



## The Impact of the Ishkashim Border Market on the Improvement of Local Household Livelihoods in Badakhshan Province

Abdul Sami Wafa <sup>1</sup>, Ghulam Reza Rahnaward <sup>1</sup>, Hafizullah Radmand <sup>1</sup> , Habibullah Rezaei <sup>2\*</sup> 

<sup>1</sup> Department of Agricultural Economics and Extension, Agriculture Faculty, Baghlan University

<sup>2</sup> Department of Agricultural Economics and Extension, Agriculture Faculty, Samangan University

\* Corresponding Author: [habibullahrezaei@gmail.com](mailto:habibullahrezaei@gmail.com)

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### Keywords

Border market, Sustainable livelihoods, Cross-border trade, Rural development, Ishkashim District.

### Abstract

Border markets are considered important drivers of development in peripheral regions, as they enhance economic security and improve local livelihoods. This study investigates the economic and social impacts of the Ishkashim border market on sustainable livelihoods in Badakhshan Province, Afghanistan. Data were collected from 200 households selected through simple random sampling using Cochran's formula. The study assessed five dimensions of sustainable livelihoods through descriptive and inferential statistical methods, including the one-sample t-test, Friedman ranking test, and Chi-square analysis. Findings reveal that the border market has become the primary source of income for 62% of respondents, gradually replacing traditional agricultural livelihoods. Physical, financial, and social capitals were found to be at favorable levels, indicating improvements in infrastructure, income, and social relations. However, human capital performed the worst, reflecting limited progress in education and health services. Overall, the market contributes to poverty reduction and income generation but has limited effects on balanced and sustainable livelihood development.

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## 1. Introduction

Border regions in most countries, particularly in developing contexts such as Afghanistan, are generally characterized by lower levels of development and limited access to opportunities compared to central regions. This situation is mainly attributed to their geographical remoteness from core economic centers, spatial isolation, and inadequate infrastructure (Guo et al., 2023). The socio-economic structure of these areas is typically defined by the absence of industrial development, a heavy reliance on low-productivity subsistence agriculture, limited access to essential resources, and underdeveloped transportation networks. Such structural constraints have contributed to the emergence and persistence of challenges, including migration, smuggling, and insecurity (Hosseini et al., 2022).

Consequently, border areas have increasingly been recognized within development literature as spaces with considerable potential for economic integration, security enhancement, and population stabilization (Niebuhr et al., 2008). Within this framework, border markets have been widely discussed as effective mechanisms for reducing regional disparities, preventing rural depopulation, and facilitating a more equitable distribution of development benefits in peripheral regions (Rigi et al., 2021). Border economies, particularly through cross-border trade, play a significant role in improving living standards, alleviating poverty, and strengthening economic linkages among border communities (Eftekhari et al., 2008).

In addition, shifts in the global economic system and the expansion of international trade have gradually transformed the perception of borders from being purely security-oriented boundaries into potential zones of economic opportunity (Akhgari & Barzegar, 2016). As a result, many governments have redefined center-periphery relations and adopted policies to promote legal trade, generate employment opportunities, and reduce socio-economic deprivation in border regions (Ahmadipour et al., 2008). In this context, border markets contribute to the economic dynamism of peripheral regions by facilitating formal trade flows, strengthening comparative advantages, expanding interregional cooperation, and enhancing the welfare of border populations (Kamran et al., 2009). Nevertheless, in mountainous and remote regions such as Afghanistan—particularly Badakhshan Province—structural limitations, including limited

economic diversification, continued reliance on traditional livelihoods, and physical distance from major economic centers, persist as significant challenges (Akhgari & Barzegar, 2016).

In this context, Ishkashim District in Badakhshan Province represents a prominent example of deprived border regions that, due to its specific geographical and political conditions, has remained largely disconnected from the national development trajectory. Difficult physical accessibility, weak infrastructure, and spatial distance from decision-making centers have contributed to the persistence of chronic poverty in the area. The livelihood structure of households is predominantly based on small-scale agriculture, traditional livestock farming, and limited economic activities, which, due to low productivity, remain highly vulnerable to shocks such as droughts, floods, and climatic fluctuations. In addition, regional insecurity has further undermined households' capacity to rebuild their livelihood assets, thereby reinforcing the cycle of poverty (Hosseini et al., 2022).

In response to these challenges, the Ishkashim border market was established in 2011 to stimulate the local economy, create employment opportunities, and alleviate poverty. It was expected that this market, by facilitating cross-border trade, would not only address structural weaknesses in the border economy but also reduce forced migration and improve local livelihoods (Ahmadipour et al., 2008). Although some informal evidence suggests an increase in income levels and financial circulation among segments of the local population (IOM, 2016), a comprehensive and systematic assessment of its impacts on the various dimensions of sustainable livelihoods has not yet been conducted (Chatham House, 2019). In this regard, the sustainable livelihood approach has emerged as a comprehensive analytical framework that emphasizes diversifying income sources and strengthening livelihood assets, enabling households to enhance their resilience against shocks and stresses (Bazvand et al., 2021).

This framework encompasses five forms of capital, namely human, physical, social, financial, and natural capital, which collectively shape household livelihood systems (Aqdasi et al., 2022). Within this framework, border markets are considered effective instruments for improving livelihoods and enhancing living standards (Rigi et al., 2021; Takao, 2008), and beyond their economic role, they may also contribute to broader social and cultural transformations (Moradi & Ilanlou, 2022). The Ishkashim border market, as an important cross-border exchange point between Afghanistan and Tajikistan, has contributed to improving income levels, reducing poverty, and strengthening social interactions (World

Bank, 2020). However, challenges such as infrastructural deficiencies, security fluctuations, and inefficient management practices continue to limit the full realization of its potential benefits (UNDP, 2020).

In this regard, numerous studies have examined the role of border markets in improving the economic and livelihood conditions of border regions. A strand of this literature indicates that the impacts of such markets are often limited or uneven across different dimensions of local development. In this context, Aleu and Mading (2025) employed a qualitative approach based on observation and interviews to explore livelihood opportunities in border areas in their study titled "Informal Livelihoods in the Nimule–Elegu Border (South Sudan)". Their findings revealed that livelihoods in the study area are largely sustained through informal cross-border exchanges, the inflow of humanitarian food aid into local markets, and currency exchange activities.

However, prolonged civil conflict and post-independence instability have significantly undermined economic structures, social relations, and market systems, thereby severely constraining livelihood sustainability. These results highlight the decisive role of political and security conditions in shaping livelihood outcomes in border regions. Building on this broader perspective, Zhou et al. (2022), in their study titled "Cross-border Livelihoods: Trade, Labor, and Internal Displacement at the Myanmar–China Border," found that internally displaced persons, despite lacking formal refugee status, engage in economic activities through informal mechanisms such as cross-border trade and local employment. The study emphasizes the dual nature of border governance in China: on the one hand, restrictive migration policies are enforced, while on the other, economic opportunities in border areas facilitate livelihood improvements. Consequently, borders may simultaneously function as both constraining and enabling spaces for vulnerable populations.

In a more quantitative assessment, Parsaie et al. (2025) examined the impact of the economic, social, and physical dimensions of border markets on the quality of life of border residents in Golestan Province. Using a descriptive-analytical methodology and a sample of 384 households selected from a population of 5,621, their regression analysis demonstrated a statistically significant positive effect of border markets on quality of life ( $p < 0.05$ ). Among the examined dimensions, the economic factor had the highest explanatory power (47%), followed by the social (35%) and physical (21%) dimensions.

Similarly, Dzawanda et al. (2022), in a study conducted in Zimbabwe on the impact of COVID-19 on the livelihoods of informal cross-border traders (ICBTs), found that border closures and quarantine measures had severe adverse effects on income generation. Many traders were forced to rely on their savings to meet daily living expenses. This situation, combined with rising prices and limited governmental support, led to a significant deterioration in livelihoods and posed serious challenges to achieving the Sustainable Development Goals, particularly in reducing poverty and hunger.

The study thus highlights the vulnerability of border livelihoods to global crises. From a development-oriented perspective, Xu et al. (2022), focusing on the China–Vietnam border region, investigated the impact of farmers' participation in tourism on sustainable livelihoods. Their findings indicate that motivation, opportunity, and capability significantly influence farmers' engagement in tourism activities. Moreover, positive perceptions of economic, social, and environmental outcomes enhance willingness to continue participation, thereby contributing to livelihood sustainability. The study underscores the importance of economic diversification in border regions as a key driver of resilience.

Regarding the functional role of border markets, Sahneh and Mousavi (2018) found, in their study of the Incheh-Borun border market in Iran, that market development led to improvements in economic and physical indicators in surrounding rural settlements. The most significant impact was observed in housing quality, while the effect on unemployment reduction was not statistically significant. These findings suggest that the impacts of border markets are not uniform across all development dimensions. Likewise, Bahramijaf et al. (2021) found that the Sheikh Saleh border market in Sarpol-e Zahab had a limited impact on the region's economic and political development. Although a modest increase in social and economic activity was observed, its overall contribution to regional development was assessed as constrained and insufficient.

In contrast, Najafikani and Aligholizadeh (2025), in their study of the Incheh-Borun border market, found that the market has a statistically significant impact on rural sustainable livelihoods and accounts for about 71% of regional development variation. Their findings indicate that the border market has played an important role in increasing employment opportunities, stabilizing population settlement, and improving the overall living standards of rural households. This study, therefore, reinforces the positive role of border markets in local development processes.

Consistent with these results, Parsaie et al. (2025) in Golestan Province concluded that border markets have a positive effect on the quality of life of border residents. Among the different dimensions examined, the economic dimension showed the strongest influence, followed by the social dimension, while the physical (infrastructural) dimension had the least impact. These findings highlight that the effects of border markets are multidimensional, with economic benefits being the most dominant.

Similarly, Guo et al. (2023), in a study conducted in Beijing's ecological conservation areas, reported that rural households' livelihoods are generally moderate. Their results further revealed that factors such as the quality of rural services, household expenditure levels, online shopping use, and local governance practices play significant roles in improving livelihood conditions. The study emphasizes the need to enhance economic and service-related conditions to strengthen sustainable livelihoods and provides an important analytical framework for examining livelihood determinants.

However, there remains a significant research gap in the precise assessment of the impacts of this market on rural household sustainable livelihoods. Existing studies conducted in other border regions suggest that the presence of border markets does not necessarily translate into improved livelihoods. In some cases, no statistically significant differences have been observed among households. This highlights the need for more rigorous field-based investigations. Moreover, it is still unclear which aspects of the functioning of such markets most strongly influence specific dimensions of livelihood capital. Against this backdrop, the present study, drawing on the sustainable livelihood framework, seeks to provide a comprehensive assessment of the impact of the Ishkashim border market on households' livelihood conditions in Ishkashim District.

The significance of this research lies in its potential to fill an important empirical and theoretical gap, thereby providing a solid evidence base for more effective policy formulation, resource allocation, and investment planning in border regions. In addition, the findings may have practical implications for organizations such as UNDP and IOM in designing strategies to improve border development policies, reduce poverty, stabilize population settlement, and strengthen regional security.

## **2. Methodology**

This study is applied in terms of its objective and adopts a descriptive–analytical research design. The study was conducted in Ishkashim District, located in Badakhshan Province in northeastern Afghanistan. Due to its strategic location along the Afghanistan–Tajikistan border, Ishkashim plays an important role in cross-border trade and local livelihood activities. At the same time, the district faces several development challenges, including geographical remoteness, limited infrastructure, and dependence on traditional economic activities. These characteristics make it an appropriate case for examining the impact of border markets on household livelihoods.

Data were collected from both secondary and primary sources. Secondary data were obtained through a review of academic literature, journal articles, books, institutional reports, and relevant documents to establish the theoretical framework and review previous studies. Primary data were collected through a structured questionnaire administered to household heads residing within the influence area of the Ishkashim border market.

The questionnaire was developed based on the Sustainable Livelihood Framework and included indicators related to the five livelihood capitals: financial, human, social, physical, and natural capital. Responses were measured using a five-point Likert scale ranging from 1 (Very Low) to 5 (Very High). Since the midpoint of the scale is 3, this value was used as the theoretical mean (test value) in the One-Sample t-test to determine whether the observed livelihood conditions were significantly above or below the average level.

To ensure the validity of the instrument, the questionnaire was reviewed and evaluated by experts in rural development and regional planning. Reliability was assessed using Cronbach’s Alpha coefficient. The obtained Cronbach’s Alpha value was 0.89, which exceeds the acceptable threshold of 0.70, indicating satisfactory internal consistency and reliability of the measurement instrument.

The statistical population consisted of all households located within the area influenced by the Ishkashim border market. Due to the absence of accurate and up-to-date statistics regarding the total number of households in the study area, Cochran’s formula for an unlimited population was employed

to determine the required sample size. Based on this formula, a sample of 200 households was selected using a simple random sampling technique. Data analysis was carried out using both descriptive and inferential statistical methods in SPSS software. Descriptive statistics, including frequency, percentage, mean, and standard deviation, were used to summarize the characteristics of respondents and livelihood dimensions. Inferential statistics included the One-Sample t-test, which was applied to assess the impact of the border market on different livelihood dimensions by comparing observed means with the theoretical mean value of 3. In addition, the Friedman test was employed to rank and prioritize the livelihood dimensions according to their relative level of improvement resulting from border market activities.

### **3. Findings of the Study**

In this section, the research variables and indicators related to different dimensions of sustainable livelihoods are first defined and introduced. Subsequently, descriptive statistics, including mean, standard deviation, minimum, and maximum values for each study variable, are presented and analyzed in order to provide an overall picture of the general status of the studied population. In the next step, appropriate statistical tests were conducted in line with the research hypotheses to examine the impact of the border market on livelihood improvement. To assess the status of each livelihood dimension and compare it with the defined benchmark level, a One-Sample t-test was employed. In addition, the Friedman test was applied to prioritize and identify the most influential livelihood indicators from the perspective of border households, enabling a clear ranking of the studied components. Prior to conducting these analyses, necessary procedures were undertaken to ensure the validity and reliability of the measurement instrument, thereby enhancing the scientific rigor of the results. All data analyses were conducted using SPSS, and the results are presented in the following sections.

#### **3.1 Descriptive Analysis of Respondents' Characteristics**

The findings presented in Table 4-1 indicate that the vast majority of individuals engaged with the border market (92%) are male. From a sociological perspective, this pronounced gender imbalance reflects the predominantly male-oriented nature of cross-border economic activities. This pattern can be attributed to the physically demanding nature of border-related occupations such as transportation, warehousing, and cargo handling, as well as the inherent risks associated with border routes. In addition,

the traditional labor structure in border regions has further limited women's direct participation in commercial activities.

The distribution of educational attainment among respondents reveals two main groups. Approximately 54% of individuals fall within the lower education categories (illiterate or primary education), suggesting that the border market largely relies on experiential and traditional labor. However, the presence of 46% of respondents with secondary or higher education (diploma or university) is a noteworthy finding. From an economic perspective, this may indicate a structural imbalance in the local labor market and a shortage of employment opportunities aligned with higher educational qualifications. Consequently, educated individuals may be compelled to engage in informal trade or border-related commercial activities.

**Table 1. Individual Characteristics and Type of Engagement with the Border Market**

Variable	Category	Frequency (Percent)
Gender	Male	92%
	Female	8%
Education level	Illiterate / Primary	54%
	Secondary (Diploma) / University	46%
Main income source	Agriculture and livestock	38%
	Market work and informal employment	62%
Purpose of visit	Buying and selling	78%
	Services and others	22%

Source: Research findings

According to the data, 62% of respondents reported that their main source of income is informal employment and market-based activities, while agriculture and livestock account for only 38%. These findings strengthen the hypothesis of a “livelihood paradigm shift” from the primary sector (agriculture) toward the tertiary sector (services and trade). It can be interpreted that, due to environmental pressures such as recurring droughts and/or the relatively higher and faster economic returns of border trade, traditional agricultural livelihoods have gradually lost their position as the dominant income source. Consequently, the border market has evolved into a key economic artery of the region. The dominance of the "buying and selling" purpose (78%) over other services (22%) reflects the prevalence of a purely commercial orientation in the border market.

This suggests that the market operates beyond a welfare-oriented space and primarily functions as an economic hub. The high concentration of transactions in goods exchange highlights its strategic role in facilitating liquidity circulation and meeting consumption needs on both sides of the border. Overall,

the results in Table 4-1 indicate that the study population is predominantly male and that, despite varying educational levels, a large share of individuals has shifted away from traditional agricultural livelihoods toward market-based activities. This shift appears to be driven by the weakening of the agricultural sector and increasing reliance on border trade. In this sense, the border market not only serves as a place of exchange but also functions as a labor absorption mechanism for surplus unemployment, playing a critical role in maintaining the economic stability of border communities.

### **3.2 Analysis of Livelihood Dimensions (One-Sample t-test)**

The results of the one-sample t-test for assessing sustainable livelihood dimensions show that the obtained mean values in most dimensions are significantly different ( $P < 0.05$ ) from the theoretical mean (value 3). Among these, physical capital, with a mean of 4.10 and a t-value of 13.85, obtained the highest score, indicating a very favorable situation of infrastructure and access to goods in the study area. Next, financial capital, with a mean of 3.85, is in a favorable condition; this finding indicates that economic activities in the border market have effectively improved the target community's income levels and saving capacity. Also, social capital, with a mean of 3.60, indicates the formation of trust networks and coherent cross-border relations that facilitate trade exchanges.

In contrast, findings related to human capital, with a mean of 2.45 and a negative t-value (-6.72), show that this is the only livelihood dimension in an unfavorable condition. This inconsistency indicates that, despite improvements in economic and physical indicators, insufficient attention has been paid to educational infrastructure, skill training, and health services; in other words, the wealth generated in the region has not necessarily translated into improved human capital quality. Finally, the natural capital situation, with a mean of 3.20 and a significance level of 0.012, is rated as moderate to relatively favorable, indicating a positive association between income and food security and access to basic resources. Overall, the analysis of the five dimensions indicates an "unbalanced development," as the superiority of material dimensions (physical and financial) over qualitative dimensions (human) poses a challenge to the long-term sustainability of livelihoods in this region and underscores the need to invest in soft and human sectors.

Table2. Results of One-Sample t-test for Sustainable Livelihood Status

Livelihood Dimension	Mean	Standard Deviation	t-value	Sig.	Status
Financial capital (income and savings)	3.85	0.74	11.42	0.000	Favorable
Physical capital (access to goods)	4.10	0.62	13.85	0.000	Favorable
Human capital (education and health)	2.45	0.89	-6.72	0.000	Unfavorable
Social capital (cross-border relations)	3.60	0.71	8.92	0.000	Favorable
Natural capital (food security)	3.20	0.81	2.54	0.012	Moderate to high

Source: Research findings

### 3.3 Ranking of Border Market Effects (Friedman Test)

According to the study's findings, access to goods and expenses (physical capital) has a mean rank of 4.35, ranking first. This highest ranking indicates that the most tangible effect of border market activities has been the improvement of physical infrastructure and the facilitation of goods supply processes in the region. In the second priority, income and employment status (financial capital), with a mean rank of 3.90, is positioned, confirming the central role of border markets in creating job opportunities and injecting liquidity into household economies. These two top priorities highlight the "economy-oriented" nature of development in border regions. In the middle and lower ranks, social relations and security (mean rank = 2.80) and food security (mean rank = 2.45) are ranked third and fourth, respectively.

The positioning of these two dimensions in the middle ranks suggests that improvements in financial and physical conditions have, to a lesser extent, influenced social ties and access to natural resources. However, the lowest mean rank belongs to education and health services (human capital) with a score of 1.50, which is placed in the fifth and final priority. This ranking reveals a significant gap between the hard (physical and financial) and the soft (human) dimensions of livelihoods in the study area. The prioritization reveals that although the border economic structure has been successful in improving material livelihoods, it has been unable to translate these financial gains into sustainable qualitative assets such as improved knowledge, skills, and public health (which remain at the lowest priority level). This hierarchical ranking highlights the need to revise supportive policies to balance livelihood dimensions, with particular emphasis on strengthening human capital, which is given the lowest priority.

Table 3. Friedman Test Results for Livelihood Dimensions Ranking

Rank	Livelihood Dimension	Mean Rank	Priority
1	Access to goods and expenses (Physical)	4.35	First
2	Income and employment status (Financial)	3.90	Second
3	Social relations and security (Social)	2.80	Third
4	Food security (Natural)	2.45	Fourth
5	Education and health services (Human)	1.50	Fifth

Source: Research findings

### 3.4 Model Statistics (Chi-Square Test)

The statistical analysis of the Friedman test indicators presented in Table 4 confirms the validity and reliability of the ranking results reported in the previous section. According to the data, the sample size (N) is 200 respondents, which is sufficient for conducting nonparametric tests. The key statistic in this table is the Chi-Square value, which equals 214.68 and is calculated with 4 degrees of freedom. The relatively high value of this statistic indicates significant differences in the mean ranks across the five dimensions of sustainable livelihoods. Considering that the significance level (Asymp. Sig) is 0.000, which is considerably lower than the conventional error thresholds (0.05 or 0.01), the null hypothesis of equal distribution of ranks across livelihood dimensions is rejected with 99% confidence.

These results suggest that the ranking of livelihood dimensions—where physical and financial capital are placed at the top and human capital at the bottom—is not random but follows a systematic pattern within the study population. In other words, the statistically significant differences among the livelihood dimensions indicate that the impact of the border market on improving the living conditions of border households has been highly uneven and unbalanced. Some dimensions (particularly economic and physical) have been substantially strengthened, whereas others (notably educational and health-related aspects) have received less attention. Overall, these findings provide a robust statistical foundation for further qualitative interpretation and for formulating policy recommendations to achieve a more balanced regional development.

Table 4: Friedman Test Statistics

Statistical Indicator	Value
N (Sample size)	200
Chi-Square	214.68
Degrees of Freedom	4
Asymp. Sig.	0.000

Source: Research findings

#### **4. Discussion and Conclusion**

The empirical findings of this study provide a nuanced understanding of the differentiated impacts of the Ishkashim border market on sustainable livelihoods. Overall, the results indicate that the border market has significantly strengthened the material dimensions of livelihoods, particularly physical and financial capital, while human capital remains comparatively weak. The dominance of physical capital and financial capital is consistent with multiple studies in the literature. For instance, findings by Sahneh and Mousavi (2018) in the Incheh-Borun border market show that border market development primarily improves physical infrastructure and economic indicators, with limited impact on employment.

Similarly, Bahramijaf et al. (2021) report that the Sheikh Saleh border market has a restricted contribution to broader regional development, despite some economic improvements. These studies, along with the present research, suggest that border markets primarily operate as economic stimulators rather than comprehensive development instruments. In contrast, more recent evidence from Najafikani and Aligholizadeh (2025) and Parsaie et al. (2025) supports a stronger positive role for border markets in improving rural livelihoods. These studies highlight that border markets can significantly enhance income levels, employment opportunities, and overall quality of life.

The current findings partially align with this perspective, particularly regarding financial and physical capital improvements, but also reveal that these benefits are not evenly distributed across all livelihood dimensions. The most critical finding of this study is the weak performance of human capital, consistent with Guo et al. (2023). Their study shows that livelihood improvement in rural areas depends strongly on service quality, governance, and institutional support, not merely on economic activity.

The present study similarly demonstrates that although income and trade activities have increased, they have not translated into improvements in education and health services. This finding also aligns with Dzawanda et al. (2022), who emphasize that external shocks and weak institutional support can significantly undermine sustainable livelihood outcomes in border regions. On the other hand, the results contrast with more optimistic interpretations, such as Xu et al. (2022), who argue that economic participation in border-related activities (such as tourism) can gradually enhance livelihood sustainability through behavioral and motivational mechanisms.

In the case of Ishkashim, however, such transformation mechanisms appear weak or absent, limiting the spillover of economic gains into human development. Regarding social capital, the moderate results are consistent with Zhou et al. (2022), who highlight that border areas can simultaneously function as spaces of restriction and opportunity, where informal networks play a crucial role in sustaining livelihoods. Similarly, the findings resonate with Aleu and Mading (2025), who emphasize the importance of informal exchanges and cross-border relations in sustaining livelihoods in conflict-affected regions.

In Ishkashim, these networks appear to facilitate trade but remain secondary to economic motivations. Finally, the moderate level of natural capital aligns with findings from Guo et al. (2023). It is partially supported by the broader livelihood literature, which suggests that improvements in income can enhance food security but do not necessarily lead to sustainable environmental resource management. This indicates that livelihood gains in Ishkashim remain vulnerable to environmental and external economic shocks. Overall, the Chi-square results further confirm that the differences across livelihood dimensions are statistically significant, indicating a systematic pattern of unbalanced development. This pattern reflects a broader structural issue identified across multiple studies: border markets tend to prioritize short-term economic gains while underinvesting in long-term human and institutional development.

This study examined the impact of the Ishkashim border market on sustainable livelihoods using the livelihood framework. The findings show that the border market has significantly improved the economic dimensions of livelihoods, particularly physical capital (access to goods and infrastructure) and financial capital (income and employment). These improvements indicate that the market has become an important driver of short-term economic welfare in the region. However, the results also reveal a clear imbalance across livelihood dimensions. Human capital, especially education and health, remains low and ranks last among components, indicating that economic gains have not been translated into long-term human development. Social and natural capitals show moderate improvements but remain secondary to economic gains. Overall, while the Ishkashim border market plays a crucial role in supporting household incomes and reducing immediate poverty, its contribution to sustainable, balanced livelihood development remains limited. The findings highlight the need for policies that

complement economic growth with stronger investment in human capital to ensure long-term livelihood sustainability.

## **5. Statements and Declarations**

### **5.1 Competing Interest**

The authors declare that they have no known competing financial interests or personal relationships that could have influenced the work reported in this paper.

### **5.2 Data availability**

Data will be made available on request.

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We have no conflict of interest.

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### **5.6 Ethics Approval**

Not Applicable

### **5.7 Consent to participate/Consent to publish**

Not Applicable

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