

Government Investment in Agriculture and Policy Recommendations

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ABSTRACT

This editorial delves into the impact of agricultural financing policies in Nepal, highlighting their role in enhancing farmers' access to credit and improving agricultural productivity. Drawing on studies by various researchers, it explores the positive outcomes of initiatives like the Agricultural Credit Guarantee Scheme (ACGS) and Prime Minister Agriculture Modernization Project (PMAMP), which have led to increased credit disbursements and adoption of modern agricultural practices. Despite these successes, challenges such as limited collateral, high-interest rates, and financial literacy gaps persist, underscoring the need for further reforms. The editorial also discusses opportunities for improvement, including innovative financing models and enhanced rural infrastructure, in alignment with Nepal's agricultural perspective plan and monetary policies. Overall, it emphasizes the crucial link between agricultural financing, economic development, food security, and poverty reduction in Nepal.

Keywords: Agriculture, Finance, Policy Gap, Source, Suggestions.

Introduction

Nepal's economy is deeply rooted in agriculture, with the sector contributing approximately 25 percent to the Gross Domestic Product (GDP) and employing a significant portion of the population. The agricultural sector not only fulfills the food needs of the nation but also serves as a major source of employment, particularly in rural areas (GON, NPC 2022). Additionally, agriculture plays a crucial role in Nepal's foreign exchange earnings and contributes to economic self-reliance and the development of the industrial sector.

Despite these contributions, Nepal faces persistent challenges, with a significant portion of its population still living below the poverty line, especially in rural areas where agriculture is

the primary livelihood (NRB, 2014). Addressing agricultural development is thus paramount for poverty reduction, economic growth, and environmental sustainability.

The importance of modernizing and developing the agriculture sector in Nepal cannot be overstated. It not only supports livelihoods but also drives economic growth and ensures food security. However, inadequate financing, limited irrigation facilities, technological gaps, high labor costs, and logistical challenges hinder the sector's growth potential (CBS, 2023).

Agricultural financing emerges as a critical component in transforming subsistence farming into a commercially viable enterprise. Access to finance enables farmers to invest in modern

inputs, technologies, and practices that can significantly boost productivity and income (IFC, 2022). Yet, challenges such as high default rates on agricultural loans and inadequate financial literacy among farmers remain barriers to effective credit utilization.

Efforts from government bodies and financial institutions to enhance agricultural financing are commendable, including mandates for banks to allocate a portion of their loans to agriculture, subsidies, microcredit initiatives, and support for deprived sectors (IFC, 2022). However, more targeted interventions and capacity-building programs are needed to ensure efficient credit utilization and repayment among farmers.

Agricultural Sector of Nepal: Cultivating Latent Opportunities

The agricultural sector in Nepal holds a crucial position, contributing significantly to the economy and providing livelihoods for a large portion of the population. It constitutes approximately one-fourth of the nation's GDP and employs two-thirds of the workforce (IFC, 2022). Despite its importance, the sector faces numerous challenges that hinder its growth and productivity.

One of the key challenges is the transition from traditional subsistence farming to modern commercialization, which necessitates access to agricultural credit (Paudel, 2016). The sector grapples with low productivity, weather-related risks, inadequate technology adoption, and insufficient supply of essential inputs like seeds and fertilizers (IFC, 2022).

Efforts to enhance agricultural productivity through government interventions and policies have shown mixed results. While production has increased by 3.2 percent over the past two decades, challenges such as climate variability, declining land holdings, and limited access to modern technologies persist (Government of Nepal, 2020/21).

Access to agricultural credit emerges as a critical factor in addressing these challenges and

improving productivity. Farmers can leverage credit to invest in irrigation facilities, improved seeds, and mechanized techniques, leading to higher technical efficiency (Jaffrin, Shrestha & Ferrari, 2006). Studies indicate that access to loans has facilitated the adoption of yield-enhancing technologies and modern agricultural practices, positively impacting agricultural output and GDP (Rimal, 2014).

Despite the potential benefits, limited access to credit, especially in rural areas, remains a concern. Farmers need credit not only for farming inputs but also for working capital and consumption items, highlighting the multifaceted role of agricultural credit in rural economies (Rimal, 2014).

Role of Agriculture in Economic Growth and Poverty Reduction

Agriculture plays a pivotal role in the economic growth and poverty reduction efforts of developing countries. It serves as a significant source of income, employment generation, poverty alleviation, and improvement in living standards.

Research by the World Bank (2008) indicates that agricultural growth directly correlates with poverty reduction, with agriculture-based GDP growth being twice as effective in reducing poverty compared to growth from other sectors. Countries experiencing rapid agricultural growth have seen a substantial decrease in rural poverty levels.

Examples from China, India, Vietnam, Bangladesh, Uganda, and Ghana highlight the positive impact of agricultural growth on poverty reduction. Land reforms, trade liberalization, and technological advancements in agriculture have led to remarkable economic growth and poverty alleviation in these nations (World Bank, 2008).

Investments in agricultural research, development, extension services, and education have resulted in increased agricultural productivity, leading to significant socio-economic benefits (OECD, 2015). Moreover,

agriculture serves as a safety net during economic downturns, external shocks, or financial crises, providing stability and resilience to developing economies (Stringer, 2001).

Improving access to finance for smallholder farmers is crucial for maximizing the benefits of agricultural growth. Micro-credit institutions have emerged as effective tools for reaching underserved populations and promoting inclusive agricultural development within countries like Nepal.

Agriculture Financing

Agricultural financing policies in Nepal have shown positive impacts on farmers' access to credit and agricultural productivity. Studies by Bhatta (2019) found that schemes like the Agricultural Credit Guarantee Scheme (ACGS) and Prime Minister Agriculture Modernization Project (PMAMP) led to increased credit access and improved agricultural practices.

However, challenges persist, particularly for smallholder farmers. Factors like lack of collateral, high-interest rates, and limited credit history hinder access to finance (Acharya, 2019). To address these, the Nepalese government has introduced policies such as loan guarantees and subsidies, aiming to incentivize financial institutions to lend to farmers (Bhatta, 2019).

Opportunities for improvement include adopting innovative financing models like mobile money and peer-to-peer lending, enhancing financial literacy among farmers, and developing rural infrastructure for market access (Bhatta, 2019). These initiatives align with Nepal's agricultural perspective plan and monetary policies, which emphasize inclusive agricultural development and increased access to finance (Economic Survey, 2020/21).

Research from Gauchan (2012) emphasizes the importance of agricultural growth for food security and poverty reduction. Similarly, Hatlebakk and Das (2009) highlight challenges like high-interest rates and pricing discrimination in rural credit markets, urging for reforms to support agricultural development.

Studies by Devi (2012), Rimal (2014), and Nepal Rastra Bank (2014) underscore the positive impact of agricultural credit on productivity and income, provided farmers receive technical support and use loans effectively. Hibbett (2018) also stresses the link between financial access, interest rates, and agricultural productivity.

Agriculture stands as not just a vital sector but a cornerstone of economic stability in many developing nations. Its significance is not merely economic but also social and environmental, making it imperative for governments to invest substantially in agricultural financing. A robust literature review of empirical studies underscores the critical role that credit accessibility plays in shaping the trajectory of agricultural productivity, smallholder farmers' livelihoods, and ultimately, sustainable rural development.

Numerous studies have delved into the impact of credit on agricultural productivity, with compelling evidence highlighting the positive correlation between credit accessibility and enhanced productivity, particularly among small farmers (Raza, 2017). These findings underscore the pivotal role that financial support plays in empowering farmers to invest in crucial inputs like seeds, fertilizers, and machinery, as well as irrigation systems, all of which are pivotal in bolstering crop yields and mitigating risks associated with climatic fluctuations.

Moreover, the efficacy of different financing mechanisms has been scrutinized, revealing a nuanced landscape where formal financial institutions offer lower interest rates but often pose collateral challenges for smallholder farmers. Microfinance institutions provide more accessible credit but at higher interest rates, while government-sponsored programs, though well-intentioned, often grapple with bureaucratic inefficiencies (Raza, 2017). These insights underscore the need for tailored financial instruments that balance accessibility with affordability, especially for vulnerable farming communities.

Factors influencing credit accessibility extend beyond financial considerations, encompassing social, institutional, and environmental dimensions (Raza, 2017). Education, income levels, institutional policies, and environmental conditions all play pivotal roles in determining farmers' ability to access credit. Addressing these multifaceted barriers requires a comprehensive approach that goes beyond mere financial provisioning.

The effectiveness of agricultural credit programs and the role of technology in enhancing financial inclusion for farmers have also garnered scholarly attention (Rahman & Hassan, 2017; Rahman & Khan, 2019). These studies underscore the potential of well-designed credit programs and digital innovations in democratizing access to credit and improving farmers' economic outcomes.

While challenges such as high transaction costs, collateral demands, and information gaps persist (Ayegba & Ikani, 2013), there is a growing consensus on the transformative potential of agricultural financing. Innovative financial instruments, including microloans and value chain financing, offer pathways to not only boost agricultural productivity but also uplift rural communities out of poverty (Celal, 2014; Sijabat, 2020).

Government intervention is crucial in bridging the financing gaps and fostering an enabling environment for agricultural development. This entails not just financial injections but also policy reforms that streamline credit accessibility, mitigate risks, and incentivize private sector participation in agricultural financing.

Gap Analysis

Gap Analysis is done with an informal consultation of a Senior agricultural engineer, NARC under policy, institution, operation and others along with possible ways forward.

Policy Level Gap

The policy level gap in Nepal's agricultural sector is characterized by the lack of agricultural

acts and refinement of agricultural policy in the federal structure. Despite Nepal being an agricultural country, there has been no formulation of agricultural acts to date, and the refinement of agricultural policy 2061 in the federal structure is still not accomplished (Joshi & Joshi, 2021); (Subedi et al., 2020). The Agricultural Development Strategy (ADS) 2015-2035 is a major policy-level document guiding the whole agriculture sector, which came before the federal structure. However, there is no clear and concrete policy-level advocacy of the impact of climate change in the agricultural sector, despite agriculture being the most vulnerable sector.

The Agricultural Development Strategy (ADS) 2015-2035 aims to achieve high and sustainable economic growth through a commercial agricultural system contributing to food security and poverty reduction, increased agricultural production and productivity, making agriculture competitive in regional and world markets with the commercial agricultural system, and conserving, promoting, and utilizing natural resources, environment and bio-diversity (Subedi et al., 2020). However, there are challenges in implementing the policy provisions, such as the lack of implementation of land use policy to discourage the transformation of fertile land for non-agricultural uses, and the lack of focus on adopting Good Agricultural Practices (GAP) in the South Asian Association for Regional Cooperation (SAARC) countries.

The lack of policy-level advocacy of the impact of climate change in the agricultural sector is a significant gap, as agriculture is the most vulnerable sector to climate change. Climate change can have a significant impact on agricultural productivity, food security, and rural livelihoods. Therefore, there is a need for clear and concrete policy-level advocacy to address the impact of climate change in the agricultural sector.

Is only land reform act 2021 sufficient to address all issues?

Institute Level Gap

The institute level gap in Nepal's agricultural sector is characterized by poor agricultural research-extension-education linkage (R-E-E linkages), poor human resource management at the tier government system, and poor interest of the banking sector in agricultural investment. The poor agricultural research-extension-education linkage (R-E-E linkages) is a significant gap, as it affects the agriculture service delivery at the local level. The literature review shows that top-down research and extension management, fragmented research, extension, and academic institutions, lower perception of the value of linkage, poor infrastructure of basic services, absenteeism of human resource, and inadequate competencies are the main causes of weak research, extension, education, and farmer linkages at the local level. Publishing the case of climate change in Nepal in any top tier journal never address national agriculture issue of Nepal, Will it?

The poor human resource management at the tier government system is another gap that affects agricultural development at the local level. The local bodies are the key sector for agricultural development, and the lack of proper human resource management in these bodies can lead to inefficiencies and ineffective service delivery.

The poor interest of the banking sector in agricultural investment is also a significant gap that affects the agricultural sector's growth and development. Agriculture is a sector that requires significant investment, and the lack of interest from the banking sector can lead to a shortage of funds for agricultural activities.

Operational Gap

The operational gap in Nepal's agricultural sector is characterized by duplication in programs, inefficient program management, poor budget allocation, inadequate research funding, and poor agricultural input status.

Duplication in programs is a significant issue that affects the efficiency of agricultural programs in Nepal. The lack of coordination and

collaboration between different programs and organizations can lead to the duplication of efforts and resources, which can negatively impact the overall effectiveness of agricultural development initiatives. Inefficient program management is another challenge in Nepal's agricultural sector. The lack of target-wise achievement in Prime Minister Agriculture Modernization Project (PMAMP) indicates that programs are not being managed effectively, and there is a need for better planning and monitoring to ensure that programs achieve their intended goals by reaching real farmers through their involvement in agriculture operation rather than just smartness in documentations only for insurance, loan and subsidies. Poor budget allocation is also a significant issue in Nepal's agricultural sector. The budget allocation for agriculture is less than 3%, which is insufficient to promote adequate agricultural growth and ensure food security. Inadequate research funding is another challenge, with the research budget also being poor, which affects the generation of applied and adaptive technologies necessary for increasing agricultural productivity. This can be evidenced from lack of specific agriculture profile based on geography as Nepal ranges from 74 m to 8848 m and in every specific location particular crop suitability need to be studied (Mishra, Nepal & Aithal, 2022).

The poor status of agricultural inputs, such as seed, fertilizer, irrigation, credit, and mechanization, is also a significant challenge in Nepal's agricultural sector. The lack of access to improved seeds, fertilizers, and irrigation facilities affects agricultural productivity, while the poor status of credit and mechanization affects the ability of farmers to adopt modern agricultural practices.

Coordination, Collaboration and Foreign Direct Investment

The agricultural sector in Nepal also faces issues related to poor lateral and vertical coordination, lack of Foreign Direct Investment (FDI), and hard cash subsidies. The poor lateral and vertical coordination indicates that there is a lack of

communication and collaboration between different levels of government and organizations, leading to inefficiencies and ineffective service delivery. The lack of FDI in agriculture, particularly in large production pockets and processing industries, affects the growth and development of the agricultural sector. There is a need for better coordination and collaboration between different levels of government and organizations, increased investment in agricultural research and development, and the promotion of FDI in agriculture. Additionally, there is a need to shift from hard cash subsidies to production-based subsidies that encourage farmers to adopt modern agricultural practices and increase productivity. Real farmer should be identified for all the promotional services.

Policy Recommendations for Agriculture Uplift

To address the operational gaps in Nepal's agricultural sector, several measures can be taken. Firstly, there is a need for a clear act and policy, such as an umbrella policy in the federal structure, to provide a framework for agricultural development. This policy should focus on enhancing the technological literacy of farmers, making technologies more accessible and user-friendly, and promoting financial literacy campaigns.

Secondly, there is a need to improve the linkages between research, extension, and education (R-E-E linkages) to ensure that farmers have access to the latest research and technologies. This can be achieved by establishing stronger linkages between research institutions, extension services, and educational institutions, and by promoting farmer-to-farmer knowledge sharing.

Thirdly, there is a need to promote enterprise development and business incubation centers at each local body to support the growth of agricultural enterprises. This can help to create employment opportunities and promote the commercialization of agriculture.

Fourthly, there is a need to shift from hard cash subsidies to production-based subsidies to encourage farmers to adopt modern agricultural practices and increase productivity. This can be achieved by providing subsidies for inputs such as seeds, fertilizers, and irrigation, and by promoting the use of mechanization in agriculture.

Fifthly, there is a need to provide collateral-less soft loans to farmers to support their agricultural activities. This can help to reduce the financial barriers that farmers face in accessing credit and promote the adoption of modern agricultural practices.

Sixthly, there is a need to improve the effectiveness of the farmer registration process to ensure that farmers have access to the support services they need. This can be achieved by improving the accuracy and completeness of farmer registration data, and by promoting the use of digital technologies to streamline the registration process.

The implementation of the ILO manual WIND (Work Improvement in Neighborhood Development) in the agriculture sector of Nepal can significantly enhance productivity while ensuring a safe work environment. By applying the principles of WIND, farmers can identify and address hazards and risks in their workplaces, leading to improved health and safety for all workers. Additionally, the implementation of WIND can lead to more efficient work processes through check points no cost and low cost techniques, reduced waste, and increased productivity. By promoting a culture of continuous improvement and worker participation, the agriculture sector in Nepal can become more competitive and sustainable, ultimately benefiting both farmers and consumers. With the support of government agencies, NGOs, and other stakeholders, the implementation of WIND in Nepal's agriculture sector can be a game-changer for the country's rural communities and contribute to the achievement of the Sustainable Development goals.

Improve Education System: Policy makers should focus on enhancing the education system to equip small farmers with the necessary skills and knowledge to access credit effectively and at lower costs. Educated farmers are more likely to adopt modern technologies and utilize credit wisely, leading to increased productivity (Mishra, 2023 a).

Subsidized Credit: Ensure that farmers have access to subsidized credit with lower interest rates. This will enable them to invest in improved seeds, fertilizers, pesticides, irrigation facilities, and mechanized production methods, ultimately boosting their productivity and income.

Farmer-Friendly Credit Services: Implement farmer-friendly agricultural credit services to promote rural development. These services should be tailored to meet the specific needs of farmers, particularly women, to improve technical efficiency and productivity.

Focus on Rural Areas: Direct financial institutions like Nepal Rastra Bank to focus on rural areas and deepen their services for providing timely agricultural credit. This will facilitate agricultural production and development in rural regions.

Efficient Loan Recovery: Implement financial education programs, suitable credit policies, and efficient loan monitoring mechanisms to improve loan recovery rates. Create a flexible and realistic approach to loan recovery to minimize fear among rural borrowers and present banks as supportive partners in rural development.

Supportive Policies: Introduce policies favoring farmers, such as timely availability of inputs like seeds and fertilizers, fair pricing for agricultural outputs, and measures to control monopolistic practices of intermediaries.

Technical Support and Insurance: Provide technical support to farmers for adopting modern agricultural practices. Strengthen agricultural insurance policies, focusing on crops, livestock, and poultry, to mitigate risks and ensure farmers' financial security in case of crop failures or other disasters.

Implementing these policy recommendations can significantly contribute to the promotion of the agriculture industry in Nepal, leading to sustainable rural development, increased productivity, and improved livelihoods for farmers.

Finally, there is a need to promote value chain development programs to support the growth of agricultural value chains. This can help to create employment opportunities, promote the commercialization of agriculture, and increase the value of agricultural products.

Conclusion

Prioritizing agricultural financing in Nepal is crucial for achieving economic growth, ensuring food security, reducing poverty, and fostering sustainable development. This requires a collaborative effort from government, financial institutions, and stakeholders to address challenges and unlock the sector's full potential for the benefit of the country's people and economy.

Addressing the challenges faced by Nepal's agricultural sector, such as limited access to credit and outdated farming practices, requires concerted efforts to improve access to agricultural credit, promote modern farming techniques, and enhance technological adoption. By doing so, Nepal can unlock the full potential of its agricultural sector, improve livelihoods, and contribute significantly to overall economic growth and development.

Prioritizing agricultural development and enhancing access to finance for farmers can lead to substantial economic growth, poverty reduction, and overall socio-economic progress in developing countries.

Empirical evidence underscores the imperative for increased government investment in agricultural financing. This investment is not only about bolstering economic returns but also about fostering sustainable rural development, enhancing food security, and uplifting millions of smallholder farmers worldwide.

The policy level gap in Nepal's agricultural sector includes the lack of agricultural acts and refinement of agricultural policy in the federal structure, the lack of focus on adopting Good Agricultural Practices (GAP), and the lack of clear and concrete policy-level advocacy of the impact of climate change in the agricultural sector. These gaps need to be addressed to ensure sustainable agricultural development and food security in Nepal. The institute level gap in Nepal's agricultural sector includes poor agricultural research-extension-education linkage, poor human resource management at the tier government system, and poor interest of the banking sector in agricultural investment. These gaps need to be addressed to ensure sustainable agricultural development and food security in Nepal. The operational gap in Nepal's agricultural sector includes duplication in programs, inefficient program management, poor budget allocation, inadequate research funding, and poor agricultural input status. These gaps need to be addressed to ensure sustainable agricultural development and food security in Nepal. to address the operational gaps in Nepal's agricultural sector, there is a need for a clear policy framework, improved R-E-E linkages, enterprise development, business incubation centers, production-based subsidies, collateral-less soft loans, effective farmer registration processes, and value chain development programs. These measures can help to promote the growth and development of the agricultural sector, increase productivity, and improve the livelihoods of farmers.

Editorial Disclosure of Inaugural Issue: SP Swag - Sudur Paschimanchal Wisdom of Academic Gentry Journal

Welcome to the inaugural issue of SP Swag, an official publication of Tribhuvan University's Sudur Paschimanchal Campus (SPC), Nepal. SPC stands as a beacon of higher education, offering a diverse range of bachelor's and master's degree programs encompassing Management Science, Arts, and Education Research. With a focus on academic excellence and a commitment to

fostering a conducive learning environment, SPC has become synonymous with quality education in Nepal.

Each article included in this journal has undergone a rigorous scientific peer review process, ensuring the highest standards of academic rigor and integrity. The adoption of APA style for research communication ensures uniformity and clarity in the presentation of research findings, enhancing the overall reading experience for our esteemed readers.

We encourage our readers to delve into the intellectual wealth presented in this issue, recognizing the individual authors as the proprietors of their respective research contributions. We invite you to join us in celebrating the spirit of academic excellence and knowledge dissemination embodied in SP Swag, as we continue to strive for academic brilliance and scholarly achievement as you always support our journals (Mishra, 2023b, c&d).

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