties in accessing high-quality raw materials and inputs necessary for producing handicrafts, such as textiles, dyes, threads, beads, and other materials. Reliance on imported materials increases costs due to transportation and customs fees. Additionally, there is a lack of local production systems and reliable sources of raw materials, limiting diversity and supply stability.
- **Production challenges:** Insufficient infrastructure and basic facilities, including electricity, water supplies, and suitable workspaces, hinder productivity, and efficiency. Outdated production techniques and limited technological advancements lead to decreased productivity and the inability to meet market demands. The absence of specialized equipment and tools necessary for certain crafts further impedes the production of high-quality products.
- **Marketing difficulties:** Limited access to markets and inadequate distribution channels pose challenges, especially in remote rural areas. SMEs in the sector often lack marketing knowledge and skills needed to effectively promote their products, develop branding strategies, and reach potential customers. Moreover, limited exposure to

national markets and a lack of trust in local products hinder export opportunities and higher income generation.

- **Financing constraints:** SMEs face limited access to flexible and affordable financing options, such as loans, grants, or microfinance, which are crucial for their growth and sustainability. High interest rates, strict collateral requirements, and bureaucratic procedures associated with obtaining official financial services create obstacles. Additionally, artisans often lack financial knowledge and business management skills, making it difficult for them to obtain loans and effectively manage their finances.
- **Training and skill development:** There is limited availability of vocational and technical training programmes that focus on enhancing craft and design skills. Insufficient training on entrepreneurship and business development hinders artisans from effectively managing their businesses, accurately pricing their products, and expanding their markets. Furthermore, disparities exist in access to training opportunities.

Addressing these challenges requires a collaborative effort involving support from a cross-section of stakeholders. Potential solutions include:

- Facilitating access to high-quality raw materials and inputs by establishing local sourcing networks, supporting local producers, reducing import barriers, and building trust in and support for local products.
- Improving infrastructure and providing necessary facilities to enhance production capacities and efficiency.
- Encouraging technological innovation and providing training on modern production techniques and equipment to enhance productivity.
- Developing market linkages, establishing handicraft clusters, and organizing trade fairs and exhibitions to connect artisans with potential buyers and expand their market reach.
- Promoting financial inclusion by providing specialized financial products, simplifying loan procedures, and offering financial literacy programmes tailored to the needs of artisans.
- Establishing vocational training centres and skill development programmes that specifically address the needs of the textiles and handicraft sector.
- Promoting equality and empowering women through targeted training and guidance programmes that address cultural barriers and facilitate their active participation in the sector.

Challenges in the poultry sector:

The poultry sector in rural areas in Yemen faces several challenges that hinder the growth of this industry and the poultry and livestock sector in rural areas of Yemen presents significant challenges that impact entrepreneurship opportunities for young people and women. These challenges can be summarized as follows:

- **Availability of raw materials and inputs:** Small-scale farmers face limited access to high-quality poultry and livestock breeds, which hinders their ability to improve productivity and profitability. The scarcity and high costs associated with acquiring improved breeds and quality animal husbandry practices pose significant obstacles. Additionally, there is an inadequate supply of nutritious and cost-effective animal feed, which further affects the overall quality and health of the livestock.
- **Production challenges:** Farmers often lack the necessary knowledge and technical skills required for effective and profitable production in the poultry and livestock sector. This includes understanding best practices in animal husbandry, disease control, and

prevention. Insufficient infrastructure and equipment also impact productivity and product quality, as farmers may not have access to essential resources such as proper housing, feeding systems, and veterinary services. Disease outbreaks, high mortality rates, and reduced productivity further add to the production challenges.

- Marketing and distribution challenges: Accessing wider markets beyond local communities is a significant hurdle for poultry and livestock farmers in rural areas. Poor transportation infrastructure and limited market linkages make it difficult to reach customers in distant regions. Additionally, farmers may lack strong branding and sufficient marketing strategies to effectively promote their products. Inefficient supply chains contribute to product losses, increased costs, and the inability to meet market demand consistently.

- Financing and access to capital:
 - A. Limited access to credit and financial services: Small and medium-sized companies face challenges in obtaining loans and financial support due to strict requirements, high interest rates, and a lack of collateral.
 - B. Insufficient investment and financing opportunities: Limited options for investment and capital investment hinder the growth and expansion of poultry and meat companies.

- Training and skills development:
 - A. Insufficient professional training and technical education: Young entrepreneurs, including women, lack comprehensive agricultural guidance and training programmes that provide them with the necessary skills and knowledge to succeed in this sector.
 - B. Limited capacity building initiatives: The absence of targeted training and guidance programmes hinders the ability of small and medium-sized companies to develop project management and administration skills.

Possible solutions may include:

- Enhancing agricultural guidance services: Providing comprehensive training and consultancy support to farmers, with a focus on modern agricultural techniques, disease prevention, and animal wealth management.
- Improving access to high-quality inputs: Facilitating affordable and reliable access to improved poultry breeds, high-quality feeds, and veterinary services.
- Improving infrastructure: Investing in developing infrastructure for poultry housing, processing facilities, and cold storage to ensure quality control and reduce post-harvest losses.
- Enhancing market linkages: Facilitating market access by improving transportation infrastructure, establishing cooperatives, and supporting small and medium-sized companies in branding, packaging, and market differentiation.
- Facilitating access to financing: Developing financial products that meet the needs of small and medium-sized companies, including microcredit plans, low-interest loans, and capital investment.
- Enhancing professional training: Creating vocational training programs to equip youth and women with the skills and knowledge necessary to succeed in the poultry and meat sector.
- Enhancing institutional support: Collaborating with relevant government agencies, non-governmental organizations, and industry associations to provide continuous support, technical assistance, and policy advocacy for small and medium-sized companies.

Challenges in the fishery sector:

The fishery sector in Yemen faces significant challenges that impact the activities of small and medium-sized enterprises (SMEs) and limit entrepreneurship opportunities, especially for young people and women. These challenges can be categorized into several areas, including raw material and input availability, production, marketing, financing, and training and skills development.

One of the main challenges is the declining fish stocks caused by overfishing and environmental degradation. This makes it difficult for fishermen to obtain sufficient supplies of raw materials. Additionally, limited access to modern fishing equipment and technologies hinders productivity and efficiency, further affecting the availability of raw materials.

In terms of production, inadequate infrastructure such as storage facilities, ice factories, and processing units in fishing areas affects the quality and shelf life of fish products. Moreover, insufficient knowledge of proper post-harvest handling, preservation, and processing methods results in significant losses after harvest.

Marketing challenges arise due to limited access to markets, especially in remote fishing areas with weak transportation networks. The lack of branding efforts and limited access to market information make it difficult for small and medium-sized companies to effectively promote their products and target potential customers.

Financing constraints pose another hurdle for SMEs in the fishery sector. They often struggle to obtain cost-effective and timely financing options from official financial institutions. High collateral requirements make it even more challenging for rural-based companies to access the necessary funds for their growth and expansion plans.

There is also a skills gap in the sector. Insufficient training and technical knowledge about modern fishing techniques, sustainable practices, and value-added processing limit the ability of small and medium-sized companies to enhance productivity and quality. Additionally, limited access to entrepreneurship training and business management skills hinders the establishment and successful management of projects by fishermen, young people, and women.

Challenges in food industry:

The food industry sector, including cheese, pastries, and sweets, faces various challenges for small and medium-sized enterprises (SMEs) in rural areas of Yemen, limiting entrepreneurship opportunities for youth and women. These challenges encompass several areas, such as the availability of raw materials and inputs, production, marketing, financing, training, and skills development.

- **Availability of raw materials and inputs:** In rural Yemen, SMEs in the food industry may encounter difficulties in accessing stable and reliable sources of raw materials necessary for cheese, pastries, and sweets production. Issues such as low productivity, inadequate transportation and storage infrastructure, and unstable supply chains can impede the availability of high-quality ingredients. This, in turn, can adversely impact the production capacity and product quality of small and medium-sized enterprises.
- **Production challenges:** Challenges related to production include outdated equipment and technology, limited access to modern machinery, insufficient infrastructure for food processing and preservation, and a lack of standardized production practices. Limited technical knowledge and skills among entrepreneurs and workers further hinder the effective production of cheese, pastries, and sweets.
- **Marketing obstacles:** Marketing poses significant challenges for small and medium-sized enterprises in rural Yemen. Limited access to markets within the local districts

restricts the reach and growth potential of these businesses. Inadequate marketing knowledge and skills among entrepreneurs can lead to ineffective promotional strategies, packaging, and advertising. Additionally, the ongoing conflict and its impact on transportation and logistics services further hamper marketing efforts for SMEs.

- **Financing constraints:** Access to financing is a major obstacle for SMEs in Yemen, particularly for high-risk projects in the food industry. The ongoing conflict and political instability have disrupted the financial sector, making it challenging for entrepreneurs to secure loans or investment capital. Difficulties such as the lack of collateral, high interest rates, and limited financial knowledge among business owners further hinder their access to sufficient financing for business expansion and development.
- **Training and skills development:** Limited access to specialized vocational training programmes and skills development initiatives in the food industry is another challenge. This particularly affects entrepreneurs and workers in rural Yemen, who lack opportunities to acquire knowledge of food processing techniques, quality control, product development, and business management. Insufficient knowledge and skills in business organization particularly limit the ability of youth and women to establish and sustain successful businesses in this sector.

Challenges in the solar energy sector:

Challenges in the solar energy sector pose significant obstacles to small and medium-sized projects in rural Yemen, limiting entrepreneurship opportunities for youth. These challenges encompass various aspects, including the availability of raw materials and inputs, production, marketing, financing, training, and skills in the solar energy sector.

- **Availability of raw materials and inputs:**
 - **Limited access to solar panels:** Rural areas in Yemen face difficulties in accessing high-quality solar panels due to limited supply and high costs. This scarcity makes it challenging for small and medium-sized solar energy projects to acquire the necessary equipment for installation.
 - **Inadequate infrastructure:** The lack of suitable infrastructure, including roads and transportation facilities, hampers the transportation of solar panels and other equipment to remote rural areas. This leads to higher prices and adds to the challenge of obtaining raw materials and inputs.
- **Production:**
 - **Technical expertise and skills gap:** There is a shortage of skilled technicians and engineers in rural Yemen who can effectively install, operate, and maintain solar energy systems. This skills gap hinders the productivity and efficiency of small and medium-sized solar energy projects.
 - **Limited local manufacturing:** Yemen heavily relies on imported solar energy equipment due to limited local manufacturing capabilities. This dependence on imports increases costs and poses challenges in terms of product availability in a timely manner.
- **Marketing:**
 - **Lack of awareness and demand:** Many rural communities in Yemen have limited awareness of the benefits and potential of solar energy. This lack of awareness hinders the demand for solar energy products and services, making it difficult for entrepreneurs to effectively market their offerings.
 - **Limited distribution networks:** Establishing distribution networks in remote rural areas can be challenging due to inadequate transportation infrastructure. This limits the access of potential customers to solar energy products and services.

- Financing:
 - Limited access to capital: Small and medium-sized solar energy projects often face difficulties in accessing financing options due to the lack of collateral, credit history, or supportive financial institutions in rural areas. This makes it challenging for entrepreneurs, particularly youth and women, to secure the necessary funds to start and expand their projects.
 - High initial investment costs: Solar energy projects require significant upfront investments, including the purchase of solar panels, batteries, and other equipment. High initial investment costs act as a barrier for entrepreneurs, especially those with limited financial resources.
- Training and skills development:
 - Insufficient technical training programmes: There is a shortage of comprehensive training programmes that specifically address the solar energy sector in rural Yemen. Limited access to training opportunities hampers the development of technical skills among youth who aspire to engage in solar entrepreneurship or receive training in solar energy system installation and maintenance.
 - Disparities in access to training: Women, in particular, face additional barriers in accessing training programmes and skills development opportunities.

Challenges in the pottery sector:

Challenges in the pottery sector in rural Yemen pose significant hurdles to the activities of pottery projects and limit entrepreneurship opportunities for youth and women. These challenges encompass various aspects, including the availability of raw materials and inputs, production, marketing, financing, and training or skills.

- Availability of raw materials and inputs:
 - Limited access to high-quality clay: Rural areas in Yemen may face difficulties in obtaining high-quality clay, which is essential for pottery production. This can impact the quality of the produced pottery.
 - Scarcity of other raw materials: Pottery production requires additional raw materials such as glaze, pigments, and tools. The limited availability or high costs of these materials can pose significant challenges.
- Production challenges:
 - Lack of equipment and modern technology: Many pottery projects in rural areas rely on traditional methods and techniques, lacking modern equipment and technology. This can affect production efficiency, quality, and output.
 - Inadequate infrastructure: Poor infrastructure, including limited access to electricity, suitable workspace, storage facilities, and transportation, can hinder the expansion and growth of pottery projects.
- Marketing and sales:
 - Limited access to markets: Pottery projects in rural areas often struggle to access wider markets due to their distance and limited transportation infrastructure. This can lead to limited access to customers and reduced sales potential.
 - Weak marketing strategies: Insufficient marketing knowledge and skills among artisans can hinder effective promotion and branding of pottery products, limiting their market visibility and competitiveness.
- Financing and resources:

- Lack of access to capital: Pottery projects may face challenges in securing sufficient funding for initial investment, working capital, and expansion due to limited access to official financial institutions or a lack of collateral.
- Limited resources for expansion: Insufficient resources, including funds for purchasing advanced equipment or expanding production capacity, can hinder the growth potential of pottery projects.
- Training and skills:
 - Lack of technical skills and training: The absence of appropriate training programmes and skills development initiatives can limit the ability of artists, particularly youth and women, to improve their pottery-making techniques and innovate in designs.
 - Entrepreneurship and business skills gap: Many artisans may lack the necessary skills for entrepreneurship and business management to effectively operate and manage a pottery project, including pricing, market research, and financial management.

Challenges in the beekeeping sector:

Challenges in the beekeeping sector in rural Yemen pose significant hurdles to the activities of beekeeping projects and limit entrepreneurship opportunities. These challenges encompass various aspects, including the availability of raw materials and inputs, production, marketing, financing, and training or skills. Here is an assessment of these challenges:

- Availability of raw materials and inputs:
 - Shortage of beehives and equipment: Limited access to beehives, frames, protective equipment, and other essential equipment necessary for beekeeping operations.
 - Scarcity of high-quality bees: Difficulties in obtaining high-quality bees for beekeeping due to factors such as insufficient breeding programs or the presence of diseases.
- Production challenges:
 - Bee diseases and pests: The widespread spread of bee diseases and pests, including varroa mites, wax moths, and hive beetles, have led to decreased bee productivity and hive losses.
 - Environmental factors: Poor weather conditions, such as drought or excessive rainfall, affect the availability and quality of flower resources, leading to decreased honey production.
 - Lack of technical knowledge: Insufficient training and knowledge of modern beekeeping techniques, hive management, and honey production practices leading to decreased productivity and profitability.
- Marketing and access to markets:
 - Limited market infrastructure: Inadequate storage, processing, and packaging facilities for honey and other bee products affect their quality and marketability.
 - Limited market opportunities: Challenges accessing local, regional, and international markets due to limited marketing networks, lack of market information, and weak market linkages.
 - Limited value addition: Limited ability to add value, such as processing honey into other products like beeswax or royal jelly, or pollen, restricting income diversification.
- Financing and investment:

- Limited access to capital: Insufficient financial resources and limited access to credit and loans to establish or expand beekeeping projects.
- Lack of supportive financial services: Absence of specialized financial products, such as microfinancing, designed for beekeeping activities or insurance plans to mitigate risks.

Facilitating linkages and promoting training

Facilitating linkages and ensuring trained individuals have potential freelancing opportunities is of utmost importance to promote entrepreneurship and economic growth. Here are some ways to achieve this goal:

1. **Entrepreneurship training programmes:** Implement comprehensive training programmes that equip individuals with the necessary skills and knowledge to start and manage their own businesses. These programmes should cover various aspects of entrepreneurship, such as business planning, financial management, marketing, and sales.
2. **Business incubators:** Establish business incubators for commercial projects that provide a supportive environment for ambitious entrepreneurs. These incubators offer guidance, networking opportunities, access to funding, and shared office spaces, creating an ecosystem in which startups can thrive.
3. **Social media platforms:** Organize events, conferences, and workshops for networking where business owners can interact with industry experts, investors, and like-minded individuals. Additionally, develop online platforms or communities where business owners can collaborate, exchange experiences, and seek advice from peers.
4. **Mentoring programmes:** Create mentoring programmes that bring experienced entrepreneurs and beginners together. Mentors can provide guidance, share their knowledge and expertise, and provide valuable insights into the challenges and opportunities in entrepreneurship.
5. **Access to funding:** Ensure that ambitious entrepreneurs have access to financing options, such as small loans, grants, venture capital, or crowdfunding platforms. Collaborate with financial institutions and government agencies to develop programmes specifically designed to meet the needs of small businesses and startups.
6. **Government support:** The government can play a significant role in facilitating linkages and ensuring individuals are trained for freelancing. They can provide tax incentives, reduce barriers, and create supportive policies that encourage entrepreneurship. Government agencies can also collaborate with private sector institutions to provide training programmes and mentoring initiatives.
7. **Skills development initiatives:** Invest in skills development initiatives that align with emerging market trends and requirements. Identify sectors with growth potential and provide training programmes to develop the necessary skills for freelancing opportunities in those sectors.
8. **Collaborate with non-governmental organizations and non-profit organizations** that focus on entrepreneurship development. These organizations often have extensive networks, resources, and expertise in supporting ambitious entrepreneurs, particularly in underserved communities.

Microcredit channels for rural businesses and financial literacy

The finance sector plays a crucial role in the economic development and growth of Yemen. However, due to continuous political instability and conflict, the sector faces significant

challenges. In this analysis, we study commercial banks with special financing programmes, as well as government institutions and rural or developmental banks operating in Yemen.

The analysis of the data provided reveals findings regarding access to financing and loans in the communities surveyed. On average, 48% of respondents indicated the presence of a source of financing or loan in their community. When comparing genders, it was found that 52% of women and 46% of men acknowledged the availability of such financial resources. The most common sources of financing were microfinance institutions or credit programmes, with 76% of respondents utilizing them. Other sources mentioned included commercial banks with special lending programmes (30%), government institutions or rural development banks (3%), and informal credit sources such as loans from friends and relatives or private money lenders (56%).

Regarding loan applications, 43% of men and 38% of women had applied for a loan to start or expand their micro-enterprises. However, only 46% of all applicants were able to obtain the loan. This figure differed slightly between genders, with 45% of women and 47% of men successfully obtaining the requested financing. Reasons for loan application rejections varied, with the most common being insufficient collateral (56%), high interest rates or fees (30%), inadequate feasibility studies (11%), and lack of credit history or low credit score (3%).

Additionally, 34% of respondents reported having taken informal loans from friends, relatives, or private money lenders, or received credit from equipment and materials suppliers. The prevalence of informal loans was slightly higher among men (34%) compared to women (32%). These findings shed light on the diverse sources of financing and the challenges individuals face when seeking loans for their micro-enterprises.

It was found that 7% of respondents had received grants or financial support from local or international development agencies or donors to start or expand their micro-enterprises. The challenges impeding access to loans were identified as limited access to microfinance institutions (12%), collateral requirements (51%), and high interest rates (37%).

When asked about the types of loans they would be interested in applying for, 50% of respondents expressed their interest in loans for equipment purchases, while an equal percentage expressed their interest in working capital loans to support their businesses. It is worth noting that 78% of respondents reported saving money at home, indicating a preference for informal saving methods. However, 54% of respondents also mentioned saving their money in banks, highlighting a dual approach to savings.

In terms of banking services, 7% of respondents indicated having a bank account, while the same percentage reported having a credit service for business or personal loans. Additionally, 7% of respondents mentioned having a deposit or savings account. It is interesting to note that a significant proportion (78%) of respondents who save money at home also save it in banks, indicating a level of trust in formal financial institutions.

It is worth mentioning here that the main reason for the lack of interest in banking services is that a portion of the community believes that banking transactions are not culturally appropriate. Recently, Law No. 4 of 2023 was issued in Sana'a to prohibit usurious transactions in banks, which may encourage the demand for the services provided by commercial banks in the long run.

In the analysed communities, it was found that 12% of respondents use mobile payment apps or e-wallets for basic payments and money transfers. The majority of respondents, 75%, own a smartphone, indicating a significant level of smartphone penetration. However, when it comes to financial transactions using smartphones, the usage frequency varies. For those who own

smartphones, some respondents reported using them daily or monthly for financial transactions, while others stated that they rarely use their smartphones for such purposes.

For the small percentage of respondents who do not own smartphones, the main reason cited is affordability, accounting for 20% of responses. Lack of knowledge or skills was also mentioned as a barrier to smartphone ownership, representing 20% of responses. In some cases, respondents indicated that they did not see a need for owning a smartphone, constituting 60% of responses.

Regarding foreign remittances, 7% of respondents reported receiving them in a currency other than the Yemeni Rial (YER). Among those who receive foreign remittances, the frequency varies, with some respondents receiving them monthly and others receiving them rarely.

The main purpose of these remittances was identified as investment, accounting for 25% of responses. Other purposes, not specified in the data, were also mentioned by 25% of respondents. Additionally, personal expenses were cited as the main purpose by 50% of respondents who receive foreign remittances.

The data indicates that the preferred method for receiving foreign remittances in the analysed communities is through money exchangers, with 100% of respondents using this method. However, when it comes to satisfaction with this method, the responses were varied. Some respondents expressed neutral feelings, while others were somehow dissatisfied or somehow satisfied. Additionally, a portion of respondents reported being very satisfied with the current method of receiving foreign remittances.

It is worth noting that the satisfaction levels provided in the data are not specific to each community or gender, as the values are consistent across all communities and genders.

Commercial banks with special financing programmes

Commercial banks in Yemen offer a variety of financial products and services to meet the needs of companies and individuals. While the conflict has affected the banking sector, some banks continue to offer special financing programmes. These programmes are designed to support specific sectors or meet specific financing requirements. Here are some examples:

a. Yemeni Bank for Reconstruction and Development (YBRD):

YBRD is one of the leading commercial banks in Yemen and plays a crucial role in financing reconstruction projects. It offers special financing programmes to support infrastructure development, including roads, bridges, and public facilities. These programmes aim to stimulate the country's economy and rebuild vital sectors affected by the conflict.

b. Yemen and Kuwait Bank:

Yemen and Kuwait Bank is a prominent financial institution in Yemen that supports various sectors, with a particular focus on small and medium-sized enterprises (SMEs). The bank plays a vital role in facilitating economic growth and development by providing financial services and interventions across multiple sectors.

- **Supporting small and medium-sized enterprises:**

Yemen and Kuwait Bank recognizes the importance of small and medium-sized enterprises in driving economic growth and creating job opportunities. To support this vital sector, the bank offers financial products and services designed specifically to meet the unique needs of small and medium-sized enterprises. These services include business loans, credit lines,

and trade financing options, enabling small and medium-sized enterprises to access the capital they need to expand, purchase equipment and working capital, and meet other business needs. By supporting small and medium-sized enterprises, Yemen and Kuwait Bank aims to promote entrepreneurship, enhance productivity, and contribute to job creation in the country.

- Intervening to support all sectors:

Yemen and Kuwait Bank's role is not limited to supporting small and medium-sized enterprises. It also intervenes in various sectors to promote economic development throughout the country. The bank provides financial assistance, loans, and other support mechanisms to sectors such as agriculture, industry, services, and infrastructure. By providing financial resources and expertise, Yemen and Kuwait Bank aims to stimulate growth, enhance productivity, and contribute to the comprehensive development of the Yemeni economy.

c. Yemen Commercial Bank (YCB):

YCB, one of the oldest commercial banks in Yemen, offers specialized financing programmes for agriculture and rural development. These programmes aim to enhance food security, promote sustainable agricultural practices, and improve livelihoods in rural communities. YCB offers loans and financial services designed specifically to meet the unique needs of farmers, including crop financing, livestock loans, and agricultural machinery financing.

d. Tadamon Bank:

Tadamon Bank is one of the Yemeni financial institutions offering a wide range of banking and financing services. The bank focuses on meeting the diverse needs of individuals, businesses, and industries throughout Yemen.

- Tadamon Microfinance:

Tadamon Microfinance is a Yemeni financial institution that focuses on providing financial services to small and micro-enterprises, especially those owned by women. The institution recognizes the importance of empowering women entrepreneurs to contribute to economic growth and development. It offers various programmes designed specifically for women's needs, with the aim of improving their access to capital and enhancing their financial inclusion.

- Programmes for Women:

The microfinance bank offers specialized programmes for women, recognizing their potential and the unique challenges they face in accessing financing. These programmes provide financial products and services designed specifically to meet the needs of women entrepreneurs. By offering easily accessible small loans, savings accounts, and other financial solutions, the programmes aim to economically empower women and promote equality in Yemen.

- Launching the Green Energy Project:

Tadamon Microfinance also launched the Green Energy Project in Yemen. This project aims to provide financing and support for renewable energy projects throughout the country. By promoting green energy solutions, it aims to contribute to environmental sustainability, reduce dependence on fossil fuels, and create new opportunities for businesses and farmers in the renewable energy sector. Through this project, institutions

are encouraged to adopt clean and sustainable energy practices, which will ultimately benefit the Yemeni economy and environment.

e. Al-Kuraimi Bank:

Al-Kuraimi Bank is one of the prominent Yemeni financial institutions offering a wide range of banking and financing services. The bank focuses on meeting the diverse needs of individuals, businesses, and industries throughout Yemen.

- Financing programmes offered:
 - a. Consumer financing: Al-Kuraimi Bank provides consumer financing options for individuals to purchase durable goods, household appliances, electronics, and vehicles. These programmes offer flexible repayment terms and competitive profit rates.
 - b. Small and medium enterprise financing: The bank supports the growth of small and medium-sized enterprises by providing financing solutions that meet their requirements. These programmes include working capital financing, trade financing, equipment financing, and business development support for small and medium-sized enterprises.
 - c. Corporate financing: The bank offers corporate financing services for large companies and companies operating in various sectors. These programmes include project financing, capital investment financing, joint loans, and enabling companies to expand their operations and implement major projects.
 - d. Trade financing: Al-Kuraimi Bank facilitates international trade by providing trade financing solutions such as letters of credit, guarantees, export financing, and import financing. The bank helps importers and exporters effectively manage their trade transactions.
 - e. Investment products: The bank offers investment opportunities through Islamic investment products, including profit-sharing investment accounts, sukuk (Islamic bonds), and investment funds. These products cater to individuals and companies looking to grow their wealth in a Shariah-compliant manner.

Government institutions and rural or development banks

Apart from commercial banks, Yemen has government institutions and rural or development banks that play a vital economic role in financing key sectors and supporting development. These institutions focus on reaching deprived areas, promoting rural development, and addressing specific needs of marginalized communities. Here are some prominent examples:

a. Cooperative & Agricultural Credit Bank (CAC Bank)

CAC bank was established in 1982 as a result of the merger of the Cooperative Agricultural Credit Bank that was established in 1975 and the Bank of National Cooperation for Development that was established in 1979. The bank offers financial and banking services to individuals and businesses.

Financing programmes offered:

- **Financing small farmers:** This service is a loan service provided to small farmers and fishers to cover the operational costs of fertilizers, seeds, pesticides, irrigation networks, labour (wages), fuel, and mobile and fixed agricultural machineries.
- **Financing solar irrigation pumps:** This service is provided to farmers in accordance with the nature and specifications of their wells. The project of solar pumps is considered as an investment project for the Yemeni farmer, as the period of

repayments of the purchased pumps is two years only, compared to the high costs and payments of diesel for ordinary pumps.

- **Greenhouse financing:** Financing (loans) of greenhouses is a service offered in partnership with the Ministry of Agriculture, specialized companies and interested organizations in agricultural development and preservation of water resources. The main goal is to achieve the aim of reducing costs and doubling income from agricultural crops.
- **Integrating graduates in the production process:** This programme finances young graduates from agricultural universities and agricultural, veterinary and fisheries institutes who couldn't find jobs opportunities. Financing helps them to contribute to establish income-generating, productive and service-oriented small and medium-sized enterprises.
- **Shahd services package (financing honey production):** Shahd is a financial package to finance the activities of beekeeping, production, and marketing of honey.

b. Social Fund for Development (SFD):

The Social Fund for Development (SFD) in Yemen is a prominent institution dedicated to supporting the country's social and economic development. Established in 1997, the fund aims to alleviate poverty, create employment opportunities, and improve living conditions for Yemeni citizens, particularly in marginalized and vulnerable communities. The Social Fund for Development operates under the supervision of the Yemeni government and in collaboration with donors and international organizations.

One of the key initiatives undertaken by the Social Fund for Development is financing small and micro-enterprises. Recognizing the importance of these institutions in driving economic growth and empowering local communities, the Social Fund for Development offers a specialized course in small and micro-enterprise financing. This course equips aspiring entrepreneurs and interested individuals with the knowledge and skills necessary to develop and manage their projects effectively, covering topics such as business planning, financial management, marketing strategies, and risk assessment. The goal is to enhance the success rate of these projects and ensure their long-term sustainability.

Regarding partnerships, the Social Fund for Development collaborates with many banks and organizations to facilitate access to financial services for small and micro-enterprises. Some prominent banks that work with the Social Fund for Development include:

- **Yemeni Bank for Reconstruction and Development:** This bank plays a crucial role in providing financial services to support small and micro-enterprises. It offers a range of financing options, including loans and credit facilities, designed specifically to meet the needs of entrepreneurs.
- **Islamic Development Bank:** As an Islamic bank, the Islamic Development Bank is committed to Shariah principles in its financial operations. It offers Shariah-compliant financial products and services for small and micro-enterprises, ensuring that entrepreneurs can access financing while adhering to Islamic principles.
- **Cooperative and Agricultural Credit Bank:** This bank specializes in providing financial services to the agricultural sector and cooperatives. It offers loans, credit

facilities, and other financial products to support small and micro-enterprises in the agricultural and cooperative sectors.

- Other banks include Al-Kuraimi Bank, Yemen and Kuwait Bank, and Bank Al-Amal.

The Social Fund for Development (SFD), in cooperation with these banks and other organizations, implements various programmes to support small and micro-enterprises. These programmes may include:

1. Financial assistance: The Social Fund for Development provides financial support in the form of loans or grants to qualified small and micro-enterprises. These funds can be used for initial capital, working capital, or investment in equipment and machinery.
2. Capacity-building: The Social Fund for Development organizes training and capacity-building programmes to enhance the entrepreneurial skills of individuals participating in small and micro-enterprises. These programmes aim to improve business management, financial literacy, marketing strategies, among other essential skills.
3. Technical support: The Social Fund for Development facilitates access to technical expertise and consulting services to assist small and micro-enterprises in areas such as product development, process improvement, and market research. This support helps entrepreneurs enhance their competitiveness and improve the quality of their products or services.

Overall, the Social Fund for Development plays an important role in supporting the growth and sustainability of small and micro-enterprises in Yemen. Through partnerships with banks and organizations, it provides financial assistance, capacity-building, and technical support, enabling entrepreneurs to achieve their business aspirations and contribute to the social and economic development of Yemen. The Social Fund for Development has implemented the Small and Micro-Enterprise Promotion and Services (SMEPS) Project.

- c. **The Small and Micro-Enterprise Promotion and Services (SMEPS) Agency**, a subsidiary of the Social Fund for Development in Yemen, is an important institution dedicated to promoting and supporting small businesses and entrepreneurship in Yemen. SMEPS was established under the umbrella of the Social Fund for Development (SFD) in 2006 and enjoys financial and administrative independence. It plays a vital role in promoting economic growth and creating employment opportunities in the country.

SMEPS focuses on providing comprehensive support and services to small and micro-enterprises, which are the backbone of the Yemeni economy. It aims to enhance their competitiveness, sustainability, and contribution to the national economy. The agency works towards achieving this through various initiatives, programs, and services designed specifically to meet the specific needs of small businesses.

One of the main aspects of the SMEPS Agency is its commitment to supporting non-governmental facilities for small businesses and entrepreneurship development services. The agency recognizes the vital role played by non-governmental organizations in promoting entrepreneurship and providing valuable resources to small businesses. SMEPS collaborates with these organizations to leverage their expertise, networks, and resources to provide impactful services and support the entrepreneurship ecosystem.

The services provided by SMEPS cover a wide range of critical areas for the growth and success of small businesses. These services include:

- 1- Access to finance: SMEPS helps small businesses access financing options, including loans, grants, and microfinance. It works closely with financial institutions to develop suitable financial products and facilitate entrepreneurs' access to capital.
- 2- Business development services: SMEPS offers a variety of business development services, such as training and capacity building, mentoring, and coaching, business planning, market research, and access to business networks. These services help entrepreneurs improve their skills, knowledge, and operational efficiency.
- 3- Market development: SMEPS supports small businesses in expanding their reach to markets and accessing new opportunities. It provides assistance in marketing, branding, product development, and accessing local and international markets. This helps small businesses increase their sales and competitiveness.
- 4- Technology, innovation, and creativity: SMEPS recognizes the importance of technology and innovation in enhancing the productivity and competitiveness of small enterprises. It facilitates technology transfer, promotes innovation, and encourages the adoption of modern technologies among entrepreneurs.

Regarding support for handicrafts, SMEPS provides specialized services to promote and support the handicraft sector in Yemen. Recognizing the cultural heritage and economic potential of handicrafts, the agency focuses on preserving traditional handicrafts and promoting artisans' access to markets. Some specific initiatives and services provided in this area include:

- 1- Artisanal training and skills development: SMEPS organizes training programmes and workshops to enhance artisans' skills and knowledge in various handicraft techniques. This helps preserve traditional handicrafts while providing modern designs and techniques to meet evolving market demands.
- 2- Market linkages and promotion: SMEPS facilitates market linkages for handicraft products through organizing exhibitions, trade fairs, and promotional events. It also supports artisans in developing their marketing strategies and brands to reach a wider customer base.
- 3- Access to finance: SMEPS helps handicraft entrepreneurs access financial services tailored to their specific needs. This may include microfinance options or low-interest loans to invest in equipment, raw materials, and marketing efforts.
- 4- Product development and innovation: SMEPS encourages artisans to innovate and diversify their product offerings to meet changing market preferences. It provides support in product development, improving design, and adapting traditional crafts to contemporary trends.

In summary, SMEPS offers a range of services to enhance the competitiveness and sustainability of small businesses, including non-governmental facilities. Additionally, SMEPS provides specialized support for the handicraft sector, focusing on preserving traditional crafts and promoting artisans' access to markets.

Microfinance institutions and loan programmes

- **Major microfinance institutions:**

1. **Al-Amal Microfinance Bank:** Established in 2006, it is a leading Islamic finance institution in Yemen that focuses on providing banking services. It aims to support economic development and empower individuals and companies through its various

programs. The bank operates in several areas and offers a range of financing programmes to meet its clients' diverse needs.

Al-Amal Bank has expanded its presence throughout Yemen, with branches in major cities and towns. It strives to reach both urban and rural areas to ensure access to financial services. The bank's expansion areas include Sana'a, Aden, Taiz, Al-Hudaydah, Al-Mukalla, and other key locations throughout the country.

Programmes offered:

- a. Personal financing: Al-Amal Bank provides personal financing solutions to individuals to meet their personal needs, such as education, healthcare, marriage, and home renovation. The bank offers competitive profit rates and flexible repayment options designed according to the client's financial capacity.
- b. Business financing: The bank supports the growth and development of small and medium-sized enterprises (SMEs) by offering business financing programmes. These programmes include working capital financing, trade financing, equipment financing, and project financing. Al-Amal Bank aims to promote entrepreneurship and contribute to economic stability and job creation.
- c. Agricultural financing: Recognizing the importance of agriculture in the Yemeni economy, Al-Amal Bank offers specialized financing programs for the agricultural sector. Farmers and agricultural companies can benefit from funds to purchase machinery, equipment, seeds, fertilizers, and expand their agricultural operations.
- d. Real estate financing: Al-Amal Bank provides financing options for purchasing, constructing, or renovating residential and commercial properties. The bank adheres to Islamic finance principles and offers solutions such as Murabaha, Ijarah, and Diminishing Musharaka, ensuring compliance with Islamic law.
- e. Microfinancing: Al-Amal Bank supports micro-projects and individuals with limited financial resources through microfinance programs. These programs offer small loans, savings accounts, and financial education to promote financial inclusion and empower marginalized communities.

2. Yemen Microfinance Network (YMN)

YMN is a key organization that facilitates coordination and collaboration among microfinance institutions in Yemen. It works to strengthen the microfinance sector by providing training, capacity building, and policy advocacy support.

Loan programmes:

Microfinance loan programmes in Yemen focus on empowering low-income individuals and small businesses to start or expand their businesses. These programmes typically offer small loans with favourable repayment terms and interest rates designed specifically for the financial capacity of borrowers. Loans are often provided for income-generating activities such as agriculture, animal husbandry, trade, and small manufacturing industries.

The microfinance sector in Yemen faces challenges due to ongoing conflict, political instability, and economic crises. These factors have affected the ability of borrowers to repay loans and the financial sustainability of microfinance institutions. However, efforts

are being made to adapt and innovate, such as integrating mobile banking services and digital financial services to reach a larger population.

3. Azal Microfinance Programme:

Azal Microfinance Programme is a microfinance institution in Yemen that focuses on providing financial services to small and micro-enterprises. It aims to contribute to poverty reduction and economic development by facilitating access to capital for entrepreneurs who do not have access to traditional banking services.

The programme offers a range of financial products and services designed specifically to meet the needs of small and micro-enterprises, including loans, savings accounts, and financial literacy training. These services are designed to empower entrepreneurs, particularly women, and help them develop their businesses and achieve sustainable income.

Programmes offered by Azal Microfinance Programme:

- a. **Microcredit:** Azal Programme offers microcredit loans to small business owners who lack collateral or official credit history. These loans typically have flexible repayment terms and low interest rates compared to traditional banks, making them accessible to small business owners.
- b. **Small business loans:** The programme offers loans for small businesses to enterprises that have the ability to grow and expand. These loans can be used for working capital, purchasing equipment, or investing in business development activities.
- c. **Savings accounts:** Azal Programme encourages entrepreneurs to save money by offering savings accounts with competitive interest rates. This helps individuals build financial flexibility and access capital for future business needs.
- d. **Financial literacy training:** Recognizing the importance of financial education, the program organizes training courses and workshops to promote financial literacy among entrepreneurs. These sessions cover topics such as budgeting, bookkeeping, and cash flow management, empowering individuals to make informed financial decisions.
- e. **Women's economic empowerment:** The Azal Programme strongly focuses on empowering women entrepreneurs in Yemen. It provides financial products and services designed specifically to meet the unique needs and challenges faced by women in business. The program also offers mentoring and networking opportunities to support women in expanding their businesses.
- f. **Business development services:** In addition to financial support, the Azal program offers business development services to help small and micro-enterprises thrive. These services may include market research, product development support, business consulting services, and enabling entrepreneurs to improve their competitiveness and explore new market opportunities.
- g. **Partnerships and collaboration:** The programme collaborates with local and international organizations, non-governmental organizations, and government agencies to expand its reach and impact. Through partnerships with other institutions, the Azal Programme benefits from resources and expertise to create a more inclusive ecosystem to support small and micro-enterprises in Yemen.

The Azal Microfinance Programme plays a vital role in promoting economic growth and reducing poverty in Yemen. By providing accessible financial services,

promoting financial literacy, and supporting women's entrepreneurship, the programme contributes to building a more inclusive and resilient economy in the country.

4. National Microfinance Foundation (NMF)

National Microfinance Foundation is a non-profit foundation that was established in Yemen in October 2003; however, it launched its field operations in 2004 with contributions from the Social Fund for Development, a number of social leaders, and local foundations. National Microfinance Foundation is considered as the first and largest microfinance foundation in Yemen and it is the only foundation in Yemen that performs field collection, too. The network of the foundation ranges across twenty branches and offices, most of its services are centred in rural areas.

Programmes offered by National Microfinance Foundation:

- a. NMF agricultural loans: Funding that targets farmers with agricultural experience and who want to expand and develop their agricultural projects through the purchase of equipment to be used to create an integrated farm and breed plant varieties. This is achieved through the provision of technical expertise by the foundation's specialized experts in the agricultural field in addition to coordination with international organizations working in the same field to provide funding for farmers and enhance their productivity.
- b. NMF small business loans: Funding for individual projects up to (YER 5,000,000) with soft guarantees to be tailored to loan size and uses. These target SMEs and micro-entrepreneurs.
- c. NMF beekeepers and livestock loans: Livestock breeders/beekeepers are financed for the purpose of cattle fattening and resale seasonally (Seasonal Instalment Loan Payments) or breeding for the purpose of making use of their products in loan repayment.
- d. Pharmacy: This product was created to meet the needs of pharmacy owners, as drug companies are difficult to sell by credit due to currency instability. The foundation finances pharmacists of good reputation and who are distinguished in their activities and their dealings with drug suppliers as well as customers. The amount of financing is up to 5,000,000 riyals. The financing period starts from 6 months to 24 months, and the payment cycle starts from weekly, quarterly, bi-monthly, and monthly.
- e. Startups: Due to a large demand for funds – this is for owners of start-up activities providing sufficient funds necessary to establish or operate their projects and have necessary training in a specific activity or project management. The institution contributes to financing the customer by purchasing the assets and goods required to operate the project, starting from the amount of 50,000 riyals to 2,000,000 riyals.

Non-governmental organizations with special loan programmes

In addition to microfinance institutions, many non-governmental organizations in Yemen offer specialized loan programmes, manage loan funds, or support private business and rural projects. These organizations aim to meet specific needs within the finance sector and promote economic development in deprived areas.

i. Yemen Relief and Reconstruction Foundation (YRRF):

The YRRF is a non-governmental organization that focuses on post-conflict reconstruction and development initiatives in Yemen. They offer loan programmes to support small private business projects, especially in sectors such as agriculture, fishing,

and handicrafts. These loans help entrepreneurs establish or revive businesses, contributing to job creation and income generation.

ii. CARE International Yemen:

CARE International Yemen is a non-governmental organization that implements various programmes to address poverty and empower vulnerable communities. They manage loan funds to support income-generating activities and small projects. These loans aim to promote economic resilience, especially for women and marginalized groups.

iii. Oxfam Yemen:

Oxfam Yemen is part of the global Oxfam union and works to reduce poverty and provide humanitarian aid in Yemen. They offer loan programmes and support for small rural projects, with a focus on sectors such as agriculture, water management, and renewable energy. These initiatives aim to improve livelihoods and promote sustainability in rural communities.

Non-governmental organizations that offer loan programmes in Yemen face significant challenges due to the complex context in the country. The ongoing conflict, limited access to resources, and weak infrastructure pose obstacles to effective implementation and sustainability. However, these organizations play a crucial role in bridging the financing gap and supporting needy communities.

In general, microfinance institutions and non-governmental organizations with loan programmes are vital actors in the finance sector in Yemen. They contribute to poverty reduction, economic empowerment, and the revitalization of local economies. Despite the challenges, these institutions and organizations continue to adapt and innovate to meet the evolving needs of Yemeni populations and help them build a more sustainable future.

Cooperatives or social organizations

Cooperatives and social organizations play a crucial role in providing credit programmes for self-employment activities in Yemen. These organizations are often community-based and aim to empower individuals by providing them with the financial resources to start their own businesses. They focus on various sectors such as agriculture, small industries, and services.

- **Importance and impact:** These credit programmes help individuals overcome financial barriers and access capital that is not otherwise available through traditional banking channels. They contribute to job creation, poverty reduction, and economic development at the grassroots level. By promoting self-employment, cooperatives and social organizations contribute to local economic resilience and reduce dependence on external aid.
- **Challenges:** However, the finance sector in Yemen faces significant challenges. The impact of the ongoing conflict and economic crisis severely affects the work of cooperatives and social organizations. Limited financial resources, scarcity of credit, and a decline in economic activity have hindered the ability of these organizations to provide sufficient support. The destruction of infrastructure and displacement of populations have further complicated the situation.
- **Governance and sustainability:** To ensure the effectiveness and sustainability of cooperative and social organizations, it is essential to strengthen their governance structures, improve transparency, and enhance financial management practices. This can be achieved through capacity-building programmes, training, and support from

international organizations and donor agencies. Additionally, enhancing an enabling legal and regulatory environment is crucial for their long-term continuity.

Cooperatives and social organizations that provide credit programmes for self-employment activities have the ability to empower individuals and contribute to economic development, but they need support to overcome financial constraints.

Non-formal financing sources

In Yemen, non-formal financing sources play an important role in meeting the financial needs of individuals and businesses, especially in rural areas where formal banking services are rare or difficult to access. These sources include loans from friends and relatives, private sector lenders, and financing from equipment and materials suppliers.

- **Accessibility:** Non-formal financing sources are often easier to access than formal banking channels, especially for individuals who lack collateral or have limited credit history. Loans from friends and relatives rely on trust and social networks, allowing individuals to secure capital quickly.
- **Flexibility:** Non-formal financing arrangements are usually more flexible in terms of loan conditions, repayment schedules, and interest rates. Borrowers often have the freedom to negotiate terms that suit their specific needs, which can be particularly beneficial for small businesses and entrepreneurs.
- **Risks and challenges:** Despite their advantages, non-formal financing sources also pose risks. The lack of appropriate legal frameworks and documentation can lead to disputes and difficulties in enforcing repayment obligations. Additionally, relying on non-formal financing can perpetuate income inequality, as those without social networks or strong relationships may struggle to access funds.
- **Formalization and regulation:** To harness the potential benefits of non-formal financing while mitigating risks, efforts should be made to formalize and regulate these activities. Encouraging financial literacy and educating individuals on making informed decisions when seeking non-formal financing can help. Implementing dispute resolution mechanisms and protecting the rights of borrowers and lenders is also crucial.

Financial inclusion initiatives to facilitate banking and financial services

The finance sector in Yemen faces many challenges due to the ongoing political instability and economic crisis in the country. However, financial institutions have implemented several initiatives to facilitate banking services in targeted areas in the short term. In addition, there are recommended methods for dealing with cash-heavy financial operations.

- **Mobile banking solutions:** Financial institutions in Yemen have recognized the importance of mobile banking solutions to reach populations in remote and conflict-affected areas. By leveraging mobile phone technology, banks can provide basic financial services such as balance inquiries, money transfers, and bill payments, even in areas with limited physical infrastructure. Mobile banking applications enable customers to access their accounts, conduct transactions, and receive real-time updates on their mobile devices.
- **Banking agents:** Another initiative adopted by financial institutions to reach deprived population segments in targeted areas is the banking agent. Banks appoint agents who act as intermediaries between the bank and customers. These agents, often local shop owners or trusted community members, provide basic banking services such as cash deposits, withdrawals, account opening, and bill payments. Banking agents work to

bring banking services closer to people, reducing their need to travel long distances to reach a bank branch.

- Financial literacy programmes: Recognizing the low levels of financial literacy in Yemen, financial institutions have started educational programmes to enhance financial awareness and understanding. These programmes educate individuals about banking products, budgeting, savings, and the benefits of formal financial services. By empowering individuals with financial knowledge, institutions aim to improve financial inclusion and promote responsible financial behaviour.
- Microfinance initiatives: Microfinance institutions play an important role in providing small loans and financial services to small businesses and low-income individuals in Yemen. These institutions focus on supporting income-generating activities and facilitating access to credit for small businesses. By providing small loans, financial institutions enable individuals to start or expand their businesses, thereby promoting economic growth and alleviating poverty in targeted areas.

Recommended approaches to address dominantly cash-based financial transactions

- Digital payment adoption: Encouraging the adoption of digital payment systems is crucial for reducing reliance on cash. Financial institutions should promote the use of debit and credit cards, mobile payment applications, and online banking platforms. This requires enhancing digital infrastructure, expanding the coverage of point-of-sale (POS) terminals, and educating individuals about the benefits and security of digital transactions. Emphasizing the convenience, speed, and safety of digital payments can encourage individuals and businesses to move away from cash.
- Collaboration with telecom companies: Financial institutions can collaborate with telecom companies to leverage the existing infrastructure of mobile networks and customer base. By integrating banking services with mobile network operators, individuals can access financial services through their mobile phones, even without a bank account. This method allows for easier non-cash transactions, including mobile money transfers, bill payments, and merchant payments.
- Encouraging e-commerce and online markets: Promoting e-commerce and online markets can contribute to reducing reliance on cash transactions. Financial institutions can support the development of secure online platforms and provide assistance to businesses in establishing e-commerce capabilities. By facilitating online transactions and providing secure payment gateways, financial institutions can enable individuals and businesses to conduct digital business, reducing the need for cash-based transactions.
- Strengthening anti-money laundering (AML) and know-your-customer (KYC) regulations: A strong regulatory framework is necessary to address concerns related to cash-based financial operations, such as money laundering and illicit activities. Financial institutions should comply with AML regulations and "know-your-customer" requirements to mitigate risks.

Factors causing failure of rural income generating projects versus drivers of continuity

Rural income-generating projects in Yemen face various challenges that can lead to their failure. At the same time, there are many reasons why small business owners face failure. These reasons can vary from financial challenges to a lack of project management skills or unexpected external factors. Here are some common factors that contribute to small business failure:

- 1- **Financial illiteracy and inability to manage financial affairs:** Many small business owners lack financial knowledge, which refers to understanding financial concepts and the ability to manage financial affairs effectively. Without adequate financial management skills, entrepreneurs may struggle to prepare budgets, manage cash flow, forecast, and make informed financial decisions. This can lead to financial instability, debt accumulation, and ultimately business failure.
- 2- **Lack of entrepreneurial skills:** Running a successful business venture requires a set of skills, including strategic planning, marketing, sales, operations management, and team leadership. Some entrepreneurs may have a great product or service but lack the necessary skills to effectively manage and develop their business. Without a strong foundation in entrepreneurship, business owners may struggle to adapt to market changes, identify opportunities, and make the right decisions to push their businesses forward.
- 3- **External factors and market conditions:** External factors, such as economic contraction, changes in consumer behaviour, or industrial disruptions, can significantly impact small businesses. For example, the COVID-19 pandemic had a profound impact on many businesses worldwide, forcing them to temporarily or permanently close due to lockdowns, a drop in customer demand, and supply chain disruptions. Such unexpected events can overwhelm small business owners, especially those with limited resources and flexibility, leading to business failure.
- 4- **Inadequate market research and planning:** Starting a business venture without conducting comprehensive market research and planning can increase the risk of failure. It is crucial for project owners to understand the target market, competition, and industry dynamics. Without this knowledge, small businesses may struggle to differentiate themselves, identify their target customers, and develop effective marketing and sales strategies. The lack of planning can also lead to misallocation of resources, inefficient operations, and difficulty adapting to changing market requirements.
- 5- **Insufficient capital and cash flow problems:** Inadequate capital is a common challenge for small projects. Insufficient financing can limit business growth, hinder marketing efforts, impede inventory management, and prevent investment in necessary equipment or technology. Moreover, poor cash flow management, such as late payments from customers or excessive expenses, can lead to liquidity problems, making it difficult for businesses to meet their financial obligations, pay employee salaries, or invest in growth opportunities.
- 6- **Ineffective marketing, customer acquisition, and a lack of marketing skills:** The lack of effective marketing strategies and difficulties in acquiring customers can contribute to

the failure of small businesses. Without a clear understanding of how to reach and engage target customers, companies may struggle to achieve consistent sales and build a loyal customer base. In the current digital age, online presence and the use of digital marketing techniques are often necessary for success, but many small business owners may lack the knowledge or resources to implement these strategies effectively.

- 7- Political instability and conflict: Yemen has experienced long-lasting conflict since 2014, leading to widespread destruction, displacement, and a severe humanitarian crisis. The conflict has disrupted basic infrastructure, destroyed farmland, and hindered the operation of rural income-generating projects. Political instability undermines the long-term planning, implementation, and sustainability of such initiatives.
- 8- Limited access to resources: Rural areas in Yemen often lack the basic resources necessary for successful income-generating projects. Limited access to water, arable land, seeds, fertilizers, and livestock significantly hinders agricultural productivity. Insufficient resources make it difficult for rural communities to engage in and sustain income-generating activities over time.
- 9- Poverty and lack of capital: Poverty is widespread in rural Yemen, with limited financial resources available for investment in income-generating projects. The scarcity of capital restricts individuals and communities from obtaining the tools, machinery, or raw materials necessary, hindering the development of viable economic activities. Without sufficient funding, projects struggle to start or expand, leading to failure.
- 10- Weak infrastructure and services: Rural areas in Yemen often suffer from inadequate infrastructure and basic services such as electricity, transportation, and healthcare. Inadequate road networks make it difficult to transport goods to markets, leading to limited access to potential buyers. Additionally, the lack of reliable electricity supplies hinders the operation of machinery and processing facilities, reducing the viability of income-generating projects.
- 11- Environmental challenges: Yemen faces various environmental challenges, including water scarcity, drought, and desertification. These factors negatively impact agricultural productivity, making it challenging for rural communities to sustain income-generating projects that rely on agriculture or livestock. Climate change exacerbates these issues, leading to unpredictable weather patterns and increased exposure to natural disasters.

It is important to note that these reasons for the failure of small rural enterprises are not comprehensive and may vary depending on the individual entrepreneur's circumstances. However, by understanding these common challenges, project owners can proactively address potential risks and increase their chances of building successful and resilient businesses. Seeking advice from mentors, business coaches, or industry experts can also provide valuable guidance and support in overcoming these challenges.

Factors contributing to the sustainability of income-generating rural projects in Yemen

1. **Resilient local communities:** Despite the challenges facing rural communities in Yemen, they often exhibit notable resilience. They have valuable traditional knowledge and skills in agriculture, animal husbandry, and other income-generating activities. This flexibility allows them to adapt to changing conditions and find alternative ways to generate income, ensuring the continuity of their projects.
2. **Support from non-governmental and international organizations:** Many non-governmental organizations and international entities provide support for income-generating rural projects in Yemen. They offer financial assistance, technical expertise, training, and capacity-building programs to empower local communities. This support enhances the success and sustainability of the projects, contributing to their continuity.
3. **Market opportunities:** Despite the generally difficult economic environment in Yemen, there are market opportunities for income-generating rural projects. Local and regional demand for agricultural products, handicrafts, and traditional goods can provide avenues for income generation. By identifying these market opportunities and taking advantage of them, rural projects can maintain themselves.
4. **Diversification of income sources:** To overcome the risks associated with a single income-generating project, rural communities in Yemen often engage in diversification. They explore different activities, such as small-scale agriculture, beekeeping, fishing, or handicraft production, to generate multiple sources of income. Diversification helps them mitigate the impact of external shocks and increases their long-term sustainability.
5. **Community collaboration and networks:** Rural communities in Yemen often collaborate and form networks to collectively address challenges and share resources. By working together, they can pool their knowledge, expertise, and resources to support income-generating projects for each other. Collaboration and networks enable communities to overcome individual limitations and contribute to the continuity of projects.



6. CONCLUSIONS

In conclusion, the findings of the market study shed light on the challenges and opportunities surrounding rural income-generating projects in Yemen. The analysis emphasizes the need for comprehensive interventions that address the multifaceted challenges faced by entrepreneurs, particularly focusing on financial literacy, entrepreneurial skills, market access, access to resources, infrastructure development, and environmental sustainability.

Addressing financial illiteracy and promoting effective financial management skills are crucial for the success of rural projects. Investment in financial education and training programmes can empower entrepreneurs to make informed financial decisions, manage cash flow, and enhance the financial stability of their businesses. Similarly, enhancing entrepreneurial skills through training initiatives can equip rural entrepreneurs with the necessary tools to adapt to market changes, identify opportunities, and effectively manage and develop their businesses.

External factors and market conditions, such as political instability and conflict, pose significant challenges for rural projects. Efforts to promote resilience and flexibility among rural communities are essential, enabling them to adapt to changing conditions and find alternative ways to generate income. Support from non-governmental organizations and international entities plays a vital role in empowering rural communities and enhancing the success and sustainability of income-generating projects.

Access to markets and market opportunities are critical for the continuity of rural projects. Improving market linkages, establishing supply chains, and enhancing marketing and distribution networks can enhance market access for rural businesses. Moreover, efforts to diversify income sources and promote collaboration and networking among rural communities can contribute to the long-term sustainability of projects.

The analysis also highlights the importance of addressing disparities in education, access to training opportunities, and income sources. Promoting gender equality, empowering women, and providing targeted support and resources can foster inclusive and sustainable rural development.

Addressing the challenges related to limited access to resources, weak infrastructure, and environmental concerns requires coordinated efforts from various stakeholders. Investments in

infrastructure development, resource access, and environmental sustainability measures are essential for creating an enabling environment for rural projects.

To facilitate entrepreneurship and overcome barriers, access to capital and financial support is crucial. Microfinance institutions and credit programs play a significant role in providing access to capital for micro-enterprises in rural areas. However, challenges in accessing loans persist, and efforts should be made to relax collateral requirements, provide financial literacy training, and establish credit scoring systems to assess creditworthiness beyond traditional credit history.

Promoting financial literacy and the utilization of formal banking services are essential for effective financial management and access to a wider range of financial products and services. Encouraging the use of digital financial solutions and expanding microcredit channels can enhance financial inclusion and contribute to the growth and development of rural businesses.

In conclusion, addressing the identified challenges and providing necessary support and training can enhance economic opportunities, increase labour market participation, and foster sustainable development in targeted rural areas. The findings of the market study provide valuable insights for informed decision-making, policy formulation, and the development of training programs that empower individuals and contribute to the economic growth and prosperity of Yemen. By implementing comprehensive interventions and fostering a supportive ecosystem, it is possible to overcome the obstacles and create a conducive environment for the success and continuity of rural income-generating projects in Yemen.



7. RECOMMENDATIONS

Throughout the document, relevant chapters have included specific recommendations based on the findings and analysis. This section provides general recommendations, highlighting key actions that can be taken to enhance the sustainability and success of rural projects in Yemen.

- Conduct workshops and training programmes: Organize workshops and training sessions on topics such as business planning, financial management, marketing strategies, and digital literacy. These programmes should be tailored to the specific needs of small business owners in the region.
- Enhance digital literacy: Provide training on how to effectively use digital tools and platforms for marketing, sales, and communication purposes. This will help small business owners leverage technology to improve their business operations.
- Foster networking and collaboration: Encourage small business owners to participate in networking events, trade fairs, and business matchmaking platforms. This will help them establish valuable connections and partnerships with other entrepreneurs and potential customers.
- Promote access to information: Facilitate access to relevant information and resources for small business owners. This can be done through the development of online platforms, resource centres, or mentorship programmes.
- Provide mentorship and coaching: Establish mentorship programmes where experienced entrepreneurs can guide and support small business owners. This can help them navigate challenges and make informed decisions.
- Offer financial literacy training: Provide training on financial management, budgeting, and accessing financial resources. This will help small business owners better understand their finances and make sound financial decisions.
- Collaboration with Microfinance Institutions (MFIs): Foster partnerships and collaboration between microfinance institutions and rural business owners. This can include establishing dedicated loan products for rural businesses, providing tailored financial services, and offering training and support to improve financial literacy.
- Supportive policy environment: Create a supportive policy environment that encourages microcredit channels for rural businesses. This can include implementing regulations that promote responsible lending practices, providing incentives for MFIs to

serve rural areas, and offering financial support or guarantees for loans to rural businesses.

- Capacity building for MFIs: Provide capacity building support to microfinance institutions operating in rural areas. This can include training programmes on rural business financing, risk management, and customer service to enhance the effectiveness and sustainability of microcredit channels.
- Peer learning and knowledge sharing: Facilitate peer learning and knowledge sharing among rural business owners and microfinance institutions. This can be done through workshops, conferences, or networking events where experiences, best practices, and challenges can be shared and discussed.

