



Obstacles and challenges of rural development in Afghanistan: examining problems and solutions

Fayaz Gul Mazloun Yar¹, Janat Gul Zazia²

Nangarhar University, Afghanistan¹

Paktia University, Afghanistan²

Email : fmazloumyar@gmail.com¹, arlphlmn04@gmail.com³

Abstract:

This study investigates the multifaceted challenges hindering rural development in Afghanistan, employing an IMRAD structure to present findings. The introduction outlines the significance of rural development, noting that approximately 71% of the Afghan population resides in rural areas, predominantly engaged in agriculture. The methods section details a comprehensive document analysis and literature review from 2020 to 2024, focusing on institutional, socio-cultural, economic, environmental, and infrastructural barriers. Results indicate that ineffective governance, centralization, and socio-cultural issues such as gender inequality and low educational attainment severely impede progress. Additionally, economic challenges, including high poverty rates and unemployment, exacerbate the situation. Environmental concerns like land degradation and inadequate infrastructure further threaten rural livelihoods. The discussion emphasizes the interconnectedness of these challenges, advocating for a holistic approach that includes decentralization, community engagement, and investment in sustainable agricultural practices. The conclusion presents strategic recommendations for policymakers and stakeholders, highlighting the necessity of a coordinated, community-driven approach to achieve sustainable rural development in Afghanistan. By addressing these interconnected barriers, Afghanistan can foster long-term growth, stability, and improved quality of life for its rural populations.

Keyword: Rural Development, Sustainable Development, Socio-Cultural Barriers, Economic Obstacles, Environmental Concerns, Development.

Corresponding: Fayaz Gul Mazloun Yar

E-mail: fmazloumyar@gmail.com



INTRODUCTION

The development of rural areas is a cornerstone for achieving sustainable national growth, particularly in countries like Afghanistan, where a significant majority of the population resides in rural regions. Approximately 71% of Afghanistan's population lives in rural areas, predominantly engaged in agriculture, which forms the backbone of the country's economy (Yar & Yasouri, 2024). However, these rural areas are often neglected, leading to a wide range of socio-economic challenges that hinder the overall development of the nation Rahmani et al., 2021. Rural development in Afghanistan has historically been undermined by a series of complex and interrelated factors. Decades of armed conflict, political instability, and weak governance structures have severely disrupted the social and economic fabric of rural communities. The lack of adequate infrastructure, including roads, schools, healthcare facilities, and energy access, further exacerbates these challenges, leaving rural populations isolated and deprived of basic services.

Additionally, Afghanistan's rural economy is characterized by low agricultural productivity, which is largely due to outdated farming practices, insufficient access to modern agricultural technologies, and a lack of institutional support (Zhu et al., 2022). The socio-cultural context of rural

Afghanistan also presents significant barriers to development. Deep-rooted traditions and cultural norms often limit the participation of women and marginalized groups in economic activities, while migration from rural to urban areas contributes to the aging of the rural population and the erosion of traditional social structures. Environmental issues, such as land degradation, water scarcity, and the impacts of climate change, further compound these challenges, threatening the livelihoods of rural communities and the sustainability of agricultural practices (Das et al., 2023). Despite the critical role that rural development plays in national stability and prosperity, efforts to address these challenges have been fragmented and inconsistent. Previous strategies have often been top-down, with limited involvement of local communities in the planning and implementation processes. This approach has led to a lack of coordination among stakeholders, inefficient use of resources, and ultimately, the failure to achieve meaningful and lasting development outcomes (Couper et al., 2023). In recent years, there has been a growing recognition of the need for a more holistic and integrated approach to rural development in Afghanistan. This approach must address the multifaceted nature of the challenges faced by rural communities, combining investments in infrastructure, education, and healthcare with efforts to modernize agriculture and promote economic diversification. Furthermore, it is essential to involve local communities in the decision-making process to ensure that development initiatives are tailored to their specific needs and contexts (Dai et al., 2023). However, the current body of research on rural development in Afghanistan is limited, particularly in terms of empirical studies that explore the practical implementation of development strategies. Much of the existing literature focuses on theoretical frameworks without adequately addressing the on-the-ground realities faced by rural communities. This study seeks to bridge this gap by providing a comprehensive analysis of the institutional, socio-cultural, economic, environmental, and infrastructural barriers to rural development in Afghanistan.

This paper is structured as follows: Section 2 provides a review of the existing literature on rural development challenges in Afghanistan and comparable contexts. Section 3 outlines the research methodology, detailing the document analysis and critical review methods employed in this study. Section 4 presents the key findings, discussing the major obstacles to rural development in Afghanistan and their implications for policy and practice. Finally, Section 5 concludes with a set of recommendations aimed at policymakers, development practitioners, and other stakeholders involved in rural development, emphasizing the need for coordinated and community-driven approaches to overcome these challenges. This type of development is aimed at all economic, social, environmental, and political dimensions. Thus, the question arises: What are the challenges, constraints, issues, and barriers to rural development in Afghanistan?

The innovation of this research lies in its comprehensive theoretical approach to identifying and critiquing the multifaceted challenges to rural development in Afghanistan. By focusing on institutional, socio-cultural, economic, environmental, and physical infrastructure challenges, the study provides a holistic understanding of the barriers that hinder rural development in the country. The research methodology, which includes document analysis, critical review, and literature review, offers a robust framework for analyzing these challenges. The study's findings underscore the need for a coordinated and inclusive approach to rural development that involves effective planning, community participation, investment in infrastructure, and sustainable agricultural practices. This research contributes to the body of knowledge on rural development by highlighting the interconnectedness of the various challenges faced by rural communities in Afghanistan and by suggesting strategic interventions for overcoming these obstacles.

The study of rural development challenges in Afghanistan, while comprehensive in its theoretical approach, reveals several gaps in the current research landscape. These gaps highlight the necessity for future research endeavors to delve into the practical manifestations of these challenges and to empirically validate the theoretical findings. Specifically, there is a lack of empirical studies that directly engage with rural communities to understand the on-the-ground realities of development challenges. Additionally, the study calls for in-depth case studies of specific villages or regions to capture the nuances of rural development in varied contexts within Afghanistan.

RESEARCH METHODS

This study employs a theoretical approach, utilizing document analysis, critical reviews, and an extensive literature review. Document analysis enabled a comprehensive examination of government reports, academic studies, and other relevant sources. A critical review provided insights into the key barriers hindering rural development, while the literature review synthesized findings from recent research to develop a robust theoretical framework. Data analysis focused on identifying institutional, sociocultural, economic, and environmental challenges, and synthesizing these findings into actionable insights. Although the study is based on secondary data, the analysis offers a comprehensive understanding of the obstacles to rural development in Afghanistan.

RESULTS AND DISCUSSION

It is an undeniable necessity that specific challenges and obstacles to rural development exist in every country. For example, the challenges in achieving sustainable rural development in India include population growth, natural resource degradation, environmental pollution, limited access to education, youth unemployment, poor health due to lack of healthcare, and weak infrastructure for receiving information. These challenges also include issues related to globalization and livelihood problems. The following will focus on the challenges of rural development in Afghanistan.

Challenges to Achieving Rural Development in Afghanistan

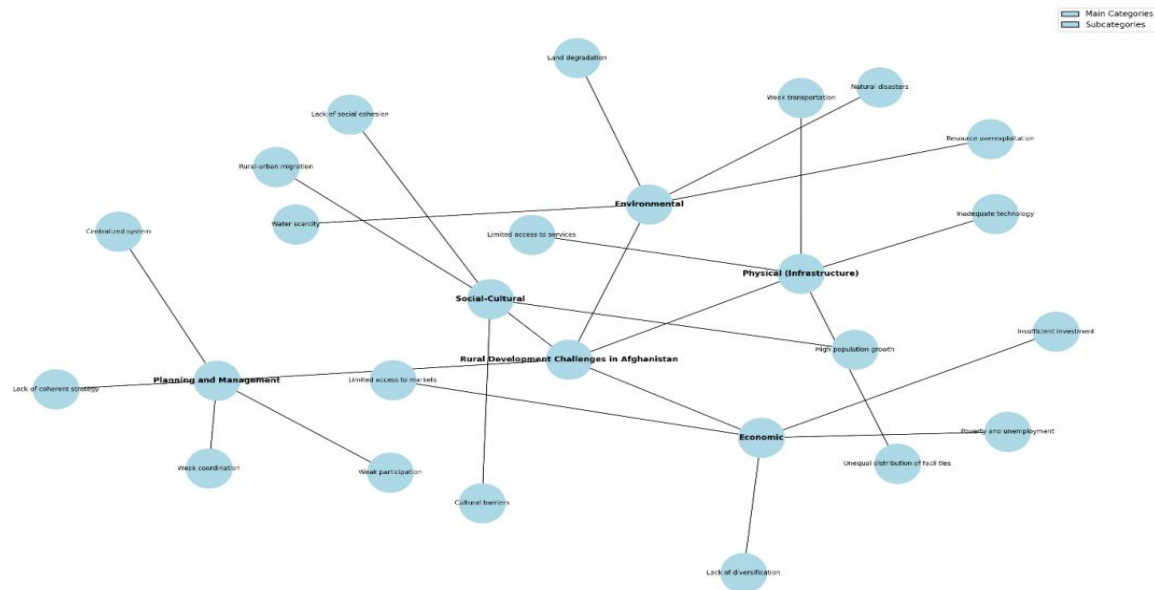
Afghanistan faces numerous challenges and obstacles in rural areas on the path to sustainable development. To achieve rural development in Afghanistan, attention must be paid to all economic, social, institutional, and environmental dimensions. It is important to note that focusing on one structure while neglecting others can lead to failure in the development process. Therefore, to achieve sustainable development in general and rural development in particular, these challenges and obstacles must be analyzed. This will draw the attention of policymakers and planners to create suitable conditions for addressing these obstacles with effective solutions and programs. Below are some of the most significant barriers and fundamental challenges to rural development in Afghanistan (Essar et al., 2023).

Poverty: Afghanistan is currently facing numerous problems. Millions of people live below the poverty line and suffer from severe hunger. Low living standards and widespread poverty, especially in rural areas, are the primary challenges to the country's underdevelopment. The ongoing conflict for more than forty years has exacerbated these issues. In Afghanistan, poverty inequality is more severe in rural areas than in urban areas, and it is especially high among nomads. Nomads rely on livestock herding and constantly search for grazing land. A survey by the Central Statistics Organization of Afghanistan, conducted in 2016 and 2017, shows that more than 54% of Afghans live below the poverty line. Poverty levels are 18% in cities, 61% in rural areas, and 89% among nomads. The poverty rate in Afghanistan is extremely high, with more than 60% of rural and nomadic populations living below the poverty line. Half of the country's population earns less than one dollar a day, and the main source of income for rural inhabitants and small-scale farmers is subsistence production. According to statistics, most of the country's wealth is concentrated in the hands of less than 30% of the population, while over 70% of the people are poor or live below the poverty line. Additionally, wealthy individuals often transfer or invest their capital outside the country, which poses a significant threat to the country's economic growth and development. People living in rural areas of Afghanistan face challenges such as low agricultural productivity, limited technical knowledge and skills among farmers, inadequate service provision, and inefficient resource use, all of which contribute to increased poverty (Yar & Nasih, 2024).

Rural Roads: Afghanistan's rural roads face two major issues: mountainous terrain and damage from decades of war. Of the roughly 40,000 villages across Afghanistan, more than 40% have dirt roads, and only about 38% have access to proper roads. **Unemployment:** In 2020, the labor force participation rate for men was 68.4%, while for women it was 16.5%, reflecting the lower employment rate among women compared to men. The unemployment rate among youth in rural areas was 29.6% in 2016 and dropped to 22.3% in 2020. Unemployment is a significant and

fundamental problem for rural residents in Afghanistan, contributing to increased migration from rural to urban areas and further exacerbating urban problems (Mahgoub et al., 2024). Low Productivity: Today, agricultural development is key to improving welfare in many developing countries. Approximately 71% of Afghanistan's population lives and works in rural areas, and 61% of households derive income from agriculture. Agriculture is a major component of rural development in Afghanistan and can play a crucial role in reducing poverty and promoting sustainable growth through job creation, productivity improvement, and inclusivity. However, several challenges affect the low productivity of the agricultural sector, including management challenges, water scarcity, and traditional usage, lack of medicine, materials, and chemical fertilizers, land fragmentation due to inheritance laws, difficulties in preserving natural resources, particularly deforestation, lack of equipped laboratories for pest detection, limited support programs for production, and rural self-sufficiency, as well as land grabbing of government and private properties (Rahman et al., 2017). According to the World Bank's 2014 report, it was recommended that Afghanistan's agricultural sector focus on three sub-sectors for economic sustainability: irrigated wheat, horticulture (including fruits, nuts, and vegetables), and livestock (including dairy, eggs, and poultry). These recommendations are based on their suitability for small-scale, intensively irrigated areas and peri-urban zones, which are expected to provide added value and employment. Additionally, studies by the International Labor Organization indicate that grapes and tomatoes generate the highest per-unit income. The regional market for grapes is highly competitive, and the establishment of a cold chain is essential for realizing potential growth in this sector. Wheat is the most widely cultivated crop, supporting the income of approximately 47% of households in Afghanistan, but it provides the lowest income per unit among the five crops examined (Eini-Zinab et al., 2021). High Population Growth: Afghanistan's population growth rate is high, and neither new technology adoption nor scientific research to enhance agricultural products and domestic production are evident. The continuous 2.4% population growth rate in the long term is a cause for serious concern, as most poor families have many children, which exacerbates economic inequalities. The average population growth rate in Afghanistan during the mentioned period was 3.15%, and it has never experienced a rate below 2%. It is predicted that Afghanistan's population growth rate, particularly in rural areas, will remain constant over the coming decades. The rapidly growing population increases pressure on the country's resources, service delivery, and labor market, which is already affected by a lack of sustainable jobs (Bozorgzadeh & Mousavi, 2023).

Education: In Afghanistan, rural residents have limited access to basic amenities compared to urban dwellers. For instance, in education, due to security threats, a lack of educational facilities, and teachers, particularly female teachers, more than 42% (5 million) of eligible children do not have access to education. Six thousand schools lack buildings and other essential facilities, and hundreds of schools are located far from residential areas (Manalai et al., 2022). The literacy rate in Afghanistan among men (aged 15 and above) is 62%, while among women it is 18%. In this country, only one in five women is literate, and the literacy rate for women in rural areas is three times lower than in urban areas. The Ministry of Education in Afghanistan faces a shortage of professional teachers, with more than 40% of school teachers being non-professional, representing a major challenge for the country's education system. The current curriculum does not meet Afghanistan's needs, and other significant challenges, especially in rural areas, include a lack of textbooks, desks, chairs, and school buildings. Not all regions are capable of providing equal education (Manalai et al., 2022).



This mind map illustrates the major categories and their specific challenges, providing a clear overview of the issues facing rural development in Afghanistan.

Challenges in Management, Regulation, and Planning (Policy-making)

One of the significant challenges in rural development in Afghanistan is the lack of effective planning and management. Historically, the country has adopted a top-down approach with centralized decision-making, excluding local communities from the development process. This has resulted in poor coordination, increased costs, and inefficient use of resources, ultimately creating dissatisfaction among rural populations. Moreover, rural development has been politicized, and accountability in policy implementation remains weak. The absence of a coherent strategy for sustainable rural development, coupled with a lack of coordination between governmental and non-governmental organizations, further exacerbates the situation. Theoretical weaknesses and the absence of practical models have hindered progress. Moreover, the involvement of communities in planning and execution has been minimal, and non-governmental organizations have struggled to play an effective role due to lack of collaboration and communication with governmental institutions. Sustainable development efforts require decentralization, more active community participation, and better alignment between local needs and national policies (Story & Carpiano, 2017).

Social Challenges

The social landscape in rural Afghanistan presents numerous challenges for development. One of the most pressing issues is the migration of the younger population from rural to urban areas, leading to the aging of rural communities and a loss of workforce. Cultural and traditional barriers, including gender inequality, hinder the participation of women and marginalized groups in economic and social activities. Educational attainment remains low, and access to basic services such as healthcare, education, and sanitation is limited, particularly in remote areas. There is also a lack of awareness among rural populations about sustainable development practices and their rights. Social cohesion is weak, and community participation in development initiatives is minimal. Addressing these social challenges requires targeted efforts to empower local communities, promote gender equality, and improve access to education and essential services (Yar & Yasouri, 2024; Rijal et al., 2020).

Economic Challenges

Rural development in Afghanistan faces numerous economic barriers. A key challenge is the ineffective cooperation and weak economic infrastructure in rural areas. Most rural communities lack access to essential markets, which hampers their ability to commercialize agricultural products. The economic structure remains heavily reliant on subsistence farming, with limited diversification

into non-agricultural sectors such as tourism or rural industry. Furthermore, the agricultural sector suffers from low productivity due to a lack of modern technologies, inefficient farming methods, and insufficient support programs. Limited access to credit and financial services further restricts economic growth. Poverty remains pervasive in rural areas, with many families living below the poverty line. In addition, rural unemployment, particularly among youth, exacerbates migration to urban areas, contributing to further economic imbalance between rural and urban regions. Economic diversification, improved market access, and increased investment in rural industries are critical to overcoming these challenges (Zhang et al., 2022).

Environmental (Ecological) Challenges

Environmental protection is the most crucial element of sustainable development. Environmental damage not only reduces the productivity of agricultural and non-agricultural activities but also poses health risks for humans, animals, and other forms of life. To ensure that economic and social progress is sustainable and institutionalized, preventing environmental degradation is paramount. Some of the environmental challenges facing rural development in Afghanistan include:

1. Conversion of agricultural land to non-agricultural uses,
2. Unfavorable ecological conditions for sustainable rural development,
3. Weak management of natural disasters in rural areas, leading to reduced production due to floods, droughts, and cold weather,
4. The imbalance between population and natural resources,
5. Over-exploitation of groundwater resources,
6. Use of inappropriate technology in agriculture and soil erosion,
7. Sanitation and wastewater pollution issues in villages,
8. Overuse of fertilizers,
9. Overgrazing of pastures,
10. The emergence of animal epidemics (Essar et al., 2022).

Physical (Infrastructure) Challenges

The physical infrastructure challenges hindering rural development in Afghanistan can be summarized as follows

1. Weakness (proper infrastructure in rural areas) unavailability of roads, banks, schools, etc
2. Structural defects in operational systems in most rural areas such as small farmers
3. Limited access to appropriate technology in rural areas
4. Limitation of access to modern knowledge and technology in rural areas
5. Unequal distribution of income, prosperity, and national facilities and opportunities between industry and agriculture.
6. Absence of a formal education system
7. Lack of connection between city and village to provide socio-economic services
8. Vulnerability of sometimes rural settlements to natural disasters
9. Lack of arrangement of space suitable for sometimes rural residence
10. Imbalance and growing inequality between urban centers and rural communities
11. Weakness in the transportation system (Bagambilana & Rugumamu, 2023)
- 12.

Institutional and Structural Challenges

Institutional and structural challenges affecting rural development include:

1. The dominance of sectoral thinking (despite the emphasis on comprehensive and spatial programs) over the overall planning process,
2. Lack of cohesive and effective communication between executive organizations in achieving program objectives,
3. The existence of a centralized (top-down) management structure despite the acceptance of regional and provincial program decentralization,
4. The presence of a centralized spatial structure in the country's spatial planning system, prioritizing urban centers over rural settlements,

5. Lack of belief in rural development among some decision-makers within the country's planning structure,
6. Absence of a comprehensive rural development plan,
7. Lack of coordination between organizations responsible for rural development and the overlap of their duties,
8. Mismanagement of land and land use,
9. Absence of long-term and practical plans for the systematic organization of rural centers and spaces,
10. Lack of a clear legal framework for rural planning,
11. Absence of a specific model or framework for rural development,
12. Deficiencies in planning at various levels, such as the absence of local-level planning and lack of clear delineation of planning responsibilities at national, regional, and local levels (Chen et al., 2022).

Planning that focuses on identifying central villages for providing necessary services, creating non-agricultural jobs, developing rural industries, consolidating agricultural lands, reducing rural migration, and developing human resources can address some of the existing challenges in rural development.

Discussion

The examination of rural development challenges in Afghanistan through a theoretical lens has yielded a comprehensive understanding of the intricate web of issues that hinder progress in the nation's rural areas. The study's findings underscore the interconnectedness of institutional, socio-cultural, economic, environmental, and physical infrastructure challenges, necessitating a multifaceted approach to rural development. The discussion of institutional challenges highlights the critical role of effective planning and management in rural development. The top-down approach and centralized planning that have characterized rural development efforts in Afghanistan have often excluded local participation and failed to address the diverse needs of rural communities. This has led to inefficiencies and a lack of coordination, resulting in dissatisfaction among the rural population (Zhang et al., 2022). Socio-cultural challenges, such as migration and cultural barriers, have contributed to the aging of rural populations and the erosion of traditional rural lifestyles. The study suggests that addressing these challenges requires an understanding of local contexts and the empowerment of rural communities to engage in development processes. Economic challenges, including low agricultural productivity and limited market access, are symptomatic of a broader lack of economic diversification and private sector involvement (Yar & Yasouri, 2024). The study indicates that stimulating rural entrepreneurship and improving market linkages are essential for enhancing rural economies. Environmental concerns, such as land degradation and water scarcity, are not only threats to agricultural productivity but also to the health and well-being of rural populations. The discussion emphasizes the need for sustainable management of natural resources to ensure the long-term viability of rural communities. Physical infrastructure challenges, including inadequate roads and technology access, underscore the necessity of investment in rural infrastructure to support economic and social development. The study argues that improved connectivity and access to technology are prerequisites for rural development. In conclusion, the discussion points to the need for a holistic and integrated approach to rural development in Afghanistan that addresses the identified challenges in a coordinated manner. This approach must be inclusive, community-driven, and cognizant of the local context to ensure that rural development initiatives are effective and sustainable.

CONCLUSION

Rural development in Afghanistan is hindered by a complex set of institutional, economic, social, and environmental challenges. These obstacles are deeply interconnected, and addressing them requires a holistic approach that emphasizes community participation, sustainable practices, and effective governance. Key recommendations include decentralizing decision-making processes, improving infrastructure, and fostering economic diversification through modern agricultural techniques and rural industries. Social challenges such as migration, gender inequality, and low educational attainment must also be addressed through targeted programs that empower rural populations and enhance their capacity for self-sufficiency. Collaborative efforts among government entities, international organizations, and local communities are essential to drive meaningful and sustainable development in Afghanistan's rural areas. Only by addressing these multifaceted challenges can Afghanistan achieve long-term growth and stability in its rural regions.

REFERENCES

- Bagambilana, F. R., & Rugumamu, W. M. (2023). Small-Scale Farmers' Vulnerability to Biophysical and Socio-Economic Risks in Semi-Arid Lowlands of Mwanga District, Kilimanjaro Region, Tanzania. *Environmental Management*, 72(2), 275-293.
- Bozorgzadeh, E., & Mousavi, S. J. (2023). Water-constrained green development framework based on economically allocable water resources. *Scientific Reports*, 13(1), 5306.
- Couper, I., Lediga, M. I., Takalani, N. B., Floss, M., Yeoh, A. E., Ferrara, A., . . . Wanjala, M. N. (2023). Exploring the ideas of young healthcare professionals from selected countries regarding rural proofing. *Rural and remote health*, 23(4), 1-11.
- Dai, J., Fang, J., Guo, Z., & Hou, J. (2023). Research on ecological restoration assessment and eco-economic development of sea area by introducing the K-means clustering algorithm. *Environmental Science and Pollution Research*, 30(56), 118318-118331.
- Das, M., Das, A., & Pandey, R. (2023). A socio-ecological and geospatial approach for evaluation of ecosystem services to communities of the Eastern Himalayan Region, India. *Environmental Science and Pollution Research*, 30(55), 116860-116875.
- Eini-Zinab, H., Sobhani, S. R., & Rezazadeh, A. (2021). Designing a healthy, low-cost and environmentally sustainable food basket: an optimisation study. *Public health nutrition*, 24(7), 1952-1961.
- Essar, M. Y., Ashworth, H., & Nemat, A. (2022). Addressing the humanitarian crisis in Afghanistan through \$10 billion Afghani assets: what are the challenges and opportunities at hand? *Globalization and health*, 18(1), 74.
- Essar, M. Y., Siddiqui, A., & Head, M. G. (2023). Infectious diseases in Afghanistan: Strategies for health system improvement. *Health Science Reports*, 6(12), e1775.
- Faizi, M., Maryono, M., & Hermawan, F. (2024). Drought in Afghanistan: Exploring the vulnerability and drought coping capacity of the farmers of Arabmazari village, Chamtal district, Balkh Province, Afghanistan. *Journal of Bioresources and Environmental Sciences*, 3(1), 1-13.
- Gonçalves, M. M. (2023). Acceptance and commitment therapy and its unacknowledged influences: Some old wine in a new bottle? *Clinical Psychology & Psychotherapy*, 30(1), 1-9.

- Haidary, S. (2023). A Comparative Study of Life Quality in Urban and Rural Areas of Afghanistan: A Case Study of Jawzjan Province. *Journal of Economics, Finance and Accounting Studies*, 5(4), 01-09.
- Hermawati, W., Ririh, K. R., Ariyani, L., Helmi, R. L., & Rosaira, I. (2023). Sustainable and green energy development to support women's empowerment in rural areas of Indonesia: Case of micro-hydro power implementation. *Energy for Sustainable Development*, 73, 218-231.
- Jat, H. S., Sharma, P. C., Datta, A., Choudhary, M., Kakraliya, S. K., Sidhu, H. S., . . . Jat, M. (2019). Re-designing irrigated intensive cereal systems through bundling precision agronomic innovations for transitioning towards agricultural sustainability in North-West India. *Scientific Reports*, 9(1), 17929.
- Mahgoub, E. A. A., Khairy, A., Osman, S., Haga, M. B., Osman, S. H. M., Abbu Hassan, A. M., . . . Babiker, A. (2024). War and education: the attacks on medical schools amidst ongoing armed conflict, Sudan 2023. *Conflict and Health*, 18(1), 23.
- Manalai, P., Currie, S., Jafari, M., Ansari, N., Tappis, H., Atiqzai, F., . . . Stekelenburg, J. (2022). Quality of pre-service midwifery education in public and private midwifery schools in Afghanistan: a cross sectional survey. *BMC medical education*, 22(1), 39.
- Nehring, R. (2022). The Brazilian green revolution. *Political Geography*, 95, 102574.
- Rahman, S. A., Sunderland, T., Roshetko, J. M., & Healey, J. R. (2017). Facilitating smallholder tree farming in fragmented tropical landscapes: Challenges and potentials for sustainable land management. *Journal of environmental management*, 198, 110-121.
- Rahmani, H., Wafa, W., & Yar, F. G. M. (2021). The importance of public awareness in environmental protection: A case study in Paktika, Afghanistan. *Nature Environment and Pollution Technology*, 20(4), 1621-1626.
- Redclift, M. (2023). The role of agricultural technology in sustainable development. In *Technological change and the rural environment* (pp. 81-103). Routledge.
- Rice, J. M., Wilson, T., Temple, J. B., & McDonald, P. (2022). The impact of demographic and economic change on the Australian generational economy: financial sustainability, intergenerational inequality, and material living standards. *Frontiers in public health*, 10, 798298.
- Rijal, S., Rimal, B., Stork, N., & Sharma, H. P. (2020). Quantifying the drivers of urban expansion in Nepal. *Environmental Monitoring and Assessment*, 192, 1-17.
- Story, W. T., & Carpiano, R. M. (2017). Household social capital and socioeconomic inequalities in child undernutrition in rural India. *Social Science & Medicine*, 181, 112-121.
- Sullivan, S. D. (2023). Medicare drug price negotiation in the United States: implications and unanswered questions. *Value in Health*, 26(3), 394-399.
- Yar, F. G. M., & Nasih, I. U. (2024). The Role of Islam in Alleviating Poverty: An Analytical Study. *Journal of Islamic and Social Studies*, 10-28.
- Yar, F. G. M., & Yasouri, M. (2024). Rural Development Challenges in Addition to Effective Solutions to Overcome Obstacles. *Zhongguo Kuangye Daxue Xuebao*, 29(3), 79-90.

- Yar, F. G. M., Zahid, S., & Miakhil, J. M. (2023). Afghanistan's Geopolitical and Geo-Economic Significance in Regional Connectivity and Development. *Journal of Political and Legal Sovereignty*, 1(2), 78-86.
- Zhang, Q., Bilsborrow, R. E., Song, C., Tao, S., & Huang, Q. (2019). Rural household income distribution and inequality in China: Effects of payments for ecosystem services policies and other factors. *Ecological Economics*, 160, 114-127.
- Zhang, Y., Liu, G., Ma, Z., Deng, X., Song, J., & Xu, D. (2022). The influence of land attachment on land abandonment from the perspective of generational difference: Evidence from sichuan province, China. *International Journal of Environmental Research and Public Health*, 19(18), 11651.
- Zhu, J., Zhou, B., & Li, W. (2022). Impact analysis of environmental regulation and improvement of agricultural economic efficiency on living environment based on systematic GMM model. *Journal of Environmental and Public Health*, 2022(1), 7674549.