



Analyzing the Effects of Rural Economy Diversification on the Livelihood Assets of Rural Households (Case Study: Khavmirabad District of Marivan County)

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Abstract

Purpose- In this applied study, which has been done by descriptive-analytical method, various agricultural and non-agricultural economic activities, and their impacts on the villagers' livelihood assets are analyzed.

Design/methodology/approach- Data collection was both theoretical using documentary method and empirical using interviews, observation, and distribution of questionnaires among 260 heads of households in the villages of the district. The sample size was determined by the Cochran method from a population size of 2736 households. The questionnaires were distributed among random heads of households as well as the sample villages that were selected by a stratified method.

Findings- The analysis showed that the created economic diversity was able to increase the villagers' livelihood capital, and among them, financial capital has had the greatest impact on improving the level of livelihood capital for the villagers.

Research limitations/implications- Among the limitations of the study were the dispersion of a large number of villages in the border area, lack of easy access to these villages, lack of cooperation in providing information, and the villagers' problem with completing questionnaires.

Practical implications- The practical solutions of the study can be: prepare for the development and expansion of tourism (rural, commercial, and nature tourism), Making the necessary legal, administrative, and supportive bases for the development of entrepreneurship and domestic & foreign private sector investment (Iraqi Kurdistan region), Development of trade in goods from the border markets, and Support the formation of fundraising from the micro-savings in the villages for investment and launching production activities in the villages of the district.

Originality/Value- Today, the predominant approach of rural planning to eliminate poverty as the most important obstacle to rural development is to provide sustainable livelihoods for villagers. In this regard, the main strategy of this approach is to diversify the rural economy and to bring about various agricultural and non-agricultural income resources in rural areas, so that the villagers' assets will be increased and/or preserved, which is the core of the sustainable livelihood approach and the main factor of sustainable rural livelihood.

Keywords- Economic diversity, Sustainable livelihoods, Livelihood assets, Khavmirabad District.

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1. Introduction

Diversification of rural economic activities has been emphasized in the sustainable livelihood approach (Chandima, 2010; DFID, 2008). It is defined as the process by which rural households have a variety of economic options to improve their quality of life. The diversity of rural economic activities causes the sustainability of the rural system by removing the main obstacle, poverty, to rural development because it brings more flexibility and resilience to the villagers in the face of sudden crises and economic, social, and natural turbulences. By and large, diversifying the rural economy provides more possibilities and opportunities to change unstable and declining conditions into sustainable conditions (Ellis, 1999). It is, in fact, one of the principles of the human development approach, as it leads to freedom in decision-making for villagers and improvement in their capabilities (Morse, 2013). Bebbington (2010) believes that the main reason for the low livelihood status for villagers is their inability to defend and protect their assets against crises, and this requires the provision and creation of new sources of livelihood (Lax & Krug, 2013). The diversification of the rural economy and its benefits will pave the way for participation and responsibility of local people in relation to environmental protection and political and social participation in both short and long terms, and thus, in addition to eliminating economic poverty, the poverty cycle also disappears (Warren, 2002). The sustainable livelihood approach puts stress on assets, as they determine people's ability to escape crises and shocks. They also present options and strategies to the poor to escape poverty. Thus, it is the number of assets that lead to the required livelihood outcomes, the most important of which is poverty alleviation (Christensen, 2008). Resources in this approach work as assets that include five main dimensions, namely human, physical, financial, social, and natural assets (Ellis & et al, 2004). In this regard, diverse livelihood opportunities are a fundamental principle for the survival of declining rural environments, especially for its role in maintaining and increasing the villagers' assets (Ellis, 1999: 8). Although the history of rural economic diversification policies dates back to the Sixth

Plan before the 1979 revolution, the effects of these policies can be pursued to the First and Second Plans after the revolution. The relative growth in rural incomes was felt by villagers, due to economic diversification in rural areas with an emphasis on the development of non-agricultural sectors (Karimzadeh et al., 2016). Many economic diversification programs were designed and implemented in the villages in the study area (Khavmirabad District of Marivan County) as one of the marginal and deprived districts whose inhabitants have a low level of livelihood because of being remote and marginalized. This is reflected in the widespread migration to Marivan City, the evacuation, and the reduction of the population living in the villages of the district in previous years. Therefore, some initiatives were implemented by development planners and officials. In one of these initiatives, they established border markets, due to the major potential of the border region. Now, these markets have become a suitable alternative for informal smuggling activities and have been accepted by local people. In addition to this, the dynamism of another source of livelihood, such as husbandry, set for daily collection of milk from the villages. Relevant organizations of the region have also been working on the economic diversification of the region and promoting activities such as training the villagers for beekeeping, encouraging horticulture by providing facilities, and for land integration and labor-intensive and profitable farming to boost jobs. This way, diversification has helped the agricultural economy in the region. The prosperity of home-based businesses such as carpet weaving among the villagers is another way for economic diversification in the villages of the region, which is now very popular among rural women. These activities have led to the growth of service businesses, including driving, shopping, and even investing in lucrative urban activities. Considering the importance of maintaining and increasing the assets of villagers as the core of the approach to sustainable livelihood and its direct and effective relationship with economic diversification, the main questions of the research are as follows:

Has the diversification of the rural economy of Khavmirabad District improved the assets of the villagers?

Which of the types of livelihood assets of the villagers has had the greatest impact and improvement in changing the level of livelihood capital of the villagers due to the economic diversification?

2. Research Theoretical Literature

Livelihood is all activities that people do to make a living, access and manage assets (Fang, 2014). The sustainable livelihood approach was noted in the late 1980s, and it also demonstrated the convergence of both theoretical and practical arguments about development (Kaag, 2010). Robert Chambers, a well-known rural theorist, was the initiator of this approach. He defines livelihoods as capabilities, assets, and activities required for making a living (Solesbury, 2003). The sustainable livelihood approach inconsistent with the intervention development approach seeks to maximize the effectiveness of development mediations and programs to help the disadvantaged and poor communities (Morse, 2013). Making a living requires access to tangible and intangible assets. In fact, a livelihood is sustainable when it has good access to livelihood capitals (Mphande, 2016). Livelihood assets as the core of sustainable livelihoods have an undeniable role in achieving sustainable livelihoods of villagers. Indeed, the ability of villagers to escape poverty depends on their access to assets. The amount of livelihood capital and the access of local people to them determines the livelihood strategies for earning a living. This is the level of livelihood capital with which the villagers can have constructive and meaningful interaction with the environment and, most importantly, the ability to change it. There are different types of livelihoods; these assets are both tangible, such as cash, land, etc., and also intangible, for instance, labor force health, social ties, interest in the village, etc. (Mphande, 2016). In sum, the notion of sustainable livelihoods is to classify livelihoods into five categories: human, social, physical, natural, and financial capital (Anderson, 2001: 5); their descriptions are presented as follows:

a) Financial capital- Financial capital refers to any mechanism that reflects the wealth of individuals in society (Mphande, 2016). The resources of financial capital can be classified into two groups. First, cash and the equivalent assets such as livestock, land, etc., and the other external

financial resources that are received through salaries, and benefits from trades or loans (Lax and Krug, 2013).

b) Human capital- Human capital is a combination of knowledge, habits, social behaviors that help to achieve economic benefits in society. These knowledge and habits are acquired through availability of training and skills and talents. Therefore, education and promotion of knowledge and comprehension are the foremost indicators of human capital. Other indicators of human capital include the level of physical and mental health of individuals and communities (Mphande, 2016). The level of skills, skill variety and the status of the human labor force are other indicators that can be examined in human capital (Lax & Krug, 2013).

c) Social capital- The sociologist Bourdieu defines social capital as a set of resources that enable the formation and perpetuation of social identities and interrelationships (Van Kien, 2011). His focus in social capital is on trust, communication, and social participation. Social capital includes social resources such as the formation of informal networks, membership, and formation of formal groups, trust, and social ties that facilitate economic cooperation. Social capital plays a major role in individual and organizational productivity. Social networks are considered as the result of the social capital of societies which causes the formation of mass communication between individuals and the facilitation and coordination of affairs (Mphande, 2016).

d) Natural capital- Natural capital includes the land, water, air, organisms, and all the ecosystems on earth that humans need for survival and well-being (Mphande, 2016). This type of capital refers to natural resources that can be used by villagers to achieve their livelihood aims (Sojasi Gheidari et al., 2015).

e) Physical capital- Physical capital implies the physical requirements or in other words, the necessary infrastructure to provide a livelihood for the villagers (Lax and Krug, 2013: 10). It is a type of asset that converts raw materials into final products and services (Nakiyimba, 2014). Basic infrastructure, such as roads, water and health centers, schools, information and communication technology, as well as livestock and agricultural tools and equipment are all included in physical capital. In addition to these, it also refers to the

built environment that includes residential homes, public places, industries, dams, anchorages, shelters, as well as facilities such as electricity, water, telephone, and critical infrastructure such as hospitals, schools, etc.

One of the main reasons that villagers fail to improve their livelihood is their inability to maintain their existing capital or create new resources and diversify the earnings (IaX & Krug, 2013). Basically, having a variety of activities is a general necessity and not all assets should be used in just one specific activity. In this regard, one of the important ways to increase and improve strategies in the present and future is altering one type of capital to other types or diversifying it (Karimi & Dehkordi, 2015). Given this, the priority of international development organizations that have adopted a sustainable livelihood approach to eliminate rural poverty is diversification of rural economy and livelihood resources (Tanner, 2015). In the sustainable livelihood approach, the ability of rural people to escape poverty depends on access to assets. The more options and assets to select, the easier elimination of rural poverty (Ellis and Allison, 2004). Diversity in rural economy and livelihood means the efforts that rural individuals

and households put in to create new sources of income, employment. This will increase choices to reduce the effects of economic, social, and environmental crises (Assan, 2014). Economic diversity can also refer to the activities of family members to improve social status and standard of living. The overarching principle of the sustainable livelihood approach is that a more diverse life is also more sustainable (Morse, 2013). In this regard, economic diversification makes rural livelihood systems resilient to economic shocks, seasonal and natural crises and reduces their vulnerability (Ellis & Allison, 2004). The sustainable livelihood framework is based on the assumption that people need to use a wide range of assets to achieve their life goals, and that no single asset is sufficient to meet the needs of the people (Sarrafii & Shamsaii, 2010). People and livelihood systems need access to livelihood capital to be able to minimize the level of vulnerability (Tanner, 2015) (Figure 1). Diversity of livelihoods and turning to new sources of livelihood is one of the important strategies in rural households to increase the quality of life and reconstruction from potential threats to their livelihood system (Assan, 2014).

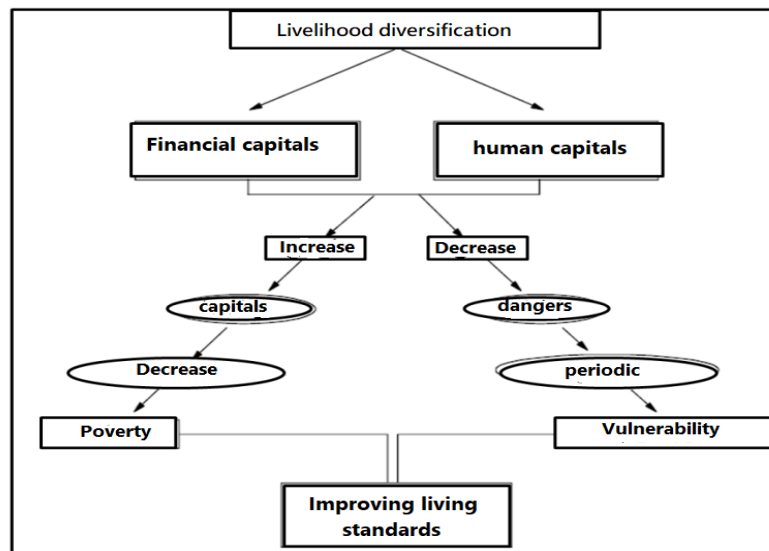


Figure 1: The effect of economic diversification on improving the livelihood level of villagers

(Source: Ellis & Allison, 2004: 13).

As shown in Figure 2, unvaried livelihood or single product systems are based solely on agriculture. These systems cannot overcome

natural and human crises, and thus because of high vulnerability, they will not be able to maintain their assets and reconstruct their livelihood.

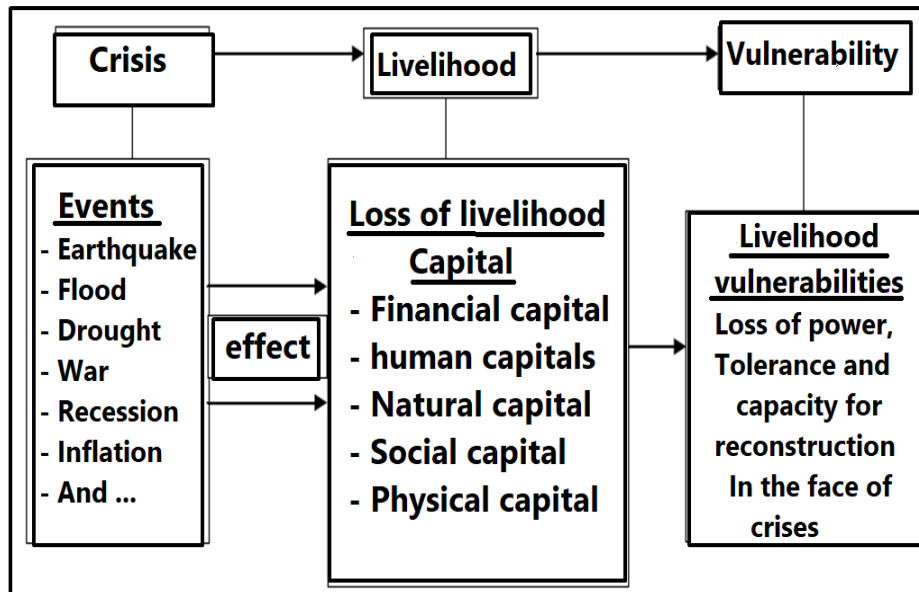


Figure 2: The relationship between crisis and livelihood vulnerability because of loss of assets
(Source: Sadeka, 2013: 98)

In general, the emphasis is placed on the diversification of rural economic activities to solve the problem and increase the assets of local people (Chandima, 2010; DFID, 2008). A diverse rural economy will provide more opportunities for the rural poor to reach living standards by creating more opportunities and taking advantage of them. As a more diverse rural economy expands the strength of rural capital as a result of their empowerment, which in turn increases the flexibility and resilience of the villagers, and on the other hand, reduces the vulnerability and waste of rural capital (Christensen, 2008; Ellis, 1999; Morse, 2013).

Studies in the literature indicate that:

Fang, et al. (2014) in a study entitled “Sensitivity of livelihood strategy to livelihood capital in mountain areas” come to the conclusion that natural and human resources drive the villagers to the agricultural economy, and those social and financial assets drive the farmers to diversify the off-farm economy and play a facilitating role. The suggested implication is increasing the ways and economic opportunities to access assets and their sustainability in the long run. Manwa (2014) in a study entitled “Poverty alleviation through pro-poor tourism: the role of Botswana Forest” concludes that Botswana's forest area is fully capable of expanding tourism as a complementary activity, a new source of income, and attracting poor villagers. Hence, tourism development, directly and indirectly, reduces

poverty in the study area by sustaining the livelihood of the villagers. Adams (2002) also shows that increasing the benefits of rural economic diversification in Egypt has played an important role in the process of equality and reducing class differences. Bart et al. (2005) emphasize that in rural Africa, individuals who are dependent on agriculture as a single product, mostly trapped in poverty. However, rural households with diverse livelihoods have more income and mobility. Escobal (2011) states that 51% of the income of rural households in Peru comes from off-farm activities. His findings show that diversifying the rural economy in a non-agricultural environment is an effective solution to alleviate poverty, and to develop villages as well. The most important research implication is improving the access of rural households to service and educational infrastructure by economic diversification, which paves the way for increasing and maintaining assets (Chun & Watanabe, 2011).

Karim zadeh et al. (2016) in an article entitled “The role of diversification of activities in the sustainability of rural economy (Case study: Merhamat Abad Miyani village. Miandoab County)” assert that diversification of economic activities caused improvement in employment opportunities, motivation to expand the employment situation and investment, and reducing rural migration.

Sojasi Gheidari et al. (2016) in another article entitled “Measuring the level of livelihood assets in rural areas with a sustainable livelihood approach (Case study: Villages of Tayebad County)” conclude that the share of social assets is higher than other assets among the studied villages. Human assets are also ranked last to confirm the migration of active human resources in the village. The most important research implication is how diversifying the village's economy with low levels of assets and also trying to use and maintain these assets. Karimi & Dehkordi (2015) in a study entitled “Rangeland utilization and the necessity of diversifying the livelihood of rural households (Case Study: Mahneshan County)” conclude that horticulture, beekeeping, aquaculture through education and promotion are alternatives or complementary to husbandry to improve the level of assets and livelihood of villagers in the study area. This approach will reduce the pressure on natural resources and prevent the waste of livelihood and natural capital. Shahraki & Sharifzadeh (2014) a study investigated aquaculture in sustainable livelihoods of villagers in Zahedan County. Aquaculture farmers have become more comparable to other farmers, and in fact, diversifying agricultural activities has improved the livelihood of the villagers. Tayyabnia & Baradaran (2014,) in an article entitled "a study of factors affecting the diversification of economic activities in border

villages of Marivan County" conclude that economic, social, environmental, and border area factors affect the diversification of rural economies in the study area. Javan et al. (2011) in their study entitled “The role of diversification of economic activities in sustainable rural development of Semirom County” show that those rural households whose job opportunities and income are more diverse have less vulnerable income stability, and eventually a better quality of life than rural households without economic diversity. Javan & Makarri (2011). a study entitled “The role of wells in rural economic diversification (Case Study: Zahak County)” considers drilling wells in the region as a factor to deal with drought and diversify agricultural products. According to the findings of this study, in some areas of Zahak County where people have access to water in summers through wells, there is a variety of agricultural products and a relatively high level of income, and their residents are optimistic about their future careers.

3. Research Methodology

3.1 Geographical Scope of the Research

Khavmirabad District is one of the three districts of Marivan County in Kurdistan Province which is occupying an area of 338 square kilometers, with 30 inhabited villages, and is located along the borderline area next to Iraq.

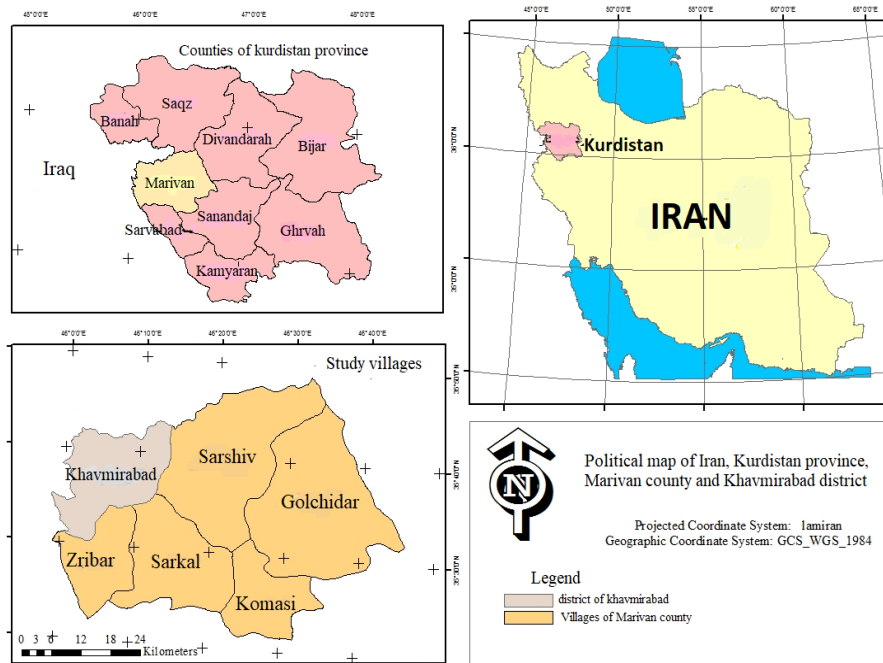


Figure 3: Area of study

There is a border market in this district due to its strategic position and communication-trade potential. It has a favorable situation of animal husbandry (daily sale of milk) and agriculture (direct sale of products to urban residents, employment in collecting and cultivating products, labor-intensive agriculture such as strawberries, etc.) thanks to its natural situation. In recent years, educational and extension activities for handicrafts and workshops have become popular in this district, and this has paved the way for a variety of economic activities in the district.

3.2. Methodology

This applied study, which has been done by the descriptive-analytical method. Data collection is

done through documentary and field survey by using some tools, i.e. distributing questionnaires and then observation and semi-structured interviews with villagers to explain the answers for the research questions. The statistical population of this study includes 2736 households living in Khavmirabad District. Using Cochran's formula, we estimated 260 heads of households as the sample size and used a stratified sample method determining 15% (5 villages) of all villages in the district (30 villages). The questionnaires were distributed randomly among the heads of households in the sample villages.

Table 1: Stratified distribution of questionnaires among sample villages

Village	Number of households	Number of assigned questionnaires
Kiken	54	23
Derah varan	60	26
Seyf Sofla	128	55
Sad Abad	90	38
Saveji	280	118
5	612	260

The face and content validity of the measurement instrument was confirmed by experts and specialists who had conducted similar studies, and the reliability or internal correlation of the answers was confirmed by calculating the Cronbach's alpha coefficient of 0.76. The independent variable of this study is the executive strategies of economic diversification in the villages of the district (establishing a

border market, collecting villagers' milk, integrating lands and producing profitable and labor-intensive products, promoting service sector employment, investment in urban economic activities, expanding horticulture, beekeeping, and handicraft production). Villagers' livelihood assets are also dependent variables of this research which are summarized in the following table.

Table 2: Variables to measure changes in the level of livelihood assets

(Source: [Dastvar, 2016](#); [Sojasi Gheidari et al., 2016](#); [Morse, 2013](#); [Ellis, 1999](#); [Belcher, 2012](#))

	Dimensions	Indexes	Variables
Livelihood capital	Human capital	Nutrition and health	Possibility of providing health facilities (personal, family), weekly consumption of protein nutrition, nutritional satisfaction, ability to provide and pay for health care, consumption of fruits and vegetables, house quality, occupational health
		Skill and knowledge	Diversity of skills, level of education, the literacy level of females, use of new media and innovations
		Employment	Employed people, ease of finding jobs, female employment
	Social capital	Participation	Cooperation in village development activities, participation in decision making, joint economic activities, participation in charitable affairs
		Sense of belonging to the village	Preferring to live in the village over the city, preferring to invest and start a business in the village over the city, Returning rural migrants to the village
		Security	Reducing crimes and quarrels, hope and interest in living (future), job security (non-

	(individual, social)	seasonality) and income, reducing daunting public spaces in rural areas by increasing construction
	Social solidarity and cohesion	Village integrity, a spirit of cooperation and collaboration, increasing altruism feeling to fundraising, increasing trust
	Institutional	Having a rural development plan with emphasis on non-agricultural jobs, government support for launching rural production jobs, family support for starting a new business, coordination of rural development institutions, continuous monitoring of regional development process, community-centered institutions, balanced distribution of benefits
Financial capital	Income and expenses	Average household income, ability to pay household expenses, ability to invest and start a business, income
	Savings	Household savings
	Loans	Ability to receive and repay loans
Physical capital	Housing	Ability to have personal housing, the strength of housing, qualified rental housing, multi-functional housing
	Services and amenities	Access to transportation infrastructure, access to educational facilities, leisure facilities, access to energy (water, electricity, gas) and mobile phone services and access to the Internet, markets to buy the required products, and places to sale manufactured products
	Machinery	Personal automobile, agricultural machinery (tractor, combine, electric pump, etc.)
Natural capital	Agriculture	Harvesting of agricultural lands, improving horticultural and livestock
	Natural landscape	The beauty of the natural landscape of the village, no destruction of natural lands

4. Research Findings

4.1. Human capital

As the results in [table 3](#) show in terms of human capital, villagers in all indicators measured with averages greater than 3; economic diversification at the village level is identified as the main factor in improving and increasing the level of this category assets. Among these, the health quality index of rural housing which is calculated at 3.78 has the highest calculated average, or in other words, it has been the most improved and upgraded situation. Villagers responded with an average score of 3.06 and 3.56 to the increase in consumption of protein and fruits and vegetables in their household food basket, so as a result, their satisfaction from the nutritional status is the calculated average of 3.54. With an average measure of 3.52, villagers believe that working environments are healthier due to the variety of jobs created. Villagers assert that the duration of work has been reduced due to the increase in income from various jobs, and with the provision of tools and facilities, things are done more easily. Also, there has been a reduction in excessive fatigue or physical and mental injuries. For two health indicators of the ability to pay for health care and health facilities in rural housing, respondents with averages measures of 3.20 and

3.78, believe that the situation of these two indicators will improve the economic diversification of the region. As responses show, the villagers with a measure of 3.08, assessed the increase in the diversity of job skills in the region. The reason is the lack of new industrial jobs. The villagers believe that most of the current jobs are the jobs that have existed before such as husbandry and horticulture, but economic and social developments have caused them to be forgotten. Furthermore, villagers are recruited only for carrying the stuff in border markets. In terms of education, the score of 3.35 for the education level index and 3.06 for the females' literacy index show that the educational status of the villages in the district has improved, which can be explained by the ability to pay for education (especially school commuting services) and the reduction in the need for child labor due to increased rural incomes. [Table 3](#) shows the status of employment indicators and their impact on economic diversification in the villages of the region. It illustrates that in the three indicators i.e. the number of employed people, ease of finding jobs, and female employment the averages, have been calculated at a satisfying level with the scores of 3.91, 3.83, and 3.62, respectively. Therefore, economic diversification has had a significant impact on improving the status of these

indicators. In this regard, the villagers stated that now the people of the district can easily work in the border markets and earn a relatively appropriate income. On the other hand, the re-emergence of the husbandry and especially the collection of milk from the villages of the district, along with some handicraft production activities and daily labor on farms helped women also

become active and income-generating labor in the villages and provide income for their households. In general, the statistical significance is less than the alpha level of 0.01. The t-test and the favorable value of means used in the test (3) show that economic diversification improved the measured components.

Table 3: The impact of economic diversity on changes in the level of human assets and livelihoods of villagers

Components	Indicators	Mean	T-test statistic T	Significance	95% confidence interval		Result
					Under	Above	
Nutrition and health	Possibility of providing personal health facilities (individual, family)	3.45	9.12	.001	.352	.546	Confirmation
	Weekly consumption of protein nutritions	3.06					
	Nutritional satisfaction	3.54					
	Ability to provide and pay for health care,	3.20					
	Consumption of fruits and vegetables	3.56					
	House sanitation quality	3.78					
	Occupational health	3.52					
Total	3.44						
Skill and knowledge	Diversity of job skills	3.08	6.52	.002	.245	.456	Confirmation
	Education level	3.35					
	Females' literacy	3.06					
	Use of new media and innovations	3.81					
	Total	3.33					
Employment	Number of employed people	3.91	15.95	.000	.666	.851	Confirmation
	Ease of finding jobs	3.83					
	Female employment	3.62					
	Total	3.75					
Human capital		3.51	14.92	.000	.451	.588	Confirmation

4.2. Social capital

Examining the impact of the social capital of the villagers (Table 4) in the participation index shows that the index of joint economic activities with a score of 3.65 has the highest effectiveness and improvement. Providing the necessary income to carry out economic activities is the stated reason by the villagers. The economic diversity of the region has a positive effect on other indicators of participation: cooperation with each other in development activities and participation in decision making, with the score of 3.38 and 3.31, respectively. The mentioned reason for this was having the financial ability to pay for engagement in development activities, as well as having more time and opportunity to participate in development activities and decisions related to the village. The villagers, with an average score of

3.35, believe economic diversity in the villages of the region and the positive consequences resulting from it, have increased the participation of villagers in charitable affairs. For the index of preferring to live in the village over the city, the situation has been declared satisfying by the villagers, so that the villagers with a score of 3.59 prefer to live in their village in order to create diverse jobs for the village. The villagers, with an average of 3.52, have expressed their desire to invest and prosper their villages. The result of these findings can be seen in the favorable and satisfactory situation of the return index of migrants who once migrated from the villages and have now returned to the villages with an average of 3.19. Field observations indicated that many rural households once migrated from rural areas to Marivan city due to lack of jobs and income and

low quality of life, but they were doing jobs such as retail in difficult living conditions. They were now returning to their homes in search of economic diversity and job and income opportunities in the villages, and even many people built new houses, and as a result, many abandoned and vacant lands in the villages were used to build houses. Indeed, it should be mentioned that the implementation of rural guide plans in the region and its positive effects. In fact, the combination of physical development and economic development has created favorable conditions and living space for the villagers in the study area. Villagers' responses to individual and social security indicators show that the greatest improvement and impact of economic diversity in the region was on reducing crime and conflict, with a score of 3.75. Certainly, in explaining this, we can mention job creation and reduction of poverty and unemployment as the main objective for rural development and the main causes of social crises such as conflict and crime. Accordingly, the villagers also responded to the increase in job security with a score of 3.78. The return of rural migrants to the villages along with the increase in the income of the villagers, in addition to the implementation of rural guide plans, are all reasons that persuaded the villagers to respond positively to the reduction of vacant, unbuilt, and scary rural space with a score of 3.34. The results of these findings can also be seen in the index of increasing life expectancy and interest in living (future) among the villagers with a score of 3.30. In the indicators related to social solidarity and social cohesion, the situation was assessed as satisfying following the jobs created and economic diversification in the villages of the region, so that in two indexes, increasing trust in each other and increasing altruism feeling to fundraising, the average scores were estimated

3.58 and 3.88, respectively. The villagers mentioned things such as having more time and income to help each other in agricultural chores, carrying out village development activities, joint economic activities and participating in each other's ceremonies as examples of increasing social cohesion and integration. The average score for all of them was calculated at 3.63. As the distribution of respondents shows, the villagers indicated that the economic diversification in the district has been created by a rural development plan with an emphasis on non-agricultural occupations (score of 3.78), and/or government support for starting manufacturing jobs (score of 3.83). Meanwhile, the index of family support for starting new businesses in rural areas with a score of 2.73 shows that economic diversification has not been able to be effective in improving this index. We can point to the limited and conservative view of the villagers, which limits their risk power to carry out new activities and entrepreneurship endeavors. Scores above the average by the respondents show that they have taken government initiatives into account for the economic prosperity of the region. This, in return, improved the coordination of rural development institutions, continuous monitoring of the development process in the region, people-centered performance Institutions. Another indicator that shows satisfaction, which is expressed to be crucial in rural areas, is a balanced distribution of benefits from development activities among the villagers. This was estimated with a score of 3.38. In conclusion, the estimation of statistics of both high and low limits along with the significance of averages is greater than the numerical desirability of the tested components, which implies that the status of these components have been improved by diversifying the rural economy (Table 4)

Table 4: The impact of economic diversity on changes in the level of social assets and livelihoods of villagers

Dimensions	Indicators	Mean	T-test statistic T	Significance	95% confidence interval		Result
					Under	Above	
Participation	Cooperation in village development activities	3.38	6.87	.000	.303	.548	Confirmation
	Participation in decision making	3.31					
	Joint economic activities	3.65					
	Participation in charitable affairs	3.35					
	Total	3.42					
Sense of belonging to the village	Preferring to live in the village over the city	3.59	7.16	.000	.310	.546	Confirmation
	Preferring to invest and start a business in the village over the city	3.52					

	Returning rural migrants back to the village	3.19					
	Total	3.43					
Individual and social security	Reducing crimes and quarrels	3.75	10.41	.000	.439	.644	Confirmation
	Hope and interest in living (future)	3.30					
	Job security (non-seasonality) and income	3.78					
	Reducing daunting public spaces in rural areas by increasing construction	3.34					
	Total	3.54					
Solidarity and cohesion	Village integrity	3.63	11.52	.000	.490	.692	Confirmation
	Spirit of cooperation and collaboration	3.26					
	Increasing altruism feeling to fundraising	3.58					
	Increasing trust in each other	3.88					
	Total	3.59					
Institutional	Having a rural development plan with emphasis on non-agricultural jobs	3.78	9.58	.000	.316	.480	Confirmation
	Government support for launching rural production	3.83					
	Family support for starting a new business	2.73					
	Coordination of rural development institutions	3.40					
	Continuous monitoring of the development process in the region	3.37					
	Community-centered institutions	3.28					
	a balanced distribution of benefits from development activities	3.38					
	Total	3.39					
Social capital		3.47	13.58	.000	.409	.545	Confirmation

4.3. Financial capital

The status of capital related to income and expenses shows that with a satisfying average of 3.76, villagers believe in the impact of economic diversification on increasing rural household incomes. The villagers, with a high score of 4,

have also responded to the verified impact of the region's economic diversity on their ability to support their families. A promising indicator of a satisfactory status in this study is considered a management matter such as income generation of rural areas and their financial resources active role for rural management.

Table 5: The impact of economic diversity on changes in the level of financial assets for the livelihood of villagers

Components	Indicators	Mean	T-test statistic T	Significance	95% confidence interval		Result
					Under	Above	
Income and expenses	Increase household income	3.76	12.37	.000	.536	.738	Confirmation
	Ability to cover household expenses	4					
	Ability to invest and start businesses	3.57					
	Rural municipality income	3.22					
	Total	3.63					
Savings and loans	Amount of household savings	3.66	16.66	.000	.758	.955	Confirmation
	Ability to receive and repay loans	3.98					
	Total	3.82					
Financial capital		3.75	15.47	.000	.662	.851	Confirmation

In the present study, the villagers acknowledge the increase in rural incomes. The reason for this is the increase in the municipal budget for the

villagers and the allocation of a part of the income of the border markets by the government to the villages. The responses provided by the villagers

to two indicators of “receiving loans” (score of 3.66) and “the amount of savings of rural households” (3.98) shows that the villagers believe that economic diversity is considered as a factor in increasing the savings of the villagers and also their ability to receive and repay loans. In conclusion, the significance of two scores of 3.82 and 3.63 for the components of financial capital in the t-test illustrates that the villagers’ livelihood capital has also improved (Table 5).

4.4. Physical capital

As table 6 demonstrates, the villagers believe in improving their situation in the rural housing

indicator as a result of economic diversification. As the findings show, economic diversification in the region has led villagers to confirm increasing access to private housing by an average score of 3.57. In addition, villagers evaluated another indicator concerning the impact of economic diversity at a positive and satisfactory average level is the quality of housing strength index. This is clearly reflected in the newly built housing of migrants who have returned to the villages. One of the salient features of rural housing, which is a reflection of the rural economy and their livelihood, is the multi-functionality of housing.

Table 6: The impact of economic diversity on changes in the level of physical assets for the livelihood of villagers

Dimensions	Indicators	Mean	T-test statistic T	Significance	95% confidence interval		Result
					Under	Above	
Rural housing	access to private housing	3.57	7.56	.001	.303	.516	Confirmation
	House physical quality	3.19					
	Qualified rental housing	3.38					
	Multi-functionality of housing	3.45					
	Total	3.40					
Services and amenities	Improving and accessing transportation infrastructure.	3.66	18.10	.000	.597	.743	Confirmation
	Access to educational facilities	3.76					
	Leisure facilities	3.30					
	access to energy (water, electricity, gas) and mobile phone services, and the Internet	3.77					
	Shops for buying household consumer products, and places to sell manufactured products	3.84					
Total	3.67						
Machinery	Personal automobile	3.33	11.32	.000	.522	.742	Confirmation
	Agricultural machinery (tractor, combine, electric pump, etc.)	3.93					
	Total	3.63					
Physical capital		3.56	21.32	.000	.518	.623	Confirmation

They said that due to the economic diversity in the region and the jobs that now exist, many of the old spaces of rural houses (warehouses, stables, etc.) have been re-used along with the prosperity of husbandry and agriculture. New housing as well has considered such spaces in the design. For the access to services and facilities index, with a score of 3.66, the villagers believe that economic diversity created in the region is an effective factor in improving and access to transportation infrastructure. In this regard, the villagers stated that the completion of commuting roads to the markets has improved the quality of transportation routes to the villages close to these routes. On the other hand, more private cars and drivers are considered as factors affecting economic diversification are the transportation of

villages in the region. The villagers stated that because of the increase in income from the diversification of the economy in the region, the villagers had more financial ability for the schools and the educational facilities (the average score is 3.76). On the other hand, the growth in the financial capacity of the villagers, which is the result of engaging in various occupations, has led to spending their leisure time in activities and purchase habits such as: traveling, having a personal car, new phones, and computers, urban shopping spree, and sports centers, etc. In order to confirm this, the villagers have assessed the improvement of the situation and leisure facilities with a satisfying score of 3.30. In addition, the villagers acknowledged (with a score of 3.84) that the number of shops selling agricultural products

and shops buying household consumption products has risen following the economic diversification in the region. The reasons can be the return of immigrants to the villages, the rise in consumption due to the increase in income and the number of villagers, and practicality of starting retail businesses in the villages, as well as the benefits for the villagers to sell agricultural and horticultural products directly to the urban consumers. The villagers confirmed the impact of economic diversification and various sources of income on increasing the villagers' personal automobiles, with an average score of 3.33. The availability of using machinery in the agricultural sector is another indicator on which the impact of economic diversification in the region with an average of 3.93 has been assessed at a satisfactory level. In short, the results of the t-test show the favorable effect of economic diversity on improving the status of the components measured by the physical capital of the villagers at a significant level of 0.001.

4.5. Natural capital

Connected with the economic diversity in agriculture, husbandry and rural nature of the area looking, villagers' respondent shows that the harvest amount from agricultural land and prospering horticultural crops index is in good status with a score of 3.64. A similar situation can be seen in the husbandry expansion. In explaining

this, the villagers used the additional income for buying agricultural tools, new agricultural and horticultural products, and using new methods of irrigation and protection of crops, which were sometimes costly, so they can do these after gaining income from other activities. Furthermore, expanding the ability of villagers to buy light and heavyweight livestock, along with collecting milk from the villages and their direct and effective income for families are other factors that grow the diversity and number of livestock. Animal husbandry should also be considered as a side job for many villagers who once did not do animal husbandry when it was the only income resource for the family. Overall, villagers stated that creating jobs and incomes in the rural areas has created many jobs that damaged the environment in the past, such as producing charcoal from trees or over-exploitation of agricultural land, and lack of fallow periods. Moreover, diversity in economic activities has caused a reduction in animal waste disposal and better sanitation systems through municipal budgets provided by villages. New, long-lasting housing, vertical building construction, together with removing the poverty and deprivation look from the building and sparsely populated villages, are also things that have led to the preservation and aesthetic elements of the natural landscape of villages.

Table 7: The impact of economic diversity on changes in the level of natural assets for the livelihood of villagers

Dimensions	Indicators	Mean	T-test statistic T	Significance	95% confidence interval		Result
					Under	Above	
Agriculture	Harvesting of agricultural lands, promoting horticulture	3.64	9.24	.000	.505	.779	Confirmation
	Promoting animal husbandry (amount and diversity of livestock)	3.64					
	Total	3.64					
Natural landscape	Aesthetic element in natural landscape	3.70	7.10	.000	.350	.619	Confirmation
	Natural lands conservation	3.26					
	Total	3.48					
Natural capital		3.56	8.64	.000	.435	.691	Confirmation

To this end, the villagers responded positively to the effect of creating various sources of income and various jobs on reducing the destruction of the natural environment of the village with an average score of 3.26, and the beauty of the rural landscape with an average score of 3.70. Finally, these scores for components of the landscape and natural and agricultural environment are higher

than the cardinal utility at a significant level of 0.001, which shows the improvement of rural livelihoods following diversifying the economy in the region.

To sum up, the score of 3.57 is higher than the cardinal utility at a significant level of 0.001 and the t - statistics, which shows that the economic diversity created in the villages of Khavmirabad

District improves the level of livelihood capital for the villagers

Table 8: The impact of economic diversity on increasing the level of livelihood assets of villagers in Khavmirabad District

Cardinal utility in the test= 3								
Dimensions	The difference from the optimal limit	Degree of freedom	Significance	T-test statistic T	Mean	95% confidence interval		Result
						Under	Above	
Total livelihood capital	.577	259	.000	23.74	3.57	.529	.625	Confirmation

Then, a hierarchical path analysis test was used to determine the most effective dimension in improving the livelihood capital of the villagers from the impact of economic diversity in the region. At first, a combined sum of the dimensions of livelihood capital in the title of villagers' livelihood as a dependent variable, and on the other hand, all dimensions of livelihood capital as an independent variable were entered in the model to measure the direct effects. Then, after entering and replacing each dimension as a dependent variable by multiplying all the paths to the desired dimension, and lastly adding all the multiplied paths to the desired dimension, the

number of indirect effects is determined. Ultimately, the overall load and the final impact of each dimension (livelihood capital) on the current livelihood of the villagers were determined by the impact of economic diversity and the benefits derived from it. As shown in Table 9, the financial dimension with a total load of 799., is the most effective in improving the livelihood level of the villagers in the region due to the impact of economic diversity. This dimension not only has a direct impact on improving the livelihood of the villagers but also improves the level of other assets.

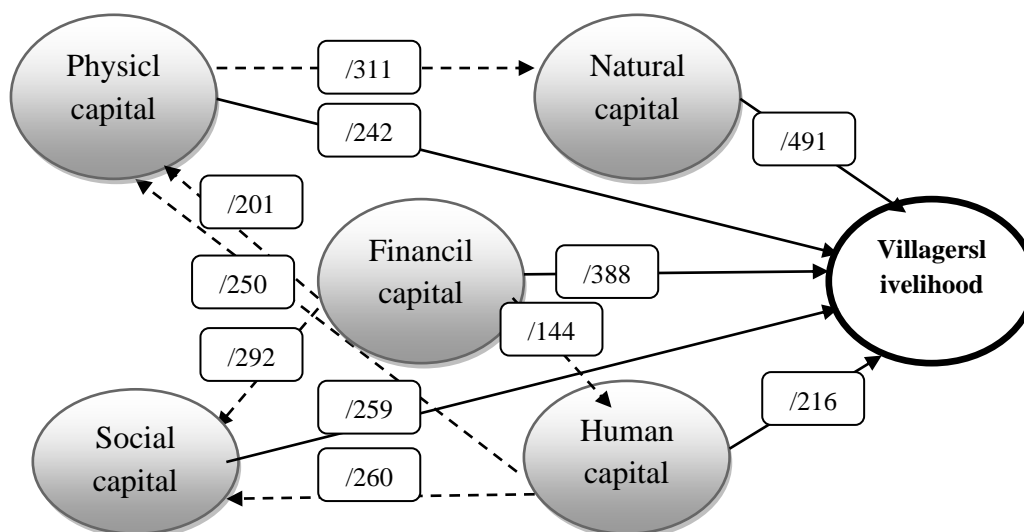


Figure 4: The final model of the relationship between the dimensions of livelihood capital in improving the livelihood level of villagers due to economic diversity in the region

Table 9: The direct, indirect, and total effect of each effective dimension on improving the livelihood assets of the villagers

Assets	Direct impact	Indirect impact	Total load
Financial	.388	.411	.799
Human	.216	.136	.352
Socially	.259	---	.259
Natural	.491	---	.491
Physical	.242	.152	.394

5. Discussion and conclusion

The present study investigated the effects of diversifying economic activities on changes in the livelihood capital level of villagers in Khavmirabad District of Marivan County. Has the diversification of the rural economy of Khavmirabad District improved the livelihood assets of the villagers? According to the average score of 3.57, which is higher than Cardinal utility in the test (3) and a significant amount calculated as 0.000, it can be stated with 99% confidence that diversifying the region's economy improved the rural livelihood capital. More particularly, financial assets with a score of 3.75, physical assets with a score of 3.56, natural assets with a score of 3.56, human assets with a score of 3.51, and social assets with a score of 3.47, respectively, have the highest improvement and changes from the economic diversification of the region. Among the components of rural livelihood capital, and also human capital, the employment index with an average score of 3.75 has had the most improvement. This result demonstrates the capacity of economic diversification to reduce unemployment for villagers, who once faced unemployment due to the elimination of smuggling of goods. In the dimension of social capital, the social solidarity, and cohesion index, with an average score of 3.59, has the most dependence on the created economic diversity. In this regard, it can be said that following the growth in income of villagers, their ability to participate in village development projects and in charitable affairs, lend money to each other, participate in each other's ceremonies, and as a result feel a sense of belonging to the village have increased. In the financial capital dimension, the ability to receive loans and growth of villagers' savings with a score of 3.82 has the most dependence on the diversification of the region's economy. In this regard, it can be said that increasing the income of the villagers along with their ability to pay their lives expenses have led to growth in villagers' savings. Thus, they are able and willing to receive more loans that are no more seen in housing construction in rural areas. Among the indicators of physical capital, access to services and amenities with a score of 3.67 has the greatest improvement. Access to better transportation due to the creation of service jobs such as driving, construction of transportation routes towards markets, in addition to the implementation of rural guide plans, access to more leisure facilities (purchase of new electronic devices, and urban

leisure) are the most important reasons. Among natural capital indicators, improving agriculture with an average score of 3.64 has the most positive dependence on economic diversification in the rural area. The economic diversity has improved the income of the villagers and this has also raised the ability of the villagers to buy more light and heavyweight livestock. In addition, collecting milk from the villages of the region has been another factor in improving the husbandry business. In agriculture, the promotion of horticulture is quite tangible in the villages of the region, as the villagers are now reviving their gardens, while gardening was impossible at a time of recession and unemployment and villagers wouldn't have done such an activity. The possibility to provide new agricultural equipment, the ability to invest in the cultivation of costly crops, are other factors improving the agricultural status in the region.

The second question of the research: which of the types of livelihood assets of the villagers has had the greatest impact and improvement in changing the level of livelihood capital of the villagers due to the economic diversification? The results of path analysis showed that financial capital has both a direct impact on improving the livelihood level of villagers and also an indirect effect on the assets of villagers by affecting human, social, and physical capital in the study area. It also has the most indirect impact, with a total load of 799. This has the greatest impact on improving the livelihood level of villagers after economic diversification in the region. This confirms the important principle in rural development planning that any action to transform the rural system, especially in remote and deprived border areas, should be aimed at improving the economic and financial situation of the villagers. When favorable economic assets are obtained, other aspects of livelihood assets will indirectly change and improve if properly managed.

Recommendations- Lastly, according to the findings and field study of the current status, the following strategies are proposed to have a more favorable effect of economic diversity on improving the livelihood capital of the villagers:

- Taking advantage of the location of the main and important commercial route in the country, such as Baneh/Marivan, and the proximity to the international border to create and launch service businesses, the lack of which is quite evident at the district.

- Prepare for the development and expansion of tourism (rural, commercial, and nature tourism) in the region to create sustainable jobs and improve employment and income levels

- Making the necessary legal, administrative, and supportive bases for the development of entrepreneurship and domestic & foreign private sector investment (Iraqi Kurdistan region due to high social and cultural similarities and proximity of distance) according to the capabilities of the region.

- Development of trade in goods from the border markets with an emphasis on the products of the villagers, and on the exports instead of imports

- Support the formation of fundraising from the micro-savings in the villages for investment and launching production activities in the villages of the district, which is proposed to create agricultural industries according to the potentials of the region.

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تحلیلی بر اثرات متنوع سازی اقتصاد روستاها در تغییرات سطح دارایی های معیشتی خانوارهای روستایی (مورد مطالعه: بخش خاوومیرآباد مریوان - غرب استان کردستان)

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چکیده مبسوط

۱. مقدمه

متنوع سازی اقتصاد روستایی و منافع حاصل از آن، زمینه ساز جلب مشارکت و مسئولیت پذیری مردم محلی در ارتباط با حفاظت از محیط زیست و مشارکت های سیاسی، اجتماعی در کوتاه مدت و بلندمدت می گردد و بدین ترتیب در کنار رفع فقر اقتصادی، فقر فرهنگی هم از بین می رود. در این راستا نیز، برنامه های متنوع سازی اقتصادی زیادی در سطح روستاهای کشور طراحی و اجرا گردیدند در منطقه مورد مطالعه، یعنی بخش خاوومیرآباد شهرستان مریوان به عنوان یکی از بخش های مرزی و محروم کشور که به دلیل دورافتاده و در حاشیه بودن، روستاییان ساکن در آن دارای سطح نازل معیشت بوده و بازتاب آنرا نیز می توان در مهاجرت های گسترده به شهر مریوان و تخلیه و کاهش جمعیت ساکن روستاهای بخش در سال های قبل دید، این مساله مسئولان و برنامه ریزان توسعه را مجاب نمود که در راستای تحول معیشت روستاییان اقداماتی را انجام دهند. این اقدامات موجب رونق مشاغل خدماتی از جمله رانندگی، مغازه داری و حتی سرمایه گذاری در فعالیت های سودآور شهری نیز گشته است. حال باتوجه به اهمیت حفظ و افزایش دارایی های روستاییان به عنوان هسته مرکزی رویکرد معیشت پایدار و ارتباط مستقیم و موثر آن با متنوع سازی اقتصادی، سوال های اصلی پژوهش بدین گونه مطرح می شود:

- آیا تنوع بخشی به اقتصاد روستاهای بخش خاوومیرآباد، موجب بهبود سطح دارایی های معیشتی روستاییان شده است؟

- کدامیک از انواع دارایی های معیشتی روستاییان، بیشترین تاثیر و بهبود را در تغییر سطح سرمایه های معیشتی روستاییان بواسطه متنوع سازی اقتصادی روستاها داشته است؟

۲. مبانی نظری تحقیق

در سال های پایانی دهه ۱۹۸۰ بود که رویکرد معیشت پایدار، شروع به شکل گرفتن کرد و ظهور آن نیز، نشانگر همگرایی بحث های نظری و عملی در باب توسعه بود. رابرت چمبرز نظریه پرداز مشهور عرصه روستایی فردی بود که آغازگر و اثبات کننده رویکرد معیشت پایدار به شمار می آید. وی امرار معاش را شامل قابلیت ها، دارایی ها و فعالیت های مورد نیاز برای گذران زندگی تعریف می کند. دارایی های معیشتی به عنوان هسته اصلی معیشت پایدار، نقش غیرقابل انکاری در تحقق پایداری معیشت روستاییان دارند. بواقع توانایی روستاییان جهت گریز از فقر به میزان دسترسی شان به دارایی ها بستگی دارد. میزان سرمایه های معیشتی و دسترسی مردم محلی به آنها است که تعیین کننده استراتژی های معیشتی جهت گذران معیشت می باشد. سطح و میزان سرمایه های معیشتی است که با استفاده از آنها روستاییان، می توانند تعامل ثمربخش و معنی داری با محیط پیرامون داشته و از همه مهمتر، توان تغییر آن را به دست آورند. سرمایه های معیشتی انواع مختلفی دارند این دارایی ها هم ملموس هستند؛ مانند: پول نقد، زمین و ... و غیرملموس؛ مانند: سلامت نیروی کار، پیوندهای اجتماعی، علاقه به روستا و.. (در مجموع، ایده اصلی معیشت پایدار، سرمایه های معیشتی را در پنج دسته: سرمایه های انسانی، سرمایه های اجتماعی، سرمایه های فیزیکی، سرمایه های طبیعی، سرمایه های مالی دسته بندی می کند.

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۳. روش تحقیق

پژوهش کاربردی حاضر به روش توصیفی - تحلیلی انجام گرفته است و اطلاعات آن در بخش نظری با استفاده از منابع اسنادی و در بخش میدانی با بهره گیری از پیمایش میدانی و ابزارهای آن یعنی توزیع پرسشنامه و سپس مشاهده وضع موجود و مصاحبه نیمه ساختار یافته با روستاییان، به منظور تبیین پاسخهای ارائه شده انجام گرفته است. جامعه آماری این پژوهش را ۲۷۳۴ خانوار ساکن در بخش خاوومیرآباد در بر می گیرد که با استفاده از فرمول کوکران تعداد ۲۶۰ سرپرست خانوار به عنوان حجم نمونه تعیین و پس از تعیین ۱۵ درصد (۵ روستا) از کل روستاهای بخش (۳۰ روستا) به روش قرعه کشی، به روش توزیع طبقه ای سهم روستاهای نمونه از تعداد کل پرسشنامه ها مشخص شده و سپس پرسشنامه ها در میان سرپرستان خانوار روستاهایی نمونه توزیع گردید. لازم به ذکر است در انتخاب افراد مورد مطالعه با مشورت شوراهای دهیارها خانوارهای انتخاب شده اند که بیشترین تنوع معیشتی را تجربه کرده اند روایی صوری و محتوایی ابزار اندازه گیری با تایید آگاهان و متخصصانی که سابقه مطالعات مشابه را داشتند و نیز پایایی و یا همبستگی درونی پاسخ ها نیز با محاسبه ضریب آلفای کرونباخ ۰/۷۶ مورد تایید قرار گرفت. خاوومیرآباد به عنوان یکی از سه بخش شهرستان مریوان در استان کردستان دارای ۳۰ روستا دارای سکنه و در منطقه صفر مرزی در همسایگی کشور عراق، واقع گردیده است

۴. یافته های تحقیق

یافته های پژوهش با استفاده از آزمون تی تک نمونه ای نشان داد که دارایی های مالی با میانگین ۳.۷۵، دارایی های فیزیکی با میانگین ۳.۵۶، دارایی های طبیعی با میانگین ۳.۵۶، دارایی های انسانی با میانگین ۳.۵۱ و دارایی های اجتماعی با میانگین ۳.۴۷ به ترتیب دارای بیشترین بهبود و اثرپذیری از تنوع بخشی اقتصادی منطقه بودند. در مجموع کل با توجه به میانگین حاصله برابر ۳.۵۷ که بیشتر از مطلوبیت عددی مورد آزمون (۳) به دست آمد و مقدار معنی داری محاسبه شده برابر ۰.۰۰۰؛ با ۹۹ درصد اطمینان می توان گفت که تنوع بخشی به اقتصاد منطقه موجب افزایش سرمایه های معیشتی روستاییان بخش شده است. همچنین یافته ها با استفاده از مدل

تحلیل مسیر نشان می دهد؛ بعد مالی با بارکلی برابر ۰.۷۹۹، موثرترین بعد در ارتقای و بهبود سطح دارایی های معیشتی روستاییان منطقه بواسطه تأثیرپذیری از تنوع اقتصادی ایجاد شده می باشد

۵. بحث و نتیجه گیری

نتایج نشان دادند تنوع بخشی به اقتصاد منطقه موجب افزایش سرمایه های معیشتی روستاییان بخش شده است این نتیجه نشان دهنده توانایی تنوع اقتصادی ایجاد شده در کاهش بیکاری روستاییانی دارد که زمانی به دلیل حذف قاچاق کالا که بسیار به آن وابسته بودند با بیکاری گسترده روبرو شدند. در این ارتباط می توان گفت که به دنبال افزایش درآمد روستاییان، توانایی های آنها جهت شرکت در کارهای عمرانی روستا، انجام امور خیریه، قرض دادن پول به یکدیگر، شرکت در مراسم های یکدیگر و در نتیجه احساس تعلق خاطر به روستا و روستایی بودنشان بیشتر شده و همه این عوامل موجب افزایش انسجام و همبستگی روستاها گردیده است. در این ارتباط می توان گفت که افزایش درآمد موجب شده که پس اندازهای روستاییان افزایش یابد و آنها توانایی و تمایل بیشتری جهت دریافت وام هایی داشته باشند. همچنین افزایش درآمد، توانایی روستاییان را برای خرید دام های سنگین و نیمه سنگین و افزایش تعداد آنها بیشتر نموده است در کنار این امر، جمع آوری شیر از سطح روستاهای منطقه هم محرک دیگری بوده که موجب بهبود وضعیت دامپروری منطقه شده است. همچنین نتایج تحلیل مسیر نشان داد که سرمایه های مالی علاوه بر تأثیر مستقیم بر بهبود سطح معیشت روستاییان و افزایش دارایی های روستاییان به صورت غیرمستقیم نیز با اثرگذاری بر سرمایه های انسانی، اجتماعی و فیزیکی در منطقه مورد مطالعه توانسته است؛ بیشترین تأثیر در بهبود سطح سرمایه های معیشتی روستاییان به دنبال متنوع سازی اقتصادی در منطقه باشد.

کلیدواژه ها: تنوع اقتصادی، معیشت پایدار، دارایی های معیشتی، بخش خاوومیرآباد.

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