



Original Article

Economic Development and Rural Employment Generation Program in North Khorasan Province (Case Study: Azari Rural District, Esfarayen County)

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Abstract

Purpose- This study was conducted with the aim of developing a structured and practical program for economic development and employment generation in the rural areas of Azari Rural District, located in Esfarayen County, North Khorasan Province.

Design/methodology/approach- The present study adopted a mixed-methods approach (quantitative–qualitative). Parts of the research were based on the positivist paradigm and employed quantitative methods relying on numerical and statistical data. Demographic analyses and statistical data collected in the fields of economics, water resources, agriculture, and social dimensions represent this approach. In addition, considering that the primary and ultimate objective of this study was to formulate an economic development and employment generation program for the 23 villages of Azari Rural District in the Central District of Esfarayen County, a qualitative approach was also employed using open-ended and face-to-face interviews. The statistical population consisted of all 23 villages of Azari Rural District in the Central District of Esfarayen County, and the study was conducted using a census method.

Finding- Based on the collected data, agricultural value chains particularly in livestock farming and animal husbandry, as well as the honey production value chain were identified as having the greatest impact on the local economy, livelihoods, and rural employment generation in the study area. Supply chains, or value-creation systems for regional products, constitute interconnected networks of processes designed to provide goods and services. These systems encompass suppliers, producers, distributors, and sellers who collaborate in an integrated manner to enhance customer satisfaction. In essence, supply chain management establishes coordination among production, inventory, location allocation, and transportation processes among stakeholders involved in a product in order to achieve the optimal balance between responsiveness and efficiency for market success. Based on this framework, the supply chain or value-creation process for rural products can be analyzed at three levels. The first level comprises the production links themselves, including required inputs, input provision, production, processing, and marketing. The second level includes the actors and stakeholders involved in the chain, such as governmental institutions, private organizations and enterprises, farmers and local industrial actors, groups of elites and entrepreneurs, financial institutions, and other public organizations. The third level examines the activities carried out within each production link by these stakeholders.

Keywords- Rural Economic Development, Employment Generation, Value Chain Analysis, Agricultural Development, Mixed-Methods Research, North Khorasan Province.

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1. Introduction

Food security and rural development are deeply intertwined, particularly in agrarian economies where the majority of the population relies on agriculture for their livelihoods. The Food and Agriculture Organization (FAO) defines food security as a condition where all people, at all times, have physical, social, and economic access to sufficient, safe, and nutritious food that meets their dietary needs and food preferences for an active and healthy life (Alawode, 2025).

The economy's capacity to absorb human resources but also has profound impacts on social structures, cultural norms, and even the psychological well-being of individuals and households. This phenomenon, as a multifaceted problem, arises from the complex interaction of economic factors such as the structure of production, fiscal and monetary policies, and labor market developments, with social variables like inequality, poverty, and migration in developing economies like Iran, particularly in rural areas, unemployment has become a chronic challenge rooted in issues such as insufficient investment, weak infrastructure, and a lack of productive employment opportunities. From an economic perspective, this situation not only leads to a reduction in the productivity of all production factors but also imposes significant social and welfare costs on governments, thereby weakening the potential for long-term economic growth (Behnia et al., 2021; Pourmohammadi and Yousefi, 2021; Mankiw, 2024; Pourmohammadi et al., 2025).

In recent decades, the focus of economic development policies on the expansion of small rural businesses has been considered as a solution to achieve rural development (Markeson and Deller, 2012). Small businesses (handicrafts) and entrepreneurship are an important factor to reduce poverty, increase productivity and competitiveness (Omri et al., 2015). The rapid changes in communication technology and the relative decrease in the importance of agricultural economy have made it necessary to pay attention to side jobs in villages (Bosworth & Turner, 2018). Therefore, achieving a sustainable livelihood and improving the quality of life is one of the key goals of rural development programs (Harpaa et al., 2016; Bahrami, 2023).

Traditionally, farming households in developing countries usually diversify their incomes through on-farm strategies such as growing different types of grains and cash crops, keeping different livestock, or engaging themselves in contract farming. Nevertheless, they still face significant uncertainties in farm income generation because the sustainability of farm production is constrained and challenged by several factors. Examples of these factors include changing climate, the occurrence of pests and diseases, unavailability of resources (e.g., land, facilities for commodity storage and livestock housing, and skilled labor), incomplete information on input and output markets, and price fluctuations (Watts et al., 2021). To stabilize or improve their well-being, some rural residents seek better income opportunities from non-farm sectors or exit the agricultural industry completely (Zou, 2024; Ma et al., 2025).

Agricultural value chains (AVCs) refer to the full range of activities and actors involved in bringing agricultural products from input supply, production, and processing to final consumption. This includes input providers, farmers, aggregators, transporters, processors, retailers, and consumers. The value chain perspective emphasizes the importance of linkages and coordination across these stages, as well as the governance structures that shape relationships and determine value distribution. Strategically, AVCs serve as conduits through which agricultural productivity gains translate into broader economic development. They enable smallholders to access markets, technologies, and services, thereby improving income stability and investment incentives. In addition, well-functioning value chains reduce postharvest losses, improve product quality, and expand employment opportunities along upstream and downstream nodes (Tian, 2017).

Despite the growing body of literature on rural development, agricultural value chains, and employment generation, relatively limited attention has been paid to developing integrated, place-based employment programs at the rural district level that combine quantitative spatial analysis with qualitative stakeholder participation. Most previous studies have focused either on evaluating individual sectors or on analyzing rural employment from a macroeconomic perspective, while few have translated these findings into

practical development programs tailored to the socioeconomic and environmental characteristics of a specific rural region. Therefore, there remains a significant gap in designing operational value chain-based development frameworks capable of supporting local policymakers in promoting sustainable rural employment.

The present study seeks to address this gap by integrating statistical analysis, GIS-based spatial assessment, and participatory qualitative research to formulate a comprehensive economic development and employment generation program for Azari Rural District in Esfarayen County. The principal innovation of this research lies in proposing a localized value chain framework that identifies priority economic sectors, spatially allocates production and processing activities, and provides an operational roadmap for regional planning based on local capacities and stakeholder participation.

Accordingly, the objectives and research questions of this study are presented below.

Research Objectives:

- To identify the economic potentials and comparative advantages of Azari Rural District.
- To analyze the agricultural and livestock production systems and their associated value chains.
- To identify priority sectors for sustainable rural employment generation.
- To develop an integrated economic development and employment generation program based on local capacities and stakeholder participation.

Research Questions:

- What are the principal economic capacities and comparative advantages of Azari Rural District?
- Which agricultural value chains have the greatest potential for sustainable employment generation?
- How can value chain analysis contribute to the formulation of an effective rural economic development program?
- What institutional, infrastructural, and spatial interventions are required to strengthen rural employment opportunities in the study area?

2. Research Theoretical Literature

Unemployment exhibits significant heterogeneity across different groups of people. Unemployment is commonly categorized into short-term and long-term unemployment. Short-term employment, includes seasonal unemployment, frictional unemployment (due to job transitions), and

structural unemployment (unemployment that happens because of economic restructuring, often impacting low-skilled workers due to technological advancements). Long-term unemployment (lasting more than six months, for example), sometimes considered permanent, is particularly detrimental to the economy, leading to financial hardship and decreased job-seeking motivation (Pourmohammadi et al., 2025).

Employment is one of the major issues of macroeconomics, which has a direct impact on the level of well-being and life of people in the society. Unemployment causes a wide range of social and economic issues at the level of societies, its consequences, in addition to the impact it has on the economic environment in any society, are also of particular importance in political and social fields (Malisauskaite et al., 2022).

All these types of unemployment can be classified by their origin: demand-side and supply-side. Demand-side unemployment arises when there's a drop in the demand for goods and services, leading to fewer labor requirements, often influenced by economic recessions or technological changes (Hamermesh, 2021). Supply-side unemployment, however, is related to the labor supply, such as changes due to immigration, education, or retirement, and mismatches in skills or geographic locations relative to job opportunities. Effective policy responses for these types vary, with demand-side solutions focusing on stimulating economic activity and supply-side measures aimed at enhancing labor market flexibility and aligning skills with job market needs (Farajnia et al., 2020).

Governments must carefully consider the specific type of unemployment occurring and then choose the most appropriate policies to effectively address and mitigate it. Macroeconomic stabilization, including monetary policies (whose effects on employment are described by the Phillips curve) and fiscal policies, improves labor market conditions. Labor market policies are further categorized into structural reforms (affecting the business environment), active policies and passive labor market policies. All types of policies can aim to reduce unemployment or achieve redistributive goals; reforms generally impact unemployment rates, active policies often focus on income redistribution and welfare improvements, while passive policies include Income Support Programs for unemployment. These categories are presented in Figure 1.

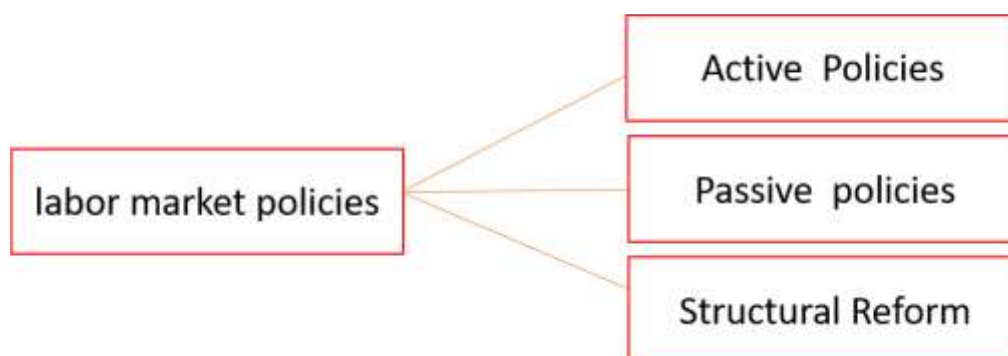


Figure 1. Labor Market Policies

Active policies include fiscal measures (government spending, taxation, and subsidies) and monetary actions (interest rates and money supply management), both of which influence employment by adjusting economic levers. For example, fiscal policies stimulate labor demand through initiatives like increased public spending and tax incentives for hiring, as demonstrated by the U.S. Paycheck Protection Program, which supported businesses in retaining employees (Granja et al., 2022). Monetary policies, managed by central banks, influence employment by affecting borrowing costs and credit availability (Bernanke, 2020).

Passive labor market policies provide financial relief primarily through income support to stabilize individuals during periods of unemployment, focusing on social protection rather than skills development or job placement.

Structural policies aim to reshape the labor market through labor law reforms, tax system adjustments, and enhanced access to labor markets, thereby improving labor market efficiency and workforce quality (Aiginger and Rodrik, 2020).

One of the selected strategies for the development of rural areas that are faced with a surplus population is the development of handicrafts and workshops. Handicrafts are mostly defined as items that are made by hand, often using simple tools, and generally have an artistic or traditional nature. Handicraft refers to a group of industries in which all or most of the manufacturing steps of its products are done by hand (Tripathi, 2022). In this section, views and theories on rural industries and their impact on rural development are discussed. As an economist, Penn Rose states in his theory of marginal economies that "under conditions of

prosperity and economic prosperity, creating growth opportunities for small and medium-sized industries is much easier and faster than the development of large industries (Barkhordari et al., 2022).

From Mina2007's point of view, in the current conditions, the agricultural sector alone cannot be a suitable answer to meet the livelihood needs of the rural people, but creating employment in the industrial sector for the rural youth is one of the necessities of the present age; By promoting small-scale industries in villages, the problem of poverty and unemployment can be eliminated. This is while these industries, in addition to having high employment, needless investment.

In terms of research background, we can refer to the results of the studies of Martin L. & Tamara (2013) who in their study on economic growth and economic innovation in small rural companies in rural England in Wales concluded that innovation in small rural businesses should be a way to reduce waste and raw material consumption. Early studies on microcredit impact often showed insignificant results. However, more recent research increasingly demonstrates positive economic effects. These studies have examined micro-level impacts (income, consumption, savings, investment) and macro-level impacts (GDP growth, aggregate consumption and investment) (Ayyagari et al., 2021).

Agricultural value chains are composed of interconnected stages that convert raw farm inputs into consumable food products, traversing several transformation and exchange nodes along the way. Typically, a value chain begins with input provisioning (such as seeds, fertilizers, and equipment), continues through production and

harvesting, and progresses into aggregation, processing, storage, marketing, and finally, consumption (Tian, 2017).

Each stage adds value, either through physical transformation, logistical services, or market linkage. The vertical structure of a value chain refers to these sequential functions, while the horizontal structure includes the network of actors operating at each level such as multiple farmers in the production stage or competing processors in the transformation stage. These structures can be short and simple (as in local vegetable sales) or long and complex, involving multiple intermediaries and international trade (Chukwunweike & Dolapo Salaudeen, 2025).

Critical to the effective operation of value chains are the governance mechanisms that coordinate flows of goods, information, and capital. Governance defines how decisions are made about standards, pricing, input sourcing, and risk allocation. Chains governed by lead firms (e.g., supermarkets or exporters) often impose strict quality and delivery requirements on suppliers. Alternatively, more decentralized governance is observed in informal and subsistence-based markets, where coordination is limited and power imbalances are common (Narro et al., 2009). Understanding these structural elements is essential for identifying leverage points where interventions such as infrastructure development, policy reform, or financing can enhance performance, reduce losses, and improve equity in agricultural systems.

In summary, the review of the theoretical literature and background research indicates that rural development and sustainable employment generation, as two fundamental components in agrarian economies, are strongly influenced by the functioning and structure of value chains. Despite the widespread emphasis on the role of value chains in reducing inequality, improving food security, and enhancing productivity, there remains a significant gap in developing operational and

place-based programs grounded in spatial analysis (GIS), stakeholder participation, and local capacities. Therefore, the present study aims to adopt an integrated approach (combining quantitative, qualitative, and spatial analysis methods) to identify the comparative advantages and economic potentials of Azari Rural District. By analyzing key value chains, this research seeks to provide an operational framework for economic development and sustainable employment creation in the region. The findings of this study can not only fill the existing scientific gap but also offer effective guidance for local policymakers and planners in optimizing resource allocation and designing targeted interventions.

3. Research Methodology

3.1 Geographical Scope of the Research

According to the 2016 national census, the population of North Khorasan Province was 863,092. Among the counties of the province, Esfarayen County ranked as the third most populous county after Bojnord and Shirvan, with a population of 120,513 in 2016. North Khorasan Province has a considerably higher proportion of rural population compared with the national average. While only 25.9% of Iran's total population resides in rural areas, the proportion of rural residents in North Khorasan Province reaches 43.7%. Within the province, Esfarayen County has one of the highest levels of rural settlement, ranking after Raz and Jargalan, Faruj, and Maneh and Samalqan counties.

Esfarayen County consists of six rural districts: Azari, Bam, Safiabad, Milanlu, Daman Kuh, Zargabad, and Ruin. Azari Rural District is located in the Central District of Esfarayen County and comprises 60 settlements, some of which are currently uninhabited. According to the 2016 Population and Housing Census, Azari Rural District, with a population of 14,230, is the most populous rural district in Esfarayen County (Figure 2).

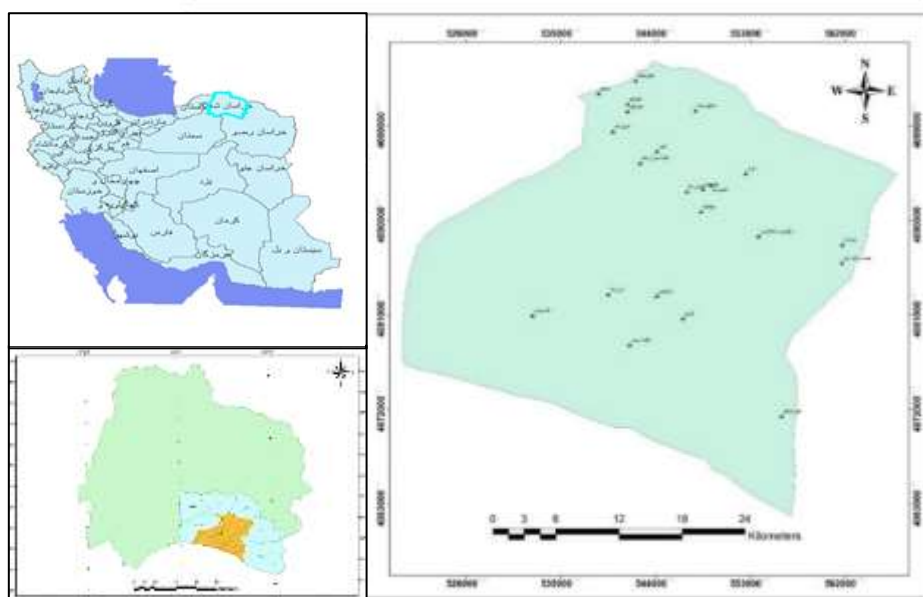


Figure 2. Location of Azari Rural District within North Khorasan Province and the Spatial Distribution of the Target Villages

3.2. Methodology

This study employs a mixed-methods research design, integrating both qualitative and quantitative approaches, with data collected through focus group discussions (FGDs) and semi-structured interviews. The study area encompasses the rural villages of Azari Rural District, located in Esfaryen County, which comprises a total of 23 villages. During the focus group sessions, the problem tree technique was utilized to identify the principal challenges and issues confronting the villages from the perspective of local residents, as well as to delineate their underlying causes and potential consequences. To facilitate this process, a large sheet of paper measuring 2 by 1.5 meters was spread on the ground, and colorful wax crayons were employed to enhance the visibility and clarity of the recorded content. A schematic tree, complete with branches and roots, was then illustrated at the center of the paper.

Participants were seated in a circle around the paper and were subsequently invited to articulate the main problems and issues affecting their communities. Through this participatory approach, an inventory of rural challenges was compiled, while simultaneously identifying the root causes and anticipated repercussions of each identified issue. The facilitators provided the necessary guidance to steer the sessions effectively and employed various interactive techniques to actively

engage passive or reticent participants, thereby ensuring inclusive and comprehensive group contributions.

Based on these considerations, the present study employs a combination of these approaches and methods:

Quantitative Approach: Since this study was conducted upon the recommendation of the Management and Planning Organization of North Khorasan Province, and in accordance with both the functional orientation of this organization and the practical nature of applied research, the findings and analyses of this study are intended to serve as a basis for economic development and employment generation planning and policymaking. Given that effective planning and policy formulation require objective, measurable, and quantitative justification, parts of this research were conducted within the framework of the positivist paradigm using methods based on numerical and statistical analysis. Accordingly, analyses related to demographic characteristics, as well as statistical data collected in the fields of economics, water resources, agriculture, social conditions, and related sectors, constitute examples of the quantitative approach adopted in this study.

Qualitative Approach: Given that the primary and ultimate objective of this study was to formulate an economic development and employment generation program for the 23 villages of Azari

Rural District in the Central District of Esfaryen County, and as discussed in the theoretical framework of this project, sustainable rural development cannot be achieved without empowering local communities and local actors, the adoption of a qualitative approach and the use of open-ended, face-to-face interviews were considered essential.

Accordingly, in addition to utilizing existing statistical data, efforts were made to obtain a deeper and more comprehensive understanding of both the villages and the research subject through interviews with informed individuals, knowledgeable stakeholders, and actors directly involved in the study context. As emphasized within interpretive paradigms, designing an effective development program is not possible without the participation of local actors and communities in the planning process; understanding their perceptions, attitudes, and viewpoints is therefore essential.

Furthermore, drawing upon the critical paradigm and considering the potential biases generated by existing power structures within local communities, particular attention was given during fieldwork and interviews to the social and power dynamics of the villages. Efforts were made to move beyond surface-level observations and gain access to deeper and less visible layers of social reality in order to develop a more accurate understanding of the research context.

For example, one of the open-ended interview questions addressed the ethnic and tribal structure of the villages and their demographic composition. Responses to this question, together with awareness of participants' ethnic backgrounds, enabled the researchers to identify potential sources of information bias. Where necessary, additional participants from other ethnic groups were consulted to enhance the comprehensiveness and balance of data collection.

Field Visits and Observational Assessments: Prior to the commencement of field interviews, throughout the interview process, and following the completion of interviews, the research team conducted a series of field visits to collect data and gain a more comprehensive understanding of the study area. These visits included observations of village environments, plains, agricultural lands and orchards, water resources, earthen dams, and other relevant local facilities and assets. Whenever

necessary, these field visits were conducted with the guidance of village council members and village administrators (Dehyars), enabling the research team to receive contextual explanations on-site and thereby develop more accurate interpretations and assessments of local conditions.

Study Population and Sample: The statistical population of this study consisted of 23 villages located in Azari Rural District in the Central District of Esfaryen County. These villages include: Kalateh Sanjar, Ghahremanabad, Hesari Gazrani, Aliabad Alou, Sanjebini, Abri Tappeh, Ghasem Khan, Nasrabad, Dowlatabad, Izi, Firouzabad, Sinan, Abbasabad, Valiabad, Atimaz, Fartan-e Jadid, Kabutarkhaneh, Joushqan, Fartan-e Kohneh, Gerati, Kalateh Mirza Rahim, Ghasemabad, and Koushki. With respect to statistical and quantitative information collected at the aggregate village level (including indicators such as literacy rates, population growth rates, and similar demographic and socioeconomic measures), the study adopted a census approach covering all target villages.

However, for qualitative information and in-depth data collection, the research required interviews with informed participants and knowledgeable stakeholders. Accordingly, qualitative data were collected through interviews with the following groups of participants:

- a) In the first stage, village administrators (Dehyars) and members of village councils were interviewed as key informants and primary gatekeepers with extensive knowledge of local conditions and village affairs.
- b) Based on consultations with these individuals, other informed participants and local entrepreneurs where present within the villages were identified and selected for interviews.
- c) During the researchers' presence in the villages, additional interviews were conducted with local residents as appropriate. These participants were generally individuals who voluntarily expressed interest and willingness to contribute to the research process.

Data Collection Procedure: The research process and data collection were conducted in the following stages:

- a) In the first stage, statistical and secondary data were collected from multiple sources, including demographic statistics obtained from the Statistical Center of Iran, datasets provided by the

Management and Planning Organization, and data gathered from governmental departments and organizations at both county and provincial levels.

b) Subsequently, a quantitative questionnaire consisting of 13 data tables was developed and completed through telephone interviews with village administrators (Dehyars). The questionnaire collected village-level information across the target villages regarding educational services and facilities, water supply systems, energy infrastructure, transportation, cultural–religious–tourism facilities, administrative services, information and technology infrastructure, commercial and economic activities, agricultural infrastructure, public facilities, employment activities, and other relevant indicators. Access to this comprehensive set of information prior to field visits enabled the research team to establish a preliminary understanding of each village and provided an initial analytical framework for conducting field investigations.

c) In addition, through a series of consultation sessions, a qualitative questionnaire consisting of 22 open-ended questions was designed to be completed during field visits through open interviews. The questionnaire covered a broad range of topics, including agriculture, livestock production, workshop-based and handicraft industries, tourism, mining, capital and investment, services, development projects, socio-cultural issues, and participants' recommendations and proposed initiatives. Data Analysis Methods: Depending on the nature of the data collected across different sections of the project, appropriate analytical methods were employed.

a) In the natural and environmental studies section, after obtaining the required data from relevant governmental agencies, maps related to natural hazards (including floods, earthquakes, fault lines, and other environmental risks), vegetation cover, regional water resources, and the spatial distribution of rural settlements were prepared and analyzed using Geographic Information System (GIS) software.

b) In demographic studies and selected components of the economic analysis (including agriculture and livestock sectors), population forecasting models and descriptive statistical measures, such as means and related summary statistics, were employed for data analysis.

c) For studies based on open-ended interviews, data were analyzed using interpretive and descriptive approaches through focus group analysis conducted by the research team, with the aim of achieving the highest possible level of analytical comprehensiveness and interpretive depth.

The statistical data used in this study were obtained from official governmental organizations, including the Management and Planning Organization, the Agricultural Jihad Organization, and the Industry, Mine and Trade Organization. To improve data reliability, the research team did not rely solely on these secondary sources. During the fieldwork, official statistics were systematically compared with field observations and discussed with village administrators (Dehyars), members of village councils, local farmers, livestock producers, and other knowledgeable stakeholders. Whenever inconsistencies or ambiguities were identified, additional inquiries were made with the relevant local authorities to ensure that the information reflected the most recent conditions in the study area. This triangulation of official statistics, field observations, and stakeholder interviews enhanced the credibility of the dataset used in the analysis. Nevertheless, farm-level random sampling was not undertaken, and this should be regarded as a limitation of the study.

4. Research Findings

An assessment of the socioeconomic conditions of Azari Rural District indicates that agriculture and livestock production constitute the primary economic activities of local residents and form the main foundation of rural livelihoods. These sectors not only represent the dominant production system within the district but also contribute substantially to agricultural output at both county and provincial levels. In the agricultural sector, major crops include wheat, barley, onion, tomato, alfalfa, and sugar beet, some of which account for a considerable share of total production in Esfarayen County. In addition, within the horticultural sector, certain villages such as Hesari Gazrani benefit from favorable climatic conditions for apple production, making this activity economically significant.

Furthermore, following the migration of a considerable number of livestock breeders from the Milanlu region to this rural district over recent decades, and given the availability of relatively

suitable rangelands, livestock farming has become one of the principal economic activities in the villages of the area. This sector contributes a notable share of the county's meat and dairy production, while associated dairy products also play an important role in supporting the income and economic resilience of rural households.

In addition to agricultural and livestock-related activities, industrial and mining activities are also present within the district. These activities are primarily based on mineral resources associated with construction materials, including brick clay, rubble stone, gypsum, sand, and gravel. Accordingly, local industrial activities have largely developed around these resource-based industries and continue to demonstrate potential for further expansion.

4.1. Description, Analysis, and Interpretation of the Natural and Ecological Conditions of Azari Rural District and Target Villages

4.1.1. Topographic Conditions:

A: Elevation

Esfarayen County is located in the southern part of the Aladagh Mountain Range. Shah Jahan Mountain, the highest peak of this range with an elevation exceeding 3,000 meters above sea level

and widely referred to as the "Roof of North Khorasan," is situated in the northeastern part of Esfarayen County and north of Bam Village. Other major peaks of the Aladagh range within this area include Shanu, Navari, Kheiran, Qareh Tash, Gavtigh, Bormahan, Pato, and Delghareh. The northern and northeastern parts of Azari Rural District are characterized by elevated mountainous terrain, whereas elevation gradually decreases toward the central and southern parts of the area, which predominantly exhibit plain-like landforms. The largest proportion of the district's terrain consists of areas located below 1,100 meters above sea level. Although the southern parts of the district are relatively low-lying and flat, undulating hills and rolling topography interrupt the uniformity of the plain landscape.

The study area extends across an elevation range from approximately 1,000 meters above sea level in the southern parts of the district to nearly 2,500 meters in the northeastern areas. Overall, higher-elevation zones and lands situated above 1,700 meters are concentrated in the northeastern parts of the district, whereas lower-elevation lands are predominantly distributed across the southern areas (Figure 3).

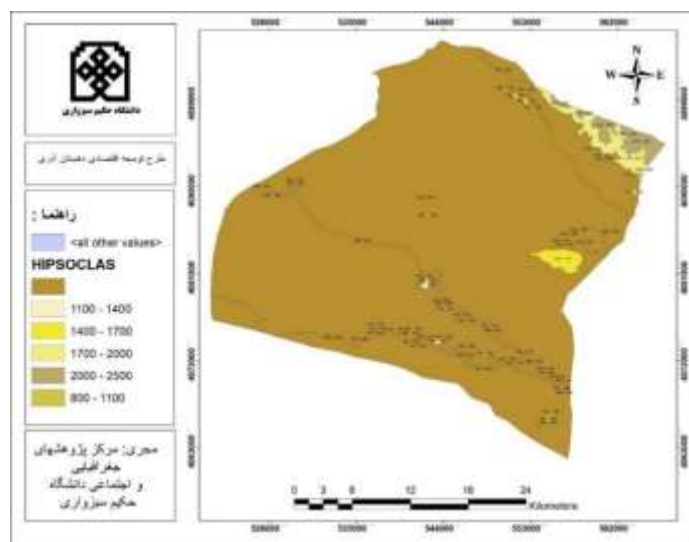


Figure 3. Elevation Classification Map of Azari Rural District

B: Slope

Slope is considered one of the key environmental factors influencing the location and development of rural and urban settlements. In addition to its important role in the initial formation of settlement cores, slope significantly affects the direction and

pattern of rural expansion over time. Since slope acts as a natural constraint on settlement establishment and human activities, it is regarded as one of the major geographical determinants of population distribution and residential land development. Moreover, favorable slope

conditions not only facilitate construction and human settlement but also influence the distribution of agricultural land, which represents a critical production resource in rural areas. The presence of steep slopes in rural environments may lead to challenges such as increased physical development costs (e.g., land grading and excavation), higher transportation expenses, and reduced cultivable land area.

Previous studies suggest that urban and rural construction is generally not recommended on slopes exceeding 15%. Similarly, steep terrain creates limitations for agricultural activities and increases cultivation and production costs. Consequently, in most regions of the world, irrigated agriculture is primarily concentrated on lands with slopes below 12% (Alborz Spatial

Planning and Development Consulting Engineers, 2016). According to the slope classification map prepared for Azari Rural District (Figure 4), most villages in the study area are located within low-slope zones (less than 5%), while a limited number of the target villages are situated in areas with slopes below 12%. As indicated above, the target villages are generally located in topographically favorable areas, and from the perspective of settlement establishment, rural expansion, agricultural land use, and industrial development, the conditions of Azari Rural District can be considered suitable.

The dominant slope direction across the study area extends from the north and northeast toward the south and southwest.

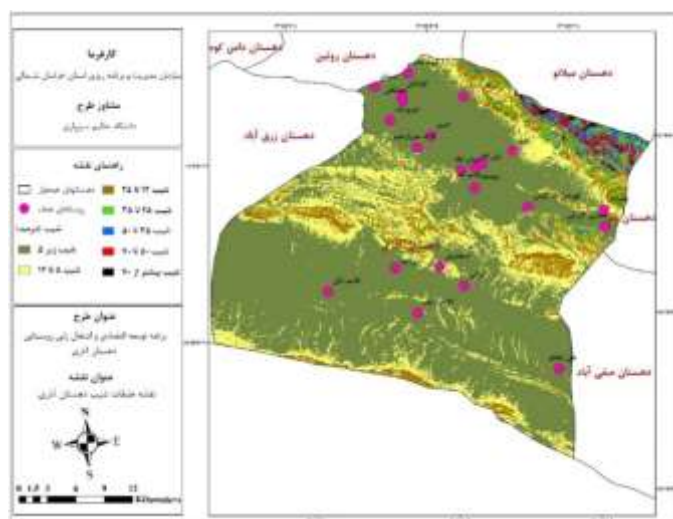


Figure 4. Slope Classification Map of the Target Villages in Azari Rural District

4.1.2. Land Use Status of Esfarayen County and Azari Rural District

Figure 5 illustrates the land use map of Esfarayen County. Based on the conducted assessments, the total area of rangelands (including dense, semi-dense, and sparse rangelands) and forest lands (comprising semi-dense forests and open forests) in Esfarayen County is estimated at approximately 337,000 hectares. Among these land categories, sparse rangelands account for the largest share, covering 252,285

hectares, whereas dense rangelands represent the smallest portion of rangeland and forest areas, with an estimated area of approximately 3,327 hectares (Table 1). In addition, approximately 155,787 hectares of land within Esfarayen County are under agricultural cultivation. Of this total, around 79,511 hectares are allocated to irrigated farming, while 76,276 hectares are devoted to rainfed agriculture.

Table 1. Area and Percentage Distribution of Vegetation Cover in Esfarayen County

Vegetation Cover Type	Area (ha)	Percentage of Total Vegetation Cover (%)
Dense Rangelands (Good Condition)	3.327	0.99
Semi-dense Rangelands (Poor Condition)	45.492	13.51
Sparse Rangelands (Poor and Very Poor Condition)	252.285	74.92

Semi-dense Forest	3.426	1.02
Open Forest	32.207	9.56
Total Vegetation Cover	336.737	100.00

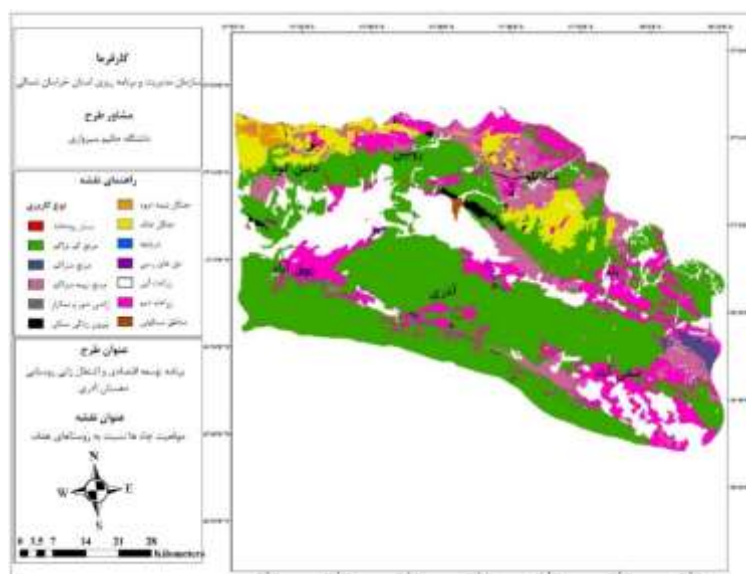


Figure 5. Land Use Map of Esfarayen County

An examination of the land use map of Azari Rural District (Figure 6) indicates that poor and very poor rangelands (sparse rangelands), covering approximately 75,819 hectares, constitute the largest share of vegetation cover in the study area. In contrast, open forests, with an area of approximately 1,073 hectares, account for the smallest proportion of vegetation cover. According to the land use map, the largest extent of irrigated agricultural land is concentrated within

villages located in the northwestern part of the rural district. As illustrated in Figure 7, the highest density of groundwater extraction wells is also concentrated in this section of the study area. Therefore, the occurrence of successive drought periods and the decline of surface water resources in the region are likely to intensify groundwater extraction to meet agricultural water demand, ultimately resulting in a decline in groundwater levels across the area.

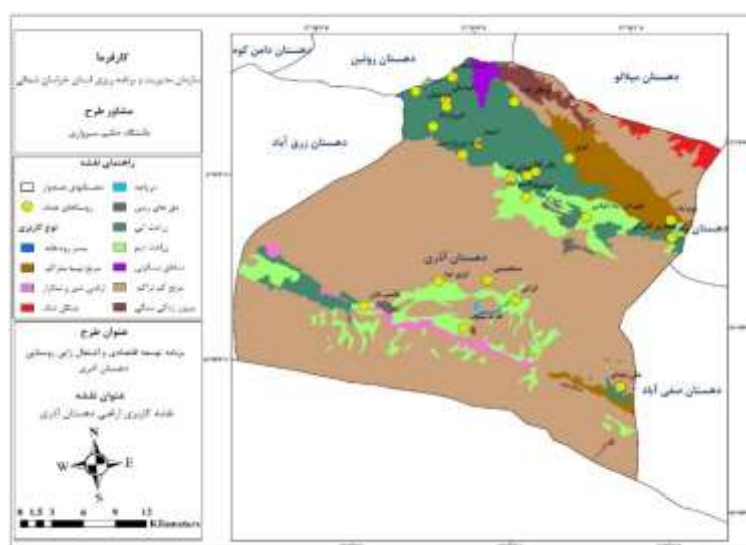


Figure 6. Spatial Distribution of Land Use Categories in Azari Rural District



Figure 7. Examples of Vegetation Cover in Azari Rural District

4.2. Description, Analysis, and Interpretation of the Agricultural Production System in the Target Villages

One of the most important considerations in designing employment generation and rural development programs is understanding the production system, market conditions, and livelihood mechanisms of rural communities. In practice, development and employment policies should be formulated based on the capabilities, comparative advantages, and endogenous potential of each region. Achieving this objective requires a comprehensive assessment of production conditions across the principal productive sectors, including agriculture and livestock production as the main pillars of rural economies, as well as industry, services, and tourism.

Accordingly, this section examines the current conditions of the target villages in terms of production structure, major products, and development potential. It should be noted that the data used in this section were compiled from a

combination of official sources and field-based investigations, including governmental and provincial institutions such as the Agricultural Jihad Organization and the Industry and Mining Organization, alongside field observations and local assessments. Particular attention was given to incorporating field evidence and local observations into the interpretation of findings in order to provide a more context-sensitive and comprehensive analysis. The following sections discuss the main productive sectors that constitute the foundation of the rural production system.

4.2.1. Agricultural Production System

Figure 8 presents the per capita irrigated agricultural land across the target villages. Based on the results, Sanjebini and Abri Tappeh villages exhibit the lowest per capita irrigated farmland, whereas Valiabad records the highest value. It should be noted that this figure represents per capita land availability only, calculated by dividing the total area of irrigated agricultural land in each village by the number of households.

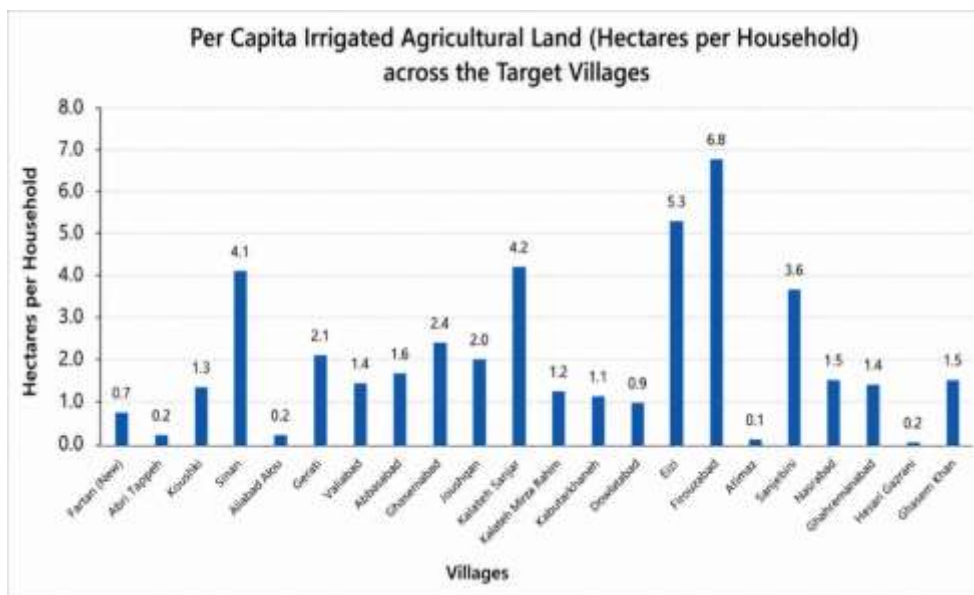


Figure 8. Per Capita Irrigated Agricultural Land across the Target Villages

Figure 9 presents the per capita orchard land area per household across the target villages. Based on the results, Fartan and Atimaz villages exhibit the lowest per capita orchard land availability, whereas Hesari Gazrani records the highest per capita

value. It should be noted that this indicator reflects only per capita orchard land availability and was calculated by dividing the total orchard area of each village by the corresponding number of households.

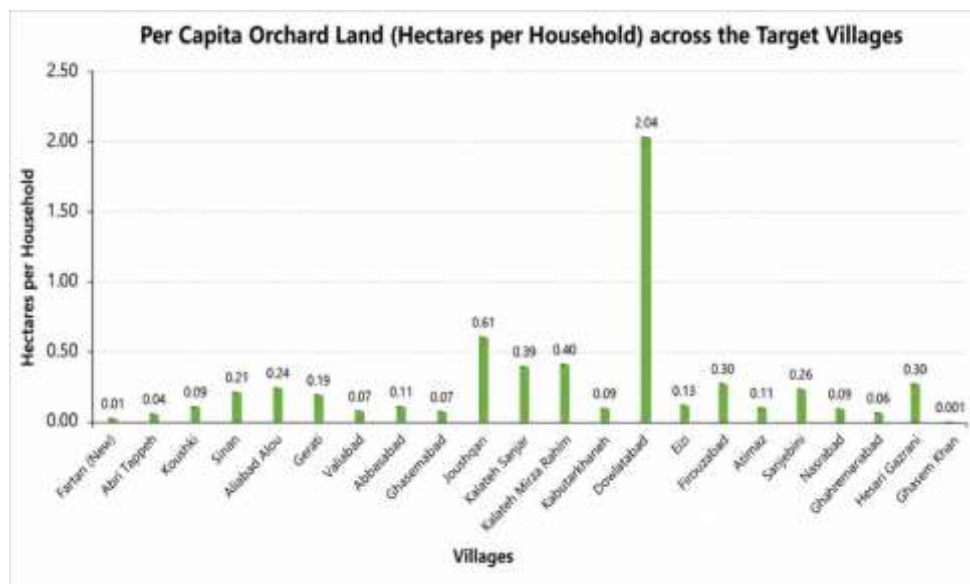


Figure 9. Per Capita Orchard Land per Household across the Target Villages

In most villages of Azari Rural District, agriculture constitutes the principal economic activity and the primary source of household income, although not all villages benefit equally from agricultural advantages and production capacity. The majority of agricultural production in the district is based on

irrigated cultivation, while rainfed farming accounts for only a limited share of total agricultural activity. In practice, rainfed cultivation is limited to a small number of villages with relatively favorable environmental conditions, where only wheat and barley are cultivated under

rainfed systems. However, according to local residents, the productivity of these activities remains relatively low. This condition is largely attributable to the predominance of arid and low-precipitation climatic conditions across most parts of the district.

Among irrigated crops, wheat and barley occupy the largest proportion of cultivated land. Specifically, wheat and barley account for 32.4% and 27.2% of the total cultivated area, respectively, representing the dominant agricultural products of the district. Following these crops, watermelon and melon collectively account for approximately 13% of the cultivated area. Overall, wheat, barley, watermelon, and melon together occupy nearly 73% of the total cultivated land area in Azari Rural District. Other important agricultural products with shares exceeding 1% of the cultivated area include cumin, onion, cotton, tomato, alfalfa, sugar beet, and saffron.

4.2.2. Livestock Production System

Alongside crop cultivation, livestock production plays a significant role in the economy of Azari Rural District. Due to the migration and permanent settlement of a considerable number of Kurdish nomadic households from the Milanlu region into this district over recent decades, the area currently

supports a substantial population of small livestock. However, during the warmer months of the year, many of these pastoral households continue their seasonal migration toward the northern parts of the district, the Milanlu Rural District, and the foothills of Shah Jahan Mountain, before returning to Azari Rural District for permanent residence. This seasonal mobility pattern should be taken into consideration when designing livestock-related policies and development interventions, as a significant proportion of livestock producers in the area continue to maintain transhumance practices despite being residentially settled within the district.

Livestock production is practiced, to varying degrees, across nearly all villages of the district; however, herd size and production intensity differ according to local climatic and environmental conditions. As shown in the findings, Kalateh Mirza Rahim, Fartan (New and Old), and Ghahremanabad villages each account for approximately 10% of the total small livestock capacity of the district, indicating their relatively prominent position within the local livestock production system.

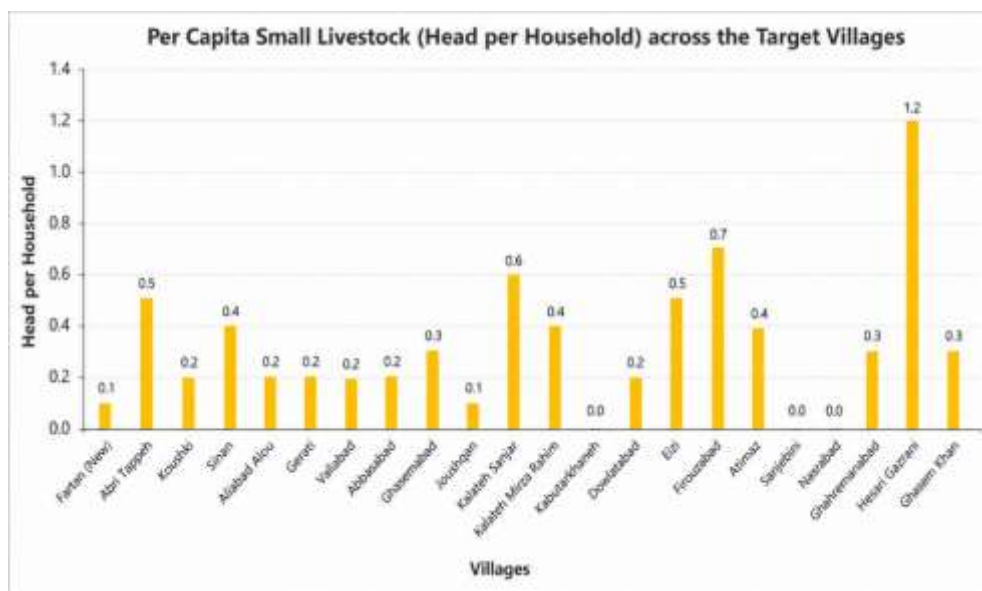


Figure 10. Per Capita Large Livestock Holdings per Household across the Target Villages

Figure 10 presents the per capita small livestock holdings per household across the target villages. Based on the results, Koushki and Sanjebini villages exhibit the lowest levels of per capita

small livestock ownership, whereas Sanjebini records the highest per capita value. It should be noted that this indicator reflects the relative availability of small livestock at the household

level and provides a comparative understanding of livestock distribution among the target villages.

4.3. Identification and Feasibility Assessment of Value Chains, Production Systems, and Business Clusters in Azari Rural District

4.3.1. Value Chain of Livestock and Livestock-Related Products

One of the most important sectors in Azari Rural District, which has considerable potential to stimulate regional prosperity and economic growth through proper supply chain design and implementation, is the livestock sector and its associated value chain. In addition to generating employment opportunities, strengthening this value chain can contribute to income growth and broader regional development. The livestock supply and value chain encompasses multiple stages, extending from input provision to final product delivery.

At the initial stage, which involves livestock feed supply as a key production input, Azari Rural District possesses the capacity to establish several forage storage facilities and silos, as well as livestock feed production units. If strategically located, these facilities could not only reduce production risks and supply concerns among livestock producers but also create additional employment opportunities within the district.

At this stage, public and governmental institutions particularly the Agricultural Jihad Organization should also play an active role. This involvement is especially important during drought periods, when these institutions can support livestock producers through more efficient procurement and distribution of feed inputs via storage and processing facilities.

The next stage concerns livestock production itself. Nearly all villages within the district demonstrate the capacity to engage in both small and large livestock production, largely due to the existence of local knowledge, production experience, and community interest in livestock husbandry. At this stage, the establishment of semi-industrial livestock farming complexes, particularly for cattle breeding and production, may also represent a viable development strategy for strengthening the livestock production system and enhancing regional economic performance.

Parallel to the production stage, the district requires supporting infrastructure, including a livestock breeding improvement center and

veterinary service units, to strengthen and sustain livestock production activities. Establishing such facilities can contribute not only to higher productivity and increased income but also to improving the adaptation of livestock breeds to local environmental conditions and reducing livestock mortality rates.

In addition, the involvement of experts from specialized institutions, particularly veterinary services, together with collaboration with regional universities to promote scientific livestock production practices, should be prioritized as a means of enhancing production efficiency. In this regard, capacity building and technical training for local communities should become an integral component of the programs implemented by the Agricultural Jihad Organization and the Technical and Vocational Training Organization in the region. Following the livestock production stage, processing and utilization of livestock outputs constitute the next critical component of the value chain. The establishment of dairy production, processing, and packaging workshops for traditional local products including local butter, clarified animal butter, traditional yogurt, Cream, cheese, and related products marketed under a regional brand, could create sustainable employment opportunities across the rural district. The location of such facilities should be determined based on local comparative advantages and production capacities, allowing them to evolve into recognized regional brands in the medium and long term.

The products generated through these processing units not only serve as one of the key links connecting the local value chain to markets beyond the district and county boundaries but can also contribute to tourism development through local markets and rural product experiences. Modern distribution companies operating around a district-level brand identity could play an important role in maintaining the integrity and efficiency of this value chain. In addition to dairy products, livestock meat and hides represent important components of the value chain. Considering the ongoing construction of the Esfarayen livestock slaughterhouse and livestock market in the Fartan area, this segment of the chain is expected to operate in close interaction with surrounding rural districts. Furthermore, establishing a leather tanning workshop adjacent to the slaughterhouse could increase

value added through more efficient utilization and processing of livestock hides.

At the same time, given the geographical proximity of Azari Rural District to Sabzevar County in Razavi Khorasan Province, the livestock market of Sabzevar may also function as a supporting market hub for this sector. Accordingly, market access constraints for meat products are expected to remain limited, while stronger supply-chain integration with neighboring districts and counties

can be achieved. Beyond the production of meat and milk as the principal outputs of the livestock value chain, by-products such as wool should also receive strategic attention. Establishing wool collection, shearing, and processing facilities at the district level, followed by yarn production through spinning workshops, could not only improve livestock production efficiency but also expand the overall value chain.

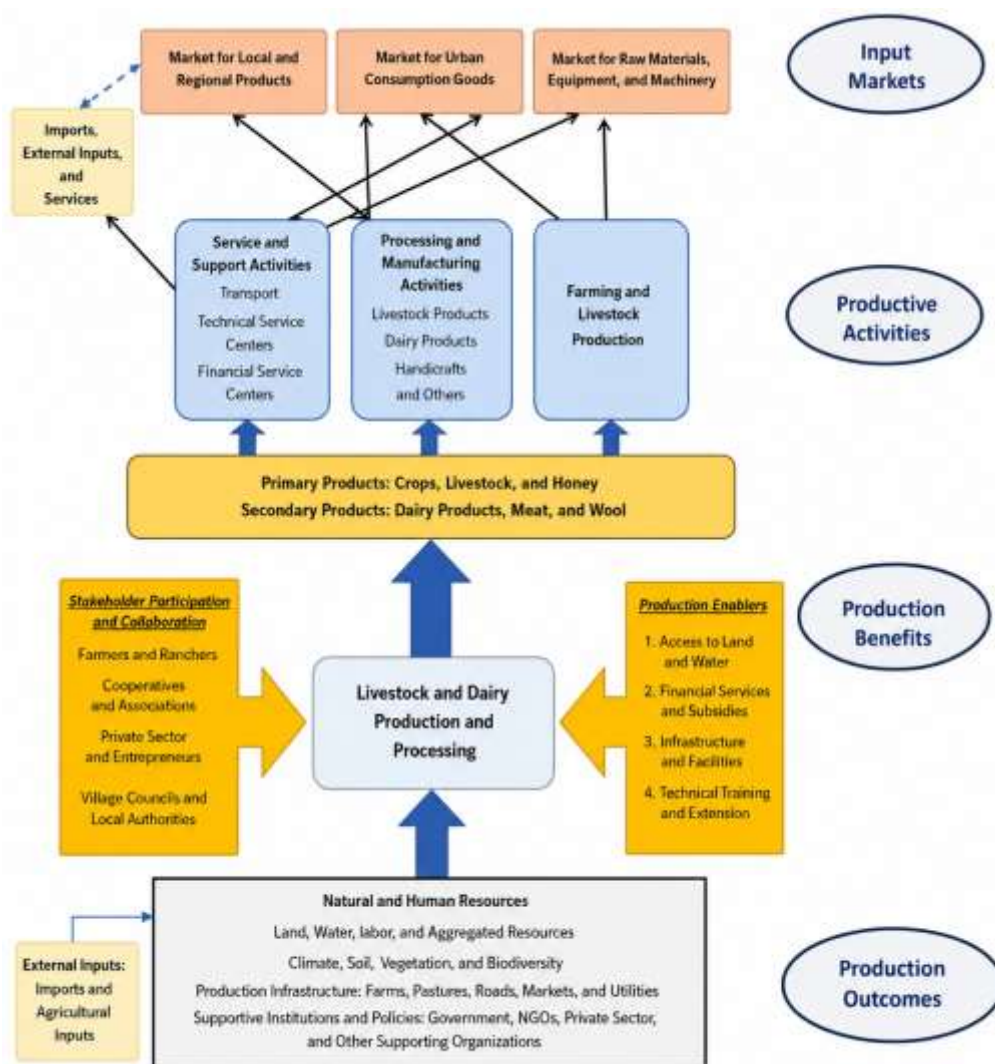


Figure 11. Livestock and Livestock-Related Products Value Chain Framework

Subsequently, small-scale dyeing workshops could generate additional value added and convert processed yarn into usable skeins for other production sectors and handicraft industries. Moreover, such processing facilities could partially resolve existing market limitations for wool

products within the district. Unlike the current situation where sheep wool is largely underutilized and lacks an organized market structure these facilities would enable year-round operations, storage capacity, and distribution to neighboring counties and provinces.

This approach would also establish functional linkages between the livestock supply chain and the handicraft value chain within the district. In practice, the outputs of spinning and dyeing workshops could serve as raw materials for local carpet-weaving workshops and related handicraft activities. Figure 11 summarizes the overall process of the livestock-sector value chain.

4.3.2. Value Chain of Honey Production

Another value chain that can be developed based on the existing capacities of Azari Rural District is the honey production value chain. As demonstrated in the section on economic potentials, Azari Rural District—particularly with Fartan serving as a production center alongside other suitable villages—holds a distinguished position in honey

production within Esfarayen County and even North Khorasan Province. Therefore, strengthening the honey supply chain has the potential to generate value added, create employment opportunities, and contribute significantly to the district's economic development.

At the input stage, the district already benefits from a relatively skilled and motivated labor force engaged in beekeeping activities. Nevertheless, further expansion of this sector requires targeted training programs delivered through institutions such as the Agricultural Jihad Organization and the Technical and Vocational Training Organization. Regarding other production inputs, including sugar supply and environmental conditions, no major constraints currently exist.

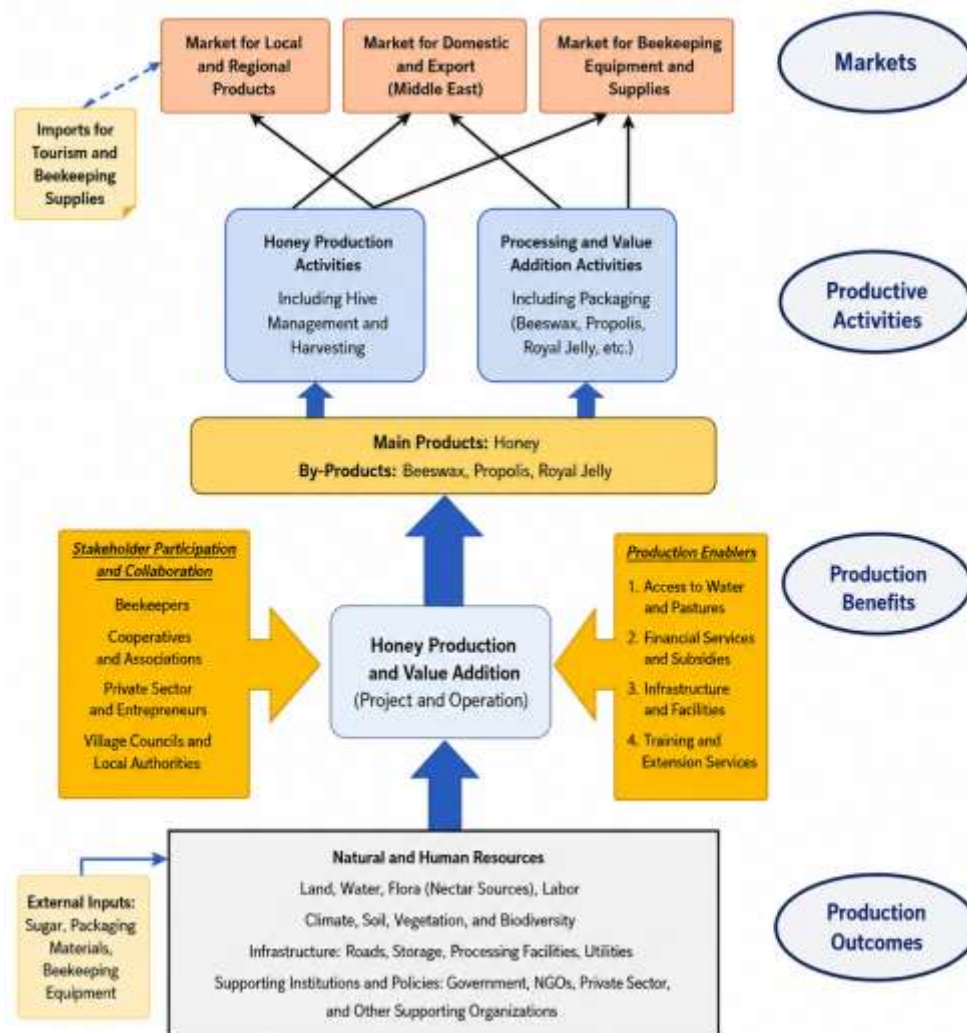


Figure 12. Honey Production Value Chain in Azari Rural District

At the production stage, facilitating licensing procedures for beekeeping operations and providing financial support mechanisms could promote the expansion of apiaries and increase honey production capacity. Training and technical capacity building for beekeepers also remain critical at this stage. In addition, local agricultural service centers can support production processes by offering technical services and introducing measures to improve productivity and production efficiency. Establishing workshops for the manufacture of beekeeping equipment may also facilitate production activities and strengthen local production networks.

Within this value chain, post-production processing constitutes another essential component of value creation. Expanding processing and packaging facilities based on regional honey branding, together with establishing workshops for the production and refining of beeswax and propolis, could substantially increase the value added of locally produced honey. At the final stage, honey products can be marketed at different spatial scales, including local county markets, provincial markets, neighboring provinces, and export destinations. It is noteworthy that export markets for the region's honey already exist, and a considerable proportion of local honey production is currently sold in Afghanistan. Through the implementation of the proposed interventions, export volumes could be expanded further, generating significant economic benefits for both the district and the province.

Moreover, organizing local honey festivals during peak harvesting seasons and establishing permanent regional honey exhibition and sales centers could contribute to promoting and institutionalizing the regional honey brand over the medium term. In addition, the role of digital platforms and online channels in marketing, sales, and branding of local honey products should not be overlooked. [Figure 12](#) illustrates the honey value chain in Azari Rural District.

5. Discussion and Conclusion

The present study aimed to identify the economic potentials of Azari Rural District and to develop a value chain-based framework for rural employment generation by integrating spatial analysis, field investigations, and stakeholder consultations. The findings demonstrate that rural employment opportunities in the study area extend

far beyond primary agricultural production and can be substantially expanded through the development of integrated value chains. Among the identified sectors, livestock production and honey production emerged as the two most promising value chains because of their comparative advantages, existing production capacity, local knowledge, and opportunities for downstream processing and value addition.

These findings directly address the first research question concerning the comparative economic advantages of the study area. The results indicate that livestock husbandry, honey production, irrigated agriculture, and related processing industries represent the principal endogenous capacities of Azari Rural District. Rather than relying solely on increasing agricultural production, the study shows that employment generation can be achieved by strengthening linkages among production, processing, marketing, and supporting institutions.

The second research question examined which value chains possess the greatest potential for sustainable rural employment generation. The analysis revealed that employment opportunities are distributed across different stages of the production system. In the livestock sector, employment can be created not only through animal husbandry itself but also through feed production, veterinary services, dairy processing, leather processing, wool collection, spinning, dyeing, packaging, transportation, and marketing. Likewise, the honey value chain provides employment opportunities through apiary development, processing and packaging facilities, beeswax and propolis production, branding, digital marketing, and regional distribution networks. These findings confirm that value chain development contributes to employment diversification and increases rural value added.

The third research question focused on the formulation of an integrated rural development strategy. The findings indicate that successful rural employment programs require simultaneous investment in production infrastructure, institutional coordination, technical training, financial support, market development, and spatial planning. Therefore, employment generation should be considered as an integrated regional development process rather than a collection of isolated projects.

The findings strongly support Porter's Value Chain Theory, which argues that competitive advantage is generated through value creation across interconnected production activities rather than within individual production units. In the present study, the proposed value chains demonstrate that substantial employment opportunities emerge from strengthening interactions among suppliers, producers, processors, distributors, and supporting organizations. Similarly, the results are consistent with the principles of Endogenous Rural Development Theory, emphasizing that sustainable rural development should build upon local resources, indigenous knowledge, and community participation. The study also supports the FAO rural value chain approach, which highlights processing, marketing, and institutional coordination as essential components of employment generation and rural economic transformation.

Unlike many previous studies that primarily evaluate agricultural production or rural employment separately, this research integrates GIS-based spatial analysis, field observations, stakeholder participation, and value chain analysis into a single planning framework. This integrated approach enables not only the identification of priority economic sectors but also the spatial allocation of processing facilities and supporting services according to local comparative advantages. Consequently, the study provides a practical framework that can assist regional planners and policymakers in designing place-based employment programs for rural areas.

Policy Implications

Based on the findings, the proposed interventions are prioritized according to implementation feasibility.

Short-term priorities (1–2 years)

- Establish livestock feed storage facilities.
- Develop veterinary and breeding improvement centers.
- Expand honey processing and packaging facilities.
- Provide technical training and extension services.

Medium-term priorities (3–5 years)

- Establish dairy processing workshops.
- Develop wool collection and processing facilities.
- Promote regional branding and digital marketing.

Long-term priorities (5–10 years)

- Develop leather processing industries.
- Expand regional logistics and distribution centers.
- Strengthen export-oriented value chains.

Study Limitations and Future Research

This study primarily focused on identifying priority value chains and suitable spatial locations for employment generation. Detailed financial feasibility analyses, including investment costs, operational costs, benefit-cost ratios, and economic return assessments, were beyond the scope of the present research. Likewise, although the proposed locations shown in [Figures 13 and 14](#) were selected based on production concentration, local capacities, existing settlements, and field investigations, detailed GIS-based accessibility analyses considering road networks, transportation costs, travel time, and infrastructure availability were not conducted. Future studies are encouraged to integrate network analysis, location-allocation modelling, and comprehensive financial feasibility assessments to further optimize the proposed development framework.

Overall, the findings demonstrate that sustainable rural employment in Azari Rural District cannot be achieved solely by increasing agricultural production. Instead, employment generation depends on strengthening integrated value chains that connect production with processing, marketing, institutional support, and regional markets. Livestock and honey production constitute the two strategic sectors with the greatest potential to stimulate local economic development. By combining value chain analysis, spatial planning, and stakeholder participation, this study provides an operational framework for designing rural employment programs that can be adapted to other rural regions with similar socioeconomic and environmental characteristics.

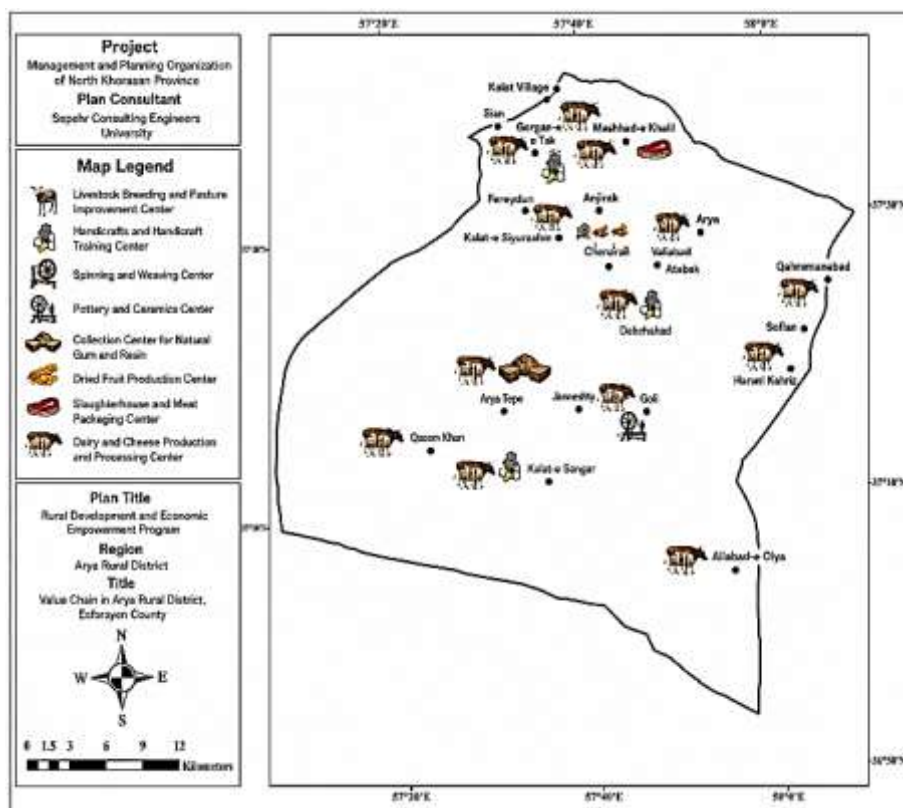


Figure 13. Location of Selected Villages for Completing the Livestock Value Chain

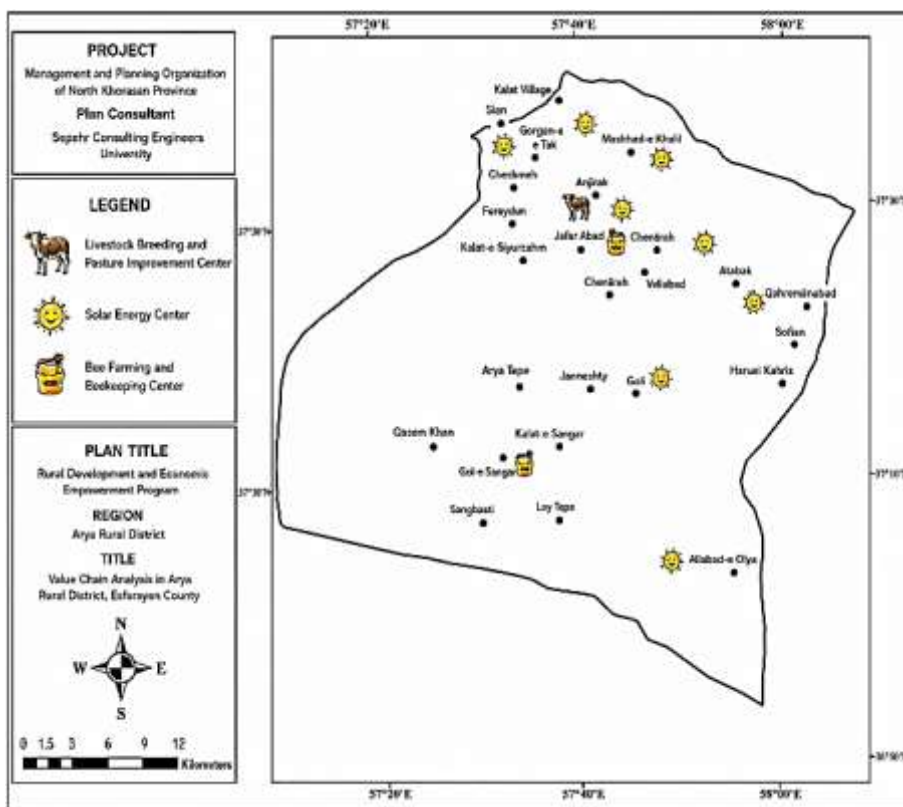


Figure 14. Location of Selected Villages for Completing the Honey Value Chain

Author Contributions

The authors contributed equally to the development and preparation of this research.

Conflict of Interest

The authors declare that there is no conflict of interest regarding the authorship or publication of this article.

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Reference

1. Aiginger, K., & Rodrik, D. (2020). Rebirth of Industrial Policy and an Agenda for the Twenty-First Century. *Journal of Industry, Competition and Trade*, 20(2), 189–207. Retrieved from <https://doi.org/10.1007/s10842-019-00322-3>
2. Alawode, A. (2025). The role of agricultural value chains in enhancing food security and economic development. *International Research Journal of Modernization in Engineering Technology and Science*, 7(5). <https://doi.org/10.56726/IRJMETS75996>
3. Ayyagari, M., Juarros, P., Peria, M. S. M., & Singh, S. (2021). Access to finance and job growth: Firm-level evidence across developing countries. *Review of Finance*, 25(5), 1473–1496. Retrieved from <https://doi.org/10.1093/rof/rfab003>
4. Bahrami, R. (2023). Identifying the key components of job creation in rural communities with emphasis on workshop and manual industries in the rural areas of Sanandaj county. *Journal of Research & Rural Planning*, 12(3), 77-90. <http://dx.doi.org/10.22067/jrpp.v12i3.2307-1052>.
5. Barkhordari, R., Dehghan Dehnavi, H., & Morovati Sharifabadi, A. (2022). Identifying and analyzing factors affecting the excellence and success of small and medium industries using the system dynamics approach. *International Journal of Nonlinear Analysis and Applications*. <https://doi.org/10.22075/ijnaa.2022.28494.3909>
6. Behnia, M., Pourmohammadi, M., & Azizkhani, F. (2021). Iranian labor market policies and regulations. *Majlis Research Center*.
7. Bernanke, B. S. (2020). The new tools of monetary policy: American Economic Association presidential address. *American Economic Review*, 110(4), 943–983. Retrieved from <https://doi.org/10.1257/aer.110.4.943>
8. Bosworth, G., & Turner, R. (2018). Interrogating the meaning of a rural business through a rural capitals framework. *Journal of Rural Studies*, 60, 1–10. <https://doi.org/10.1016/j.jrurstud.2018.02.002>
9. Chukwunweike, J., Dolapo Salaudeen, H. (2025). Advanced Computational Methods for Optimizing Mechanical Systems in Modern Engineering Management Practices. *International Journal of Research Publication and Reviews*. 2025 Mar;6(3):8533-8548. Available from: <https://ijrpr.com/uploads/V6ISSUE3/IJRPR40901.pdf>
10. Farajnia, S., Yousefi, K., & Fadaee, M. (2020). Modeling the unemployment rate of Iran: Structural unemployment, sectoral changes and unanticipated monetary policy. *Economic Research*, Retrieved from https://joer.atu.ac.ir/article_12365_en.html
11. Granja, J., Makridis, C., Yannelis, C., & Zwick, E. (2022). Did the paycheck protection program hit the target? *Journal of Financial Economics*, 119(4), 361–416. Retrieved from <https://www.sciencedirect.com/science/article/pii/S0304405X22001131>
12. Hamermesh, D. S. (2021). Labor demand. In *Labor Demand*. Retrieved from <https://doi.org/10.2307/j.ctv17ppcqn>
13. Harpaa, E., Mocaa, S., & Rus, D. (2016). A Comparative Study of Rural Entrepreneurship Romania – Greece. *Procedia Technology*, 22, 1100-1105. <https://doi.org/10.1016/j.protecy.2016.01.155>.
14. Ma, W., Zheng, H., Boansi, D., Horlu, G., & Owusu, V. (2025). Types of employment and well-being of rural residents: A multinomial endogenous switching regression application. *Economic Modelling*, 147, 107047. <https://doi.org/10.1016/j.econmod.2025.107047>
15. Malisauskaite, G., Nizalova, O., & Xanthopoulou, D. (2022). Unemployment and well-being of Europeans across the life cycle: The role of countries' macroeconomic situation. *Social Indicators Research*, 162, 1387–1412. <https://doi.org/10.1007/s11205-022-02892-y>
16. Mankiw, N. G. (2024). *Principles of Macroeconomics* (4). Instructor's Manual with Solutions Manual. Retrieved from https://www.academia.edu/download/53871586/solutions_of_book.pdf
17. Markeson, B., & Deller, S. (2012). Growth of Rural Us Non-Farm Proprietors with a Focus on Amenities. *Review of Urban & Regional Development Studies*, 24(3), 83-105. <https://doi.org/10.1111/rurd.12000>.
18. Martin, L., McNeill, T., & Warren-Smith, I. (2013). Exploring business growth and eco innovation in rural small firms. *International Journal of Entrepreneurial Behavior & Research*, 19(6), 592-610. <https://doi.org/10.1108/IJEBR-10-2012-0118>

19. Narrod, C., Roy, D., Okello, J., Avendan, B., and Rich, K. (2009). Thorat A. Public private partnerships and collective action in high value fruit and vegetable supply chains. *Food policy*. 2009 Feb 1;34(1):8-15. <https://doi.org/10.1016/j.foodpol.2008.10.005>
20. Omri, A., Frikha, M. A., & Bouraoui, M. A. (2015). An empirical investigation of factors affecting small business success. *Journal of Management Development*, 34(9), 1073–1093. <https://doi.org/10.1108/JMD-07-2013-0088>
21. Pourmohammadi, M., & Yousefi, K. (2021). Pandemic in labor market: Evidence from Iran. *The Journal of Planning and Budgeting*. Retrieved from http://jpbud.ir/browse.php?a_code=A-10-1072-3&sid=1&slc_lang=fa&ftxt=1&pure_pdf=1.
22. Pourmohammadi, M., Taiebnia, A., & Yousefi, K. (2025). Microfinance as a Catalyst for Change: Evaluating the Success of Iran's Rural Employment Program from 2017 to 2022. *Iranian Economic Review*, 29(3), 1040-1067. <https://doi.org/10.22059/ier.2025.390349.1008194>
23. Tian F. A. (2017). Supply chain traceability system for food safety based on HACCP, blockchain & Internet of things. In 2017. International conference on service systems and service management 2017 Jun 16 (pp.1-6). IEEE.
24. Tripathi, R., Yadav, U. S., Tripathi, M. A., Rawat, R., & Kushwaha, J. (2022). Performance of women artisans as entrepreneurs in ODOP in Uttar Pradesh to boost economy: Strategies and away towards Global Handicraft Index for small business. *Academy of Marketing Studies Journal*, 26(1), 1-19. <https://doi.org/1528-2678-26-1-104>
25. Watts, N., Amann, M., Arnell, N., Ayeb-Karlsson, S., Beagley, J., Belesova, K., Boykoff, M., Byass, P., Cai, W., Campbell-Lendrum, D., Capstick, S., Chambers, J., Coleman, S., Dalin, C., Daly, M., Dasandi, N., Dasgupta, S., Davies, M., Di Napoli, C., ... Costello, A. (2021). The 2020 report of the Lancet Countdown on health and climate change: Responding to converging crises. *The Lancet*, 397(10269), 129–170. [https://doi.org/10.1016/S0140-6736\(20\)32290-X](https://doi.org/10.1016/S0140-6736(20)32290-X)
26. Zou, B., & Mishra, A. K. (2024). Modernizing smallholder agriculture and achieving food security: An exploration in machinery services and labor reallocation in China. *Applied Economic Perspectives and Policy*, 46(4), 1662–1691. <https://doi.org/10.1002/aepp.13433>



برنامه توسعه اقتصادی و اشتغال‌زایی روستایی در استان خراسان شمالی (مطالعه موردی: دهستان آذری، شهرستان اسفراین)

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چکیده مبسوط

۱. مقدمه

توسعه اقتصادی و ایجاد اشتغال پایدار از مهم‌ترین الزامات توسعه روستایی، کاهش فقر، ارتقای معیشت و جلوگیری از مهاجرت روستاییان به شمار می‌رود. در مناطق روستایی، اتکال صرف به تولید اولیه کشاورزی به دلیل محدودیت منابع، نوسانات قیمت، خشکسالی، تغییرات اقلیمی و ضعف دسترسی به بازار، ظرفیت محدودی برای ایجاد اشتغال پایدار دارد. از این رو، توجه به فعالیت‌های مکمل، صنایع کوچک، فراوری محصولات و به‌ویژه توسعه زنجیره‌های ارزش می‌تواند زمینه افزایش ارزش افزوده، تنوع‌بخشی به اشتغال و تقویت اقتصاد محلی را فراهم کند. زنجیره ارزش کشاورزی مجموعه‌ای از فعالیت‌ها و کنشگرانی است که از تأمین نهاده، تولید و فراوری تا حمل‌ونقل، بازاریابی و مصرف نهایی را دربرمی‌گیرد و از طریق تقویت پیوند میان این مراحل می‌تواند به افزایش درآمد و اشتغال روستایی منجر شود.

با وجود مطالعات متعدد درباره توسعه روستایی و اشتغال، در سطح دهستانی توجه محدودی به طراحی برنامه‌های مکان‌محور و عملیاتی شده است که به‌طور همزمان از تحلیل فضایی، داده‌های کمی، مشارکت ذی‌نفعان و تحلیل زنجیره ارزش استفاده کنند. پژوهش حاضر با هدف شناسایی ظرفیت‌ها و مزیت‌های اقتصادی دهستان آذری شهرستان اسفراین و تدوین برنامه‌ای یکپارچه برای توسعه اقتصادی و اشتغال‌زایی روستایی انجام شده است. نوآوری اصلی پژوهش، ارائه چارچوب بومی زنجیره ارزش برای شناسایی بخش‌های اقتصادی اولویت‌دار، تعیین مکانی فعالیت‌های تولیدی و فراوری و ارائه نقشه راه عملیاتی مبتنی بر ظرفیت‌های محلی و مشارکت ذی‌نفعان است.

۲. مبانی نظری تحقیق

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مبنای نظری پژوهش بر پیوند میان توسعه اقتصادی روستایی، اشتغال پایدار و زنجیره ارزش استوار است. در رویکرد زنجیره ارزش، تولید به‌عنوان یک فعالیت منفرد در نظر گرفته نمی‌شود، بلکه مجموعه‌ای از حلقه‌های مرتبط شامل تأمین نهاده، تولید، جمع‌آوری، فراوری، ذخیره‌سازی، بازاریابی و مصرف مورد توجه قرار می‌گیرد. همچنین، شبکه‌ای از بازیگران شامل تولیدکنندگان، بخش دولتی، بنگاه‌های خصوصی، کارآفرینان، نهادهای مالی و سایر ذی‌نفعان در این زنجیره مشارکت دارند. کارآمدی زنجیره نیز به نحوه هماهنگی جریان کالا، اطلاعات و سرمایه و سازوکارهای حکمرانی وابسته است. بر این اساس، پژوهش حاضر ضمن بهره‌گیری از نظریه زنجیره ارزش پورتر، با نظریه توسعه روستایی درون‌زا و رویکرد زنجیره ارزش روستایی FAO نیز همخوان است؛ زیرا بر استفاده از منابع و دانش بومی، مشارکت جامعه محلی، فراوری محصولات، توسعه بازار و هماهنگی نهادی تأکید دارد. بنابراین، اشتغال روستایی نه صرفاً از طریق افزایش تولید، بلکه از طریق تقویت پیوند میان تولید، فراوری، بازاریابی، خدمات پشتیبان و بازارهای منطقه‌ای دنبال می‌شود.

۳. روش تحقیق

پژوهش از نظر هدف کاربردی و از نظر روش، ترکیبی (کمی - کیفی) است. محدوده مطالعه، ۲۳ روستای دهستان آذری در بخش مرکزی شهرستان اسفراین است. در بخش کمی، اطلاعات جمعیتی، اقتصادی، کشاورزی، دامداری، منابع آب، زیرساخت‌ها و خدمات با استفاده از داده‌های مرکز آمار ایران، سازمان مدیریت و برنامه‌ریزی و دستگاه‌های اجرایی گردآوری و با روش سرشماری در سطح روستاها بررسی شد. همچنین، پرسشنامه‌ای شامل ۱۳ جدول اطلاعاتی درباره خدمات آموزشی، آب، انرژی، حمل‌ونقل، گردشگری، فناوری اطلاعات، فعالیت‌های اقتصادی، کشاورزی و اشتغال تکمیل شد. در بخش کیفی، از مصاحبه‌های باز و چهره‌به‌چهره، بحث‌های گروهی

توسعه بازارهای منطقه‌ای و صادراتی دارای ظرفیت قابل توجه تشخیص داده شد.

۵. بحث و نتیجه‌گیری

نتایج نشان می‌دهد که ایجاد اشتغال پایدار در دهستان آذری صرفاً از طریق افزایش تولید کشاورزی امکان‌پذیر نیست، بلکه مستلزم تکمیل و یکپارچه‌سازی زنجیره‌های ارزش و ایجاد پیوند میان تولید، فرآوری، بازاریابی، زیرساخت، آموزش، حمایت مالی و نهادهای پشتیبان است. دامداری و تولید عسل به دلیل برخورداری از مزیت نسبی، ظرفیت تولید، دانش بومی و امکان توسعه فعالیت‌های پایین‌دستی، دو زنجیره راهبردی منطقه محسوب می‌شوند. این یافته با نظریه زنجیره ارزش پورتر و اصول توسعه روستایی درون‌زا سازگار است و نشان می‌دهد که مزیت رقابتی و اشتغال از تعامل میان حلقه‌های مختلف زنجیره ایجاد می‌شود. بر مبنای نتایج، در کوتاه‌مدت ایجاد مراکز ذخیره خوراک دام، مراکز دامپزشکی و اصلاح نژاد، توسعه فرآوری و بسته‌بندی عسل و آموزش‌های فنی پیشنهاد می‌شود؛ در میان‌مدت، ایجاد کارگاه‌های فرآوری لبنیات، مراکز جمع‌آوری و فرآوری پشم و توسعه برندسازی و بازاریابی دیجیتال و در بلندمدت توسعه صنایع فرآوری پوست، مراکز لجستیک و تقویت زنجیره‌های صادرات‌محور ضرورت دارد. در مجموع، چارچوب پیشنهادی با ترکیب تحلیل زنجیره ارزش، برنامه‌ریزی فضایی و مشارکت ذی‌نفعان، می‌تواند مبنایی عملیاتی برای برنامه‌ریزی اشتغال مکان‌محور در دهستان آذری و مناطق روستایی دارای شرایط مشابه فراهم آورد.

کلیدواژه‌ها: توسعه اقتصادی روستایی؛ اشتغال‌زایی روستایی؛ تحلیل زنجیره ارزش؛ توسعه کشاورزی؛ پژوهش ترکیبی؛ دهستان آذری؛ شهرستان اسفراین؛ خراسان شمالی.

تشکر و قدردانی

این مقاله حاصل طرح پژوهشی با عنوان اشتغال‌زایی روستایی می‌باشد که با حمایت‌های مالی سازمان مدیریت و برنامه‌ریزی استان خراسان شمالی انجام شده است.

متمركز و تكنيك درخت مشكلات استفاده شد. دهياران، اعضاي شوراهای روستا، کارآفرینان، افراد مطلع و ساکنان محلی در فرایند گردآوری اطلاعات مشارکت داشتند. علاوه بر این، بازدیدهای میدانی و مشاهده مستقیم محیط روستاها، اراضی کشاورزی، باغ‌ها، منابع آب و سایر ظرفیت‌ها انجام شد. داده‌های فضایی مربوط به مخاطرات طبیعی، پوشش گیاهی، منابع آب و پراکنش سکونتگاه‌ها نیز در محیط GIS تحلیل و نقشه‌های مرتبط تهیه شد. برای داده‌های جمعیتی و برخی مؤلفه‌های اقتصادی از آمار توصیفی و مدل‌های پیش‌بینی جمعیت و برای داده‌های کیفی از تحلیل تفسیری و توصیفی استفاده شد. اعتبار داده‌ها نیز از طریق تطبیق آمار رسمی با مشاهدات میدانی و دیدگاه ذی‌نفعان افزایش یافت.

۴. یافته‌های تحقیق

یافته‌ها نشان داد که کشاورزی و دامداری مهم‌ترین فعالیت‌های اقتصادی و پایه اصلی معیشت خانوارهای دهستان آذری هستند. در بخش کشاورزی، گندم و جو به ترتیب با ۳۲/۴ و ۲۷/۲ درصد بیشترین سهم از سطح زیرکشت را دارند و همراه با هندوانه و خربزه حدود ۷۳ درصد سطح زیرکشت را به خود اختصاص می‌دهند. در بخش دامداری نیز ظرفیت قابل توجهی از دام سبک در روستاهای دهستان وجود دارد. در کنار این فعالیت‌ها، ظرفیت‌های صنعتی و معدنی مرتبط با مصالح ساختمانی نیز شناسایی شد. با این حال، تحلیل زنجیره‌های ارزش نشان داد که **زنجیره دام و محصولات دامی و زنجیره تولید عسل** بیشترین ظرفیت را برای ایجاد اشتغال پایدار و افزایش ارزش افزوده دارند. در زنجیره دام، ظرفیت‌هایی مانند تولید و ذخیره خوراک دام، دامداری، خدمات دامپزشکی، اصلاح نژاد، فرآوری لبنیات، فرآوری پوست، جمع‌آوری و فرآوری پشم، ریسندگی، رنگرزی، بسته‌بندی، حمل‌ونقل و بازاریابی شناسایی شد. در زنجیره عسل نیز توسعه زنبورداری، تولید تجهیزات، فرآوری و بسته‌بندی عسل، تولید موم و برهموم، برندسازی، بازاریابی دیجیتال و

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