

Empowering Small-Scale Farmers through Agricultural Insurance Policy in Nepal: An Empirical Study

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Abstract

The small-scale farmers in the country are facing numerous challenges, including limited access to resources, poor road infrastructure, water scarcity and irrigation constraint, outdated farming techniques, natural calamities, lack of or low productivity and limited knowledge and training which often resulting in their low incomes and vulnerability. In this backdrop, a proper implementation of the agriculture insurance laws, policies, programs and provisions can contribute to empowering small-scale farmers, as it can be crucial to help mitigate financial risks and improve their resilience. In this regard, this research article/research paper has critically assessed the ground reality of the situation of the application of agricultural insurance policies in the three districts of Kathmandu valley, namely Kathmandu, Lalitpur and Bhaktapur through semi-structured questionnaire targeted or administered to the small-scale farmers selected by random and convenience sampling research method. The difficulties small-scale farmers in Nepal confront and the shortcomings of the country's existing agrarian regulations are highlighted in this study report. The research reveals that the lack of agricultural insurance coverage in Nepal has exacerbated the financial risks faced by small-scale farmers. Further, the research concludes that still small-scale farmer friendly insurance provisions have not been adequately addressed by current agricultural laws in Nepal. Finally, the research recommends that the implementation of agrarian laws that prioritize the needs of small-scale farmers should be highly emphasized to cope with the existing challenges.

Keywords: Agrarian law, agricultural insurance, insurance literacy, small-scale farmer, sustainable agriculture

INTRODUCTION

Approximately two-thirds of the labor force, equating to around 8 million individuals [1], is employed in agriculture, which serves as the foundation of the Nepalese economy. Nepalese farmers have engaged in agriculture, livestock raising, and small-scale productive activities for centuries. Agriculture plays a crucial role in the economic development of Nepal. It accounts for approximately 24.26 percent of the nation's GDP [1] and generates a variety of employment opportunities, ranging from agriculture to small-scale enterprises. Nepal's long-term agricultural development faces significant

risks from climate change, labor force outmigration, land loss and degradation, environmental pollution, insufficient comprehensive policy, inadequate investment frameworks, and land fragmentation. Nepal is susceptible to food insecurity and is frequently affected by natural disasters, including floods, droughts, landslides, earthquakes, diseases, and pest outbreaks [2]. The designation "small-scale farmer" pertains to individuals who manage limited land areas and primarily grow crops for subsistence or local market consumption. A small farm differs from industrialized, large-scale, mono-crop operations, yet it plays a vital role in sustaining the

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agricultural sector at a fundamental level. The Government of Nepal categorizes the rural farming population into three distinct groups: small commercial farmers, subsistence farmers, and landless or near-landless farmers. A significant portion of the agricultural population (53%) [3] consists of landless or near-landless farmers, each possessing less than 0.50 hectares of land. Approximately 27% of farmers engage in subsistence farming, managing land holdings between 0.5 and 1 hectare, which constitutes 28% of the total land available. Twenty percent of rural families are classified as 'small commercial farmers,' possessing land holdings ranging from 1 to 5 hectares or more. The mean farm size is 0.6 hectares per household [3].

Agricultural development experts contend that small farms, challenging topography, restricted access to affordable and farmer-centric agricultural technologies, inadequate all-weather road connectivity between urban and rural regions, excessive dependence on seasonal rainfall, constrained agricultural markets, and traditional farming methods constitute the primary obstacles impeding the nation's agricultural productivity [4]. Small-scale farmers, who typically operate on a small scale of land, face numerous challenges that hinder their ability to improve their livelihoods and contribute to sustainable agricultural development. To address the challenges faced by small-scale farmers, Nepal has enacted various agrarian laws that govern land ownership, tenure rights, and land use. However, these laws have primarily focused on land ownership and tenure rights, and do not adequately address the needs of small-scale farmers.

In this backdrop, agricultural insurance can be a powerful strategic weapon to prevent the possible loss of farmers. Agricultural insurance serves to mitigate potential losses, especially those related to crop damage from natural events like pests, diseases, hail, and hurricanes, thereby safeguarding farmers' investments. Livestock insurance serves as a safeguard against the potential death or loss of livestock for both commercial and individual farmers, addressing risks associated with various diseases or accidents while also protecting the investments of those who raise livestock. The insurance cost is covered by a 75 percent [5] subsidy provided by the government. Nonetheless, insurance providers extend their services to cover specific agricultural risks, including crop loss resulting from natural disasters or fluctuations in the market. In the interim, the involvement of the majority of insurance companies in the agricultural sector appears to be relatively minimal.

Agricultural insurance is an important strategy that protects farmers and agricultural producers from financial losses caused by a variety of hazards such as natural disasters, pests, illnesses, and market changes. It helps to reduce the financial risks connected with farming by offering coverage for crops, livestock, and farm equipment. Effective risk management is one of the main advantages of this kind of insurance, which guards against losses from natural disasters like hailstorms, droughts, and floods. By providing a financial cushion to aid farmers in catastrophe recovery and cash flow maintenance, it also offers financial stability. Additionally, agricultural insurance makes it easier for farmers to obtain funding and loans because it might increase their appeal to lenders. In order to lower rates for farmers, governments frequently provide subsidies for these insurance plans.

Under agricultural insurance, there is a wide variety of coverage options that can be customized to fit the requirements of a variety of situations. For instance, crop-yield insurance covers crop losses due to natural disasters, ensuring that farmers receive compensation for reduced yields. Crop-revenue insurance protects against revenue losses due to price fluctuations, providing a safeguard against market volatility. Moreover, farm equipment and property insurance safeguards farm assets against damage or loss, which is crucial for maintaining operational capacity. Overall, agricultural insurance plays a crucial role in supporting the sustainability and resilience of agricultural businesses by managing risks and ensuring financial stability.

THEORETICAL FRAMEWORK

This study is anchored in an integrated theoretical framework that draws upon risk management theory, farmer vulnerability theory, and legal empowerment theory to examine the role of agricultural insurance in the context of small-scale farming in Nepal.

Risk management theory conceptualizes agriculture as an inherently uncertain economic activity, continuously exposed to climatic variability, biological hazards, and market fluctuations. Within this perspective, institutional instruments such as agricultural insurance are understood as mechanisms designed to redistribute and absorb risk, thereby stabilizing farm income and encouraging productive investment. The relevance of this theory lies in its capacity to explain how the absence or inadequacy of formal risk-management mechanisms intensifies economic insecurity among small-scale farmers.

Farmer vulnerability theory provides a complementary lens by focusing on the structural and socio-economic conditions that render small-scale farmers disproportionately susceptible to shocks. Limited asset ownership, fragmented landholdings, constrained access to credit and markets, and dependence on climate-sensitive livelihoods collectively heighten farmers' exposure to risk while simultaneously reducing their coping capacity. This theoretical perspective shifts the analysis beyond individual decision-making and situates agricultural risk within broader patterns of structural disadvantage and policy neglect.

Legal empowerment theory further enriches the framework by emphasizing the role of law and institutions in enabling marginalized groups to claim, access, and effectively utilize their rights. From this standpoint, agricultural insurance is not merely a financial product but a legal and policy instrument whose effectiveness depends on clarity of legal entitlements, institutional accessibility, procedural fairness, and accountability. The theory underscores that the mere existence of insurance schemes is insufficient unless they are designed and implemented in a manner that is comprehensible, affordable, and responsive to the lived realities of small-scale farmers.

Taken together, these theoretical perspectives provide a coherent analytical foundation for assessing whether agricultural insurance policies in Nepal operate as effective tools for mitigating risk, reducing farmer vulnerability, and advancing sustainable agricultural development. By integrating economic, social, and legal dimensions, the framework enables a holistic evaluation of both policy design and practical implementation.

LITERATURE REVIEW

Commercialization of Smallholder Farming-A Case Study from the Rural Western Middle Hills of Nepal

This research paper based on the empirical findings focuses on the increasing commercialization of smallholder farming in Nepal, specifically in the rural western middle hilly region [4]. The article examines the impact of this commercialization on the livelihoods of smallholder farmers and the overall agricultural sector in the region. The authors reveal that the commercialization of smallholder farming has led to increased income for farmers and improved productivity but has also resulted in the loss of traditional crops and practices. The article also highlights the importance of balancing the benefits of commercialization with the preservation of traditional practices and the need to support smallholder farmers in this transition. However, the article remains silent on the possible contributions which can be made by the agricultural insurance policies to achieve the ends of a smart agricultural culture in the country.

Supporting Small-Scale Farmer Agency in Commercial Agriculture

In this article, the author argues about the potential's challenges faced by small-scale farmers in commercial agriculture and the strategies that can be used to support their agency. The authors highlight the importance of recognizing the agency of small-scale farmers and involving them in decision-making processes related to commercial agriculture. The article also explores the role of various actors, including governments, non-governmental organizations, and private sector actors, in supporting small-scale farmer agency. The authors argue that supporting small-scale farmer agency can not only improve their livelihoods but also contribute to more sustainable and equitable agricultural systems [6]. This article also fails to comprehensively analyze and explore the existing legal regime to assure the farmer's right through implementation of the perfect insurance policies.

Status and Prospects of ICT among Nepalese Smallholder Farmers

This scholarly work is a review journal article that explores the use of information and communication technologies (ICT) among smallholder farmers in Nepal. The article examines the current status of ICT adoption and use by smallholder farmers and identifies the factors that influence their adoption and effective use. The authors have conclusively argued that smallholder farmers in Nepal face various challenges, including limited access to ICT infrastructure, low literacy rates, and language barriers. The article also highlights the potential of ICT in improving the productivity and profitability of smallholder farming, as well as its role in promoting sustainable agriculture practices [7]. The authors suggest that the development of appropriate policies and programs, as well as public-private partnerships, can support the effective adoption and use of ICT among smallholder farmers in Nepal. However, there is no mention of agricultural insurance policies and its other relevant contexts.

Smallholder Peri-Urban Organic Farming in Nepal: A Comparative Analysis of Farming Systems

This is a research article that analyses the farming systems of smallholder of organic farmers in Nepal. The article compares the practices and outcomes of smallholder organic farming with those of conventional farming in peri-urban areas, highlighting the benefits and challenges of organic farming for smallholder farmers. The author finds that smallholder organic farming can provide higher incomes, better food security, and environmental benefits compared to conventional farming. However, organic farming requires more labour, has higher costs of production, and can face marketing challenges. The article highlights the need for supportive policies, technical assistance, and market access to promote the adoption and sustainability of smallholder organic farming in Nepal. The findings of the article have implications for promoting sustainable agriculture practices and improving the livelihoods of smallholder farmers in peri-urban areas [8]. However, the prospect of insurance in agricultural field has not been made in specific.

Determinants of Small-Scale Commercial Vegetable Farming among Vegetable Growers in Nepal

The research paper examines the determinants of small-scale commercial vegetable farming among vegetable growers in Nepal. The article focuses on the factors that influence the decision of small-scale farmers to adopt commercial vegetable farming practices and the challenges they face in doing so. The author found that factors such as access to finance, land ownership, market information, and technical knowledge are critical determinants of small-scale commercial vegetable farming in Nepal. The article also identifies challenges such as limited access to credit, lack of market infrastructure, and high production costs that hinder the adoption and sustainability of commercial vegetable farming among small-scale farmers. The article highlights the need for supportive policies, technical assistance, and market access to promote the adoption and sustainability of small-scale commercial vegetable farming in Nepal. The findings of the article have implications for promoting sustainable agricultural development and improving the livelihoods of small-scale farmers in Nepal [9]. However, the paper does not take agricultural insurance as a determinant to study different dimensions of small-scale farmers.

Agricultural Insurance Feasibility Study for Nepal

This feasibility study states that agricultural insurance facilitate access to agricultural credit at better terms as it increases the creditworthiness of farmers and other agents of the agricultural sector. This article states that the insurance literacy in Nepalese famer is unsatisfactory. It further states that due to absence of specific agricultural insurance legislation, there is a lack of clarity over the legal status of the guarantee protection cum insurance products which are being implemented by a range of public-sector organizations, the cooperatives, NGOs, and MFIs in the country. It further goes on saying that insurance legislation and regulation does not recognize and supervise, the insurance products and services offered by the cooperatives and MFIs to Nepali small and marginal farmers. It provides recommendations on the next possible steps for the development of agricultural insurance that the Government of Nepal and insurance companies may want to consider, in order to make agricultural insurance attractive to farmers and viable for insurance companies without relying on heavy government subsidies [10]. Unfortunately, this paper is not based on the study of application of insurance policies in context of small-scale farmers.

Status of Agriculture Insurance Service Business in Nepal

This research is based on a study that was conducted to assess the status of agriculture and livestock insurance service business in Nepal. The paper expresses role played by leading insurance companies, mainly Shikhar Insurance from private side, and Rastriya Beema Company, from government side. The author suggests that a national database should be developed to provide agricultural insurers with reliable and consistent agricultural yield figures, crop production losses, livestock mortality rates, geographical and meteorological information, and other information that would allow institutions to improve their product design. This further suggests various mitigating strategies, such as advertising the farmer insurance policies [11]. However, this paper doesn't elaborately study the statutory provisions relating to insurance in the country.

LITERATURE GAP

These empirical research studies, journal articles and paper only seem to have focused on the role of agriculture insurance in empowering small-scale farmers and promoting sustainable agriculture in the country. These articles primarily focus on the determinants and challenges of small-scale farming practices in Nepal, including access to finance, technical knowledge, market infrastructure, and production costs. However, they do not address the issue of agriculture insurance, which can mitigate financial risks and provide a safety net for small-scale farmers. Therefore, there is a gap in the literature regarding the role of agriculture insurance in promoting sustainable agriculture and empowering small-scale farmers in Nepal.

Research Design

The study adopts an empirical, qualitative-dominant mixed-method approach, combining primary field data with doctrinal legal analysis.

Sample and Sampling Method

Primary data were collected from 28 small-scale farmers in Kathmandu, Lalitpur, and Bhaktapur districts. Due to time, budgetary, and accessibility constraints, convenience sampling supplemented by limited random selection was employed. While the sample size is small, it is justified given the exploratory nature of the study and the depth-oriented qualitative approach.

Data Collection

Data were collected through semi-structured questionnaires and key informant interviews, enabling respondents to express lived experiences regarding insurance awareness, adoption barriers, and institutional interactions.

Data Analysis

Responses were thematically analyzed to identify patterns related to insurance literacy, subscription behavior, administrative barriers, and policy perceptions.

Limitations of the Study

This study is limited by its small sample size and geographic focus on Kathmandu Valley, which may not fully capture the diversity of farming experiences across Nepal. The use of convenience sampling restricts generalizability. However, the study's objective is exploratory rather than representative, aiming to generate policy-relevant insights grounded in farmer experiences. Future research should incorporate larger samples, comparative regional analysis, and quantitative impact assessment.

NATIONAL LEGISLATION AND POLICIES ON THE RIGHTS OF FARMERS IN NEPAL

Due to their low incomes and limited access to land and other agricultural resources, Nepalese farmers are considered a marginalized group in the country's constitution. It is a commonly accepted fact that farmers are failing to achieve adequate output relative to their investment.

The constitution states, “Every farmer shall, in accordance with law, have the right to access land for agro activities, select, and protect local seeds and agro species that have been traditionally used and pursued” [12].

Furthermore, Nepal has several laws and provisions aimed at protecting the rights of farmers, ensuring fair treatment, land rights, and access to resources. Here are some key laws and provisions related to the protection of farmers’ rights in Nepal:

Nepal's constitutional guarantee of land access and seed sovereignty creates both a foundation and imperative for agricultural insurance systems by addressing systemic vulnerabilities in smallholder farming. The provision's dual focus on land rights and agro-biodiversity protection directly intersects with risk mitigation needs. Land Reform Act, 2021

Nepal's Land Act defines land rights and addresses issues related to land ownership, tenancy, and land-use rights, which are crucial for farmers' security and livelihoods. By making the necessary agricultural knowledge and resources easily accessible and distributing cultivable land equitably, it has sought to improve the living standards of the actual peasants who depend on the land. It has also sought to maintain the convenience and economic interests of the general public by encouraging the greatest possible increase in agricultural production [13].

Cooperatives Act, 2074

The Act's objectives are to: promote the regulation of cooperative organizations as community-based, member-centric, democratic, autonomous, corporate entities; and develop a self-reliant, sustainable, and socialism-oriented national economy through cooperative farming, industries, goods, and services enterprises. It also aims to improve the economic, social, and cultural well-being of cooperative members by integrating capital, technology, and talents that are dispersed among farmers, craftspeople, laborer's, low-income groups, marginalized communities, or general consumers in accordance with cooperative norms, values, and principles [14].

The Department of Cooperatives, part of the Ministry of Agriculture and Cooperatives (MOAC), serves as a regulatory authority while also engaging in the promotion and development of cooperatives.

Nepal Agricultural Research Council Act, 2048

This legislation facilitates the formation of the Nepal Agricultural Research Council, aimed at enhancing awareness and pursuing resolutions for agricultural environmental challenges, thereby ensuring the advancement of safe and sustainable agricultural practices.

Animal Health and Livestock Services Act, 2055

The Act aims to systematize and promote the animal husbandry industry, which plays a major role in the national economy, as well as to make appropriate arrangements for healthy production, sale, distribution, export, and import of animal products or animal production inputs [15-16].

Seeds Act, 2045

This legislation has been established to preserve the convenience and economic interests of the public by ensuring the provision of seeds that meet quality standards. It encompasses a systematic approach to the production, processing, and testing of high-quality seeds, thereby facilitating an increase in the yield of various crops [17].

Nepal Farmers Commission Formation Executive Order, 2073

To meet the aspirations mentioned in the Agricultural Development Strategy, the National Farmer Commission was formed on 2073 Magh 6 to provide necessary policy recommendations to the government regarding the best interests of the farmers.

NATIONAL AGRICULTURE POLICIES

The Nepalese government has endeavored to develop and execute agriculture sector strategies since the 1960s. It has developed numerous policies and initiatives pertaining to agriculture, forestry, agroforestry, climate change, land use, poverty alleviation, and irrigation. Certain policies appear to be directed towards specific demographics and communities (poverty alleviation policy), various sectors and commodities (forestry, agriculture, poultry, coffee, etc.), and tackle both international and national issues and priorities (climate change policy, agrobiodiversity) [18].

National Agricultural Policy 2061

The policy's primary goal is to foster an atmosphere that supports rural growth driven by agriculture. In order to provide the small farmers with additional resources, the program sought to separate farmers into two categories: small and large. By converting the subsistence agricultural system into a commercial and competitive agricultural system, the policy aims to enhance living standards through sustainable agricultural development.

Agro-Business Promotion Policy 2063

This strategy was developed in accordance with the National Agriculture Strategy 2061, which emphasizes the construction of business service centers to provide excellent agricultural supplies and services [19]. The policy emphasizes diversification, commercialization, and promotion of agriculture, as well as private sector involvement in commercial farming. It emphasized that farmers' living standards would not increase unless the agriculture sector transitioned from subsistence to commercial farming. The policy seeks to alleviate poverty by stimulating the production of marketable and competitive agricultural products.

Irrigation Policy, 2014

The goal of this program is to increase agricultural production by providing all agricultural fields with dependable, sustainable irrigation systems throughout the year. In the context of achieving the goals of raising agricultural output and lowering poverty, this is significant.

National Land Use Policy, 2072

This strategy was developed in response to the escalating concerns regarding the fragmentation of arable land and unregulated urbanization. The objective of this strategy is to maximize the utilization of available Land and Land Resources (LLRs) to achieve sustainable social, economic, and ecological development and prosperity for the nation [20]. This seeks to ensure optimal land utilization and mitigate land fragmentation, facilitating a connection between the agricultural and industrial sectors.

National Agroforestry Policy, 2076

This policy seeks to enhance national prosperity by fostering the development, expansion, and commercialization of the agroforestry system. The aims encompass enhancing the output of agricultural, livestock, and forest products through improved land productivity and multifunctional land use; preserving the environment and biological diversity by alleviating pressure on forests, ensuring quality maintenance, and fostering climate-resilient ecosystems; and generating opportunities for livelihoods, employment, and income, while also securing food for local communities.

From the aforementioned elaborations, it is evident that Nepal lacks any specific and specialized legislative or policy framework for agricultural insurance for farmers. Investigations on Small-Scale Farmers in Agricultural Insurance Policy within the Kathmandu Valley Agricultural insurance policies encompass coverage for cattle, poultry, paddy, fish, vegetables, and fruits, providing compensation for potential losses of crops and livestock resulting from fire and natural disasters such as storms, floods, landslides, and earthquakes.

The researcher has conducted the research in Kathmandu Valley due to the time and budget limitation. The three districts of Kathmandu valley, namely Kathmandu, Bhaktapur, and Lalitpur district have been

taken as the universe of the research. It came to be known to the researcher that the structural and functional complexities that are playing the role of potential barrier for the wider application of the existing the insurance policies in agriculture sector. The incompetent and unstable plan and policies of government, lack of willingness of government to promote insurance culture in the country and poor insurance literacy of the small-scale farmers have been found as the potential problems being faced in the country on a large scale. The report revolves around various nuances of problems associated with the Nepalese farmers due to their lesser attraction towards the insurance policies.

FINDINGS AND DISCUSSION

The findings of this study demonstrate a clear gap between awareness of agricultural insurance and actual subscription among small-scale farmers in the Kathmandu Valley. While a majority of respondents reported having heard about agricultural insurance, only a small proportion had actively subscribed. This finding is consistent with earlier studies on agricultural insurance in Nepal, which identify low uptake despite policy provisions and government subsidies. Existing literature attributes this gap to institutional inefficiencies, limited insurance literacy, and weak farmer trust in insurance mechanisms, all of which are strongly reinforced by the present study.

The empirical evidence reveals that administrative complexity, procedural rigidity, and delayed claim settlements are the most significant barriers to insurance adoption. These findings align with feasibility studies on agricultural insurance in Nepal, which highlight excessive documentation requirements and lack of transparency as major deterrents for farmers. However, this study adds to the literature by demonstrating how these barriers are experienced at the grassroots level, leading farmers to perceive insurance not as a protective mechanism but as an additional bureaucratic burden.

Cost-related concerns also emerged as a critical factor influencing farmers' reluctance to subscribe to insurance schemes. Although premium subsidies exist, respondents perceived insurance as financially burdensome due to rigid payment structures and uncertainty regarding compensation. This observation supports existing research that emphasizes affordability and flexibility as key determinants of insurance uptake among smallholder farmers in developing economies. From a policy perspective, this suggests the need for redesigned premium structures that reflect the economic realities of small-scale farmers.

Despite low participation, farmers strongly acknowledged the potential role of agricultural insurance in mitigating risks associated with climate change, natural disasters, and livestock diseases. This finding resonates with broader literature on agricultural risk management, which identifies insurance as a vital tool for enhancing resilience and encouraging productive investment. The disconnect between perceived benefits and actual adoption highlights a critical policy failure – not in the concept of insurance itself, but in its implementation and delivery.

The study further reveals that Nepal's existing agrarian and insurance policy framework insufficiently integrates agricultural insurance as a core component of farmer protection. While land reform, seed regulation, and cooperative development receive substantial legislative attention, insurance remains peripheral and poorly institutionalized. This observation supports legal scholarship that argues for the inclusion of risk mitigation mechanisms within farmer-rights discourse. Policy-wise, this necessitates the development of a dedicated agricultural insurance framework that clearly defines farmer entitlements, insurer obligations, and state responsibilities.

Overall, by linking empirical findings with existing literature, this study demonstrates that agricultural insurance in Nepal suffers less from conceptual inadequacy and more from governance, accessibility, and design failures. Addressing these issues through legal reform, institutional coordination, localized implementation, and targeted insurance literacy programs is essential for transforming agricultural insurance into an effective instrument for empowering small-scale farmers and promoting sustainable agricultural development.

REASONS FOR NOT SUBSCRIBING TO AGRICULTURAL POLICIES BY SMALL-SCALE FARMERS

It was found that the small-scale farmers were unwilling to join agricultural insurance policies offered by different insurance agencies, though the majority of them about it as shown in Figure 1. The administrative hassles and complexities that demand plenty of requirements to be accomplished were also pointed as the big demotivating factors for the farmer. One major issue is the lack of rural accessibility to insurance services. Private insurers primarily operate in urban and semi-urban areas, with minimal branch networks in rural regions where most farmers reside.

This forces farmers to travel long distances to enrol in insurance or file claims, incurring high costs and time burdens. Additionally, the documentation requirements are overly complex and inaccessible for many farmers, particularly smallholders and tenant farmers. Farmers are often required to provide land ownership certificates, crop yield histories, and loss verification documents – records that are either unavailable or difficult to obtain for marginalized groups such as tenant farmers and women, many of whom lack formal land titles.

Another challenge is the high administrative costs associated with managing agricultural insurance for small-scale farms. With most farms in Nepal being less than one hectare in size, the cost of underwriting, premium collection, and claims processing becomes disproportionately high compared to the premiums collected. This inefficiency makes individual farmer policies less viable and discourages insurers from expanding their services. Further, it was found that, due to administrative complexities, many farmers have a misconception that agricultural insurance is similar to an agricultural loan.

Furthermore, there is a lack of regulatory clarity and collaboration among stakeholders. Current insurance regulation does not explicitly recognize the informal insurance programs provided by cooperatives and microfinance institutions (MFIs), which creates impediments to collaboration between these groups and private insurers. This fragmentation causes discrepancies in product design, premium rates, and claims settlement procedures, exacerbating the situation for farmers.

Finally, the lack of trustworthy data on crop yields, losses, and weather patterns impedes the development of personalized insurance solutions. While some weather data exists, it is frequently insufficient for developing efficient index-based insurance schemes that could streamline claims processing.

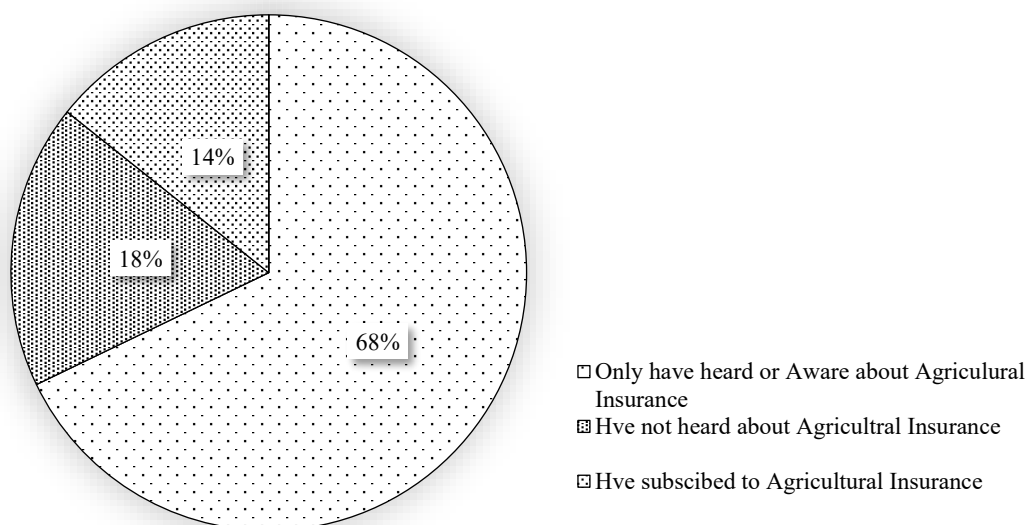


Figure 1. Distribution of respondents based on insurance literacy.

The monetary aspect of the insurance was also interpreted as one of the systematic barriers for subscribing to the agricultural insurance policies. The respondents argued that it is relatively costly for farmers having a weak financial base. The rigidity in the submission of premiums and renewal of the insurance was also identified as another potential barrier in the adoption of insurance programs. Some of the farmers argued that insurance companies generally provide very little recovery money, which is not sufficient to cope with the harsh situation caused by different natural or man-made calamities in the agricultural sector. Also, the delay in the payment of the claimed amount by the insurance companies or agencies has discouraged the attraction of farmers in the agricultural sector. The research also discovered that there has been a misconception among the farmers that the agricultural insurance policies are only meant to livestock (like animal husbandry) and do not apply to different types of crop production.

The next situation that has declined the enrolment of small-scale farmers was the formal requirement of registering the small firm for getting insurance facilities. It was observed that many of the small-scale farmers were unable to subscribe to the insurance policies despite having a strong willingness or desire and fundamental knowledge of the benefits of insurance policies to mitigate different sorts of risk in the agricultural field.

Regarding the demotivating factors to subscribe agricultural insurance, the research revealed that 12 respondents didn't subscribe to the agricultural insurance due to administrative hassles or procedural complexities, 5 respondents didn't subscribe stating it to be expensive, 4 respondent could not subscribe due to the lack of their access to the insurance companies and 7 couldn't subscribe as they were unaware of the importance of agricultural insurance policies.

Although there was disappointment in the limited adoption of agricultural policies by small-scale farmers, it was commendable to observe their profound recognition of the importance of subscribing to agricultural insurance policies as shown in Figure 2.

FACTORS MOTIVATING SMALL-SCALE FARMERS TO SUBSCRIBE TO AGRICULTURAL INSURANCE POLICY

The respondents provided a mixed response regarding the vital motivating factors pressing them to subscribe to insurance policies based on their intellectuality, experience (also, hearsay in many cases), or say it, their legitimate expectation from the insurance programs and policies. Though the responses showed that they knew it was beneficial to subscribe to insurance policies, they were actually not insured. The reasons were more concerned with the mal-administration and less public-friendly insurance mechanism (The detailed observation has been presented in the next part).

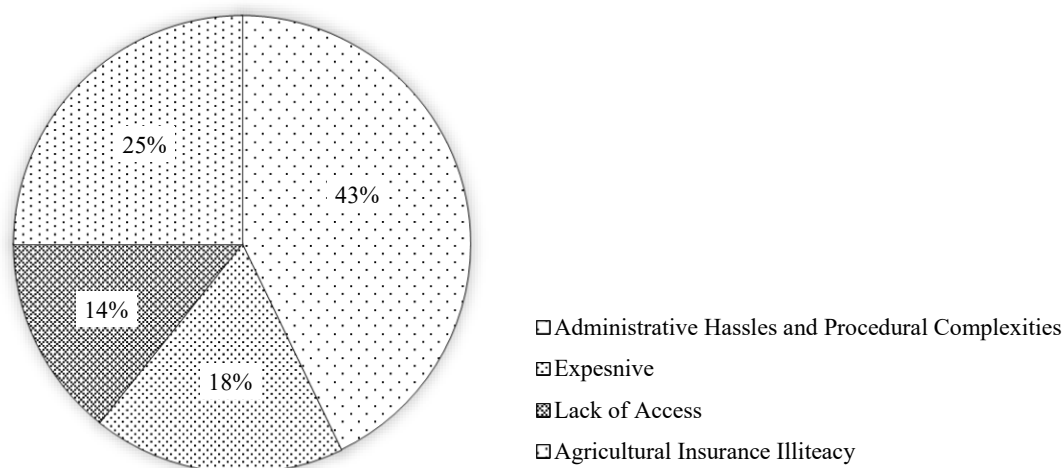


Figure 2. Factors demotivating to subscribe to agricultural insurance'.

The farmers stated that the agricultural insurance is important for the security, longevity, and stability of the performance of agriculture in the country in the long run. They connected their pessimistic approach, which was some of the natural factors carrying potential to deteriorate the agriculture, mainly unfriendly rain and natural disasters, with their willingness to prefer the agricultural loan.

The respondents stated that agricultural insurance can play a crucial role in building resilience, improving livelihoods, and fostering sustainable agricultural practices, as they are vulnerable to various risks. Moreover, the Farmers argued that they can invest in improved farming practices, higher-quality inputs, and modern technologies. Knowing that potential losses are mitigated by insurance coverage. One of the respondents stressed the implications of climate change, which poses huge challenges to agricultural productivity. He stated that with the increasing impacts of climate change, the unpredictability of weather patterns has become a major challenge for farmers. As a result, agriculture insurance can assist farmers in adapting to changing conditions by compensating for weather-related losses.

The factors that induce small-scale farmers to subscribe to various types of agricultural insurance from various providers were found through research. Out of 28 respondents who participated in the research process, 7 respondents argued that the agricultural insurance can help to mitigate the risk that can come out from natural disasters as Nepal is too vulnerable in this regard, 6 respondents responded that agricultural insurance is useful for bearing the repercussions of various diseases in animals, 2 respondents reasoned that there are some other factors which inspire the small-scale farmers to subscribe agricultural insurance whereas 13 respondents could not provide any strong reason or abstained from answering the question.

SUGGESTIONS REGARDING REFORM IN DIFFERENT ASPECTS OF AGRICULTURAL INSURANCE POLICY GIVEN BY SMALL-SCALE FARMERS

The suggestions from the small-scale farmers were mainly concerned about reformation in the administrative and procedural complexities that face them as shown in Figure 3. They recommended expanding the horizon of agricultural insurance policies to address many forms of agricultural insurance in the country, as the agricultural insurance policies are limited to a limited region.

The suggestion also included making the insurance policies inexpensive and financially feasible for small-scale farmers. Can you quantify it? Similarly, they give suggestions to develop the agricultural insurance program under the budget of local-level government, like the way health insurance has been incorporated under the budget of local-level governments.

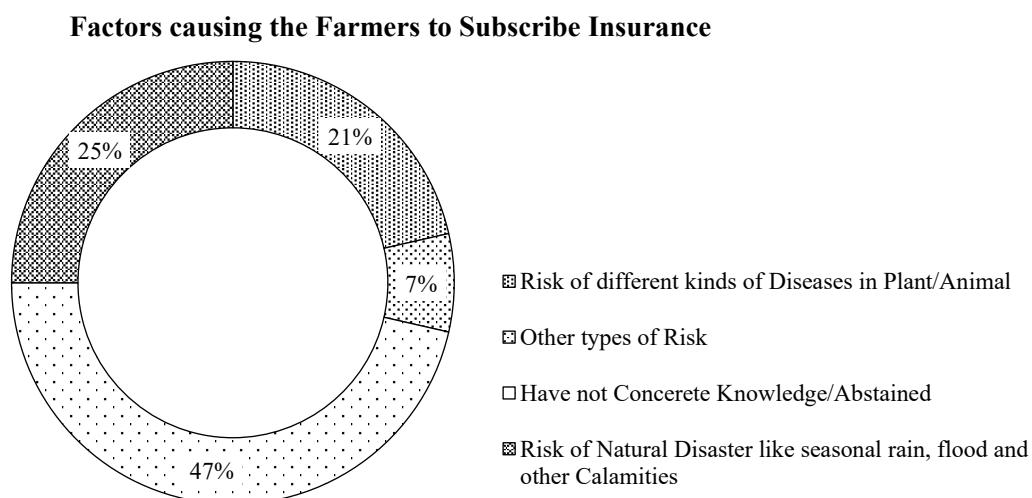


Figure 3. Factors causing the farmers to subscribe insurance.

SOME OTHER OBSERVATIONS

Here are some other notable findings that also have significant academic weight besides the aforementioned findings. These findings also portray the actual scenario of the underdeveloped status of agricultural insurance programs among Nepalese farmers.

Some small-scale farmers suffer from a misconception that agricultural insurance is like an agricultural loan. Also, paying a premium is like paying interest on the loan. In this way, insurance has been understood as an extra economic burden, rather than a way out to tackle possible risks in the agricultural sector.

The small-scale farmers were found to be so curious to know about the benefits of agricultural insurance policies, as some of them were already in the initial phase of subscribing to agricultural insurance policies.

The orientation regarding agricultural insurance policies to the small-scale farmers was very misleading. Unfortunately, the agricultural insurance policies have not been arranged for their welfare; rather, they were understood as a part of the marketing of business activities of some insurance policies. This misalignment has led to a lack of trust among farmers, who feel that insurance companies prioritize profit over their welfare. As a result, many small-scale farmers view agricultural insurance as an additional financial burden rather than a safeguard against crop failures or other agricultural setbacks.

The post-subscribing experiences of those small-scale farmers who have already subscribed to any of the agricultural insurance policies were not impressive; rather, some of them were found to be regretful. The payment by the insurance companies was so nominal that it couldn't cover the harm. In this regard, one of the respondents literally argued that it was like 'Haatiko Mukhma Jeera (in a very small quantity than actually required). Based on these bitter experiences, a negative approach towards agricultural insurance policy was observed to have flourished in the neighbourhood and the community.

It would be great if you could provide some case studies in the earlier section!

During a formal interview with an official of the National Insurance Authority, the researcher came to know about some recent initiatives of the Authority, which are crucial steps towards the establishment of an agricultural insurance culture in the country. The authority has prepared samples of Machha Bimalekh, Khadyanna BaliBimalekh, and an amended version of Bhakhra Bimalekh, which are the contract samples for proceeding agricultural insurance policies.

ANALYSIS AND CONCLUSION

The term 'small-scale farmer' refers to farmers who cultivate small plots of land and produce crops primarily for subsistence or local markets. Small-scale farmers face numerous challenges that hinder their ability to improve their livelihoods and contribute to sustainable agricultural development. To address the challenges faced by small-scale farmers, Nepal has enacted various agrarian laws that govern land ownership, tenure rights, and land use. However, these laws have primarily focused on land ownership and tenure rights, and do not adequately address the needs of small-scale farmers. Agricultural insurance is a powerful strategic weapon to prevent the possible loss of farmers. In particular, agriculture insurance is offered to protect the investment of farmers and to avoid the loss of crops that may be caused by natural disasters such as hail, storms, illnesses, and pests from occurring. There are just a few categories of agricultural risks that are covered by insurance firms. These categories include crop loss as a result of natural catastrophes or fluctuations in the market. The participation of insurance companies in the agricultural sector is quite modest.

In the empirical research study carried out with 28 small-scale farmers from three districts, in the situation of Agricultural Insurance Literacy in Small-scale Farmers, it is found that 14% have subscribed to agricultural insurance, 68% have heard or are aware of agricultural insurance, whereas 18% farmers have not heard about agricultural insurance. The data shows that the situation of insurance literacy is not satisfactory.

Investigating the reasons for not subscribing to agricultural policies, 43% were reluctant to subscribe because of the administrative hassles and complexities, 18% of farmers did not subscribe because of the expense, 14% because of a lack of access, and 25% did not subscribe because of the lack of insurance literacy. The research revealed that the insurance is not farmer-friendly, as existing agricultural laws primarily focus on land ownership and tenure rights, failing to adequately address the specific needs of small-scale farmers, such as risk mitigation through insurance

The farmers that has used the insurance policy has different motivating factors to subscribe it, Out of 28 respondents who participated in the research process, 25% respondents argued that the agricultural insurance can help to mitigate the risk that can come out from natural disasters, 21% respondents stated that the agricultural insurance is instrumental to bear the consequences that may cause out of different diseases in the animal, 7% respondents reasoned that there are some other factors which inspire the small-scale farmers to subscribe agricultural insurance. In the research, the suggestions from the small-scale farmers were also found to be mainly concerned about reformation in the administrative and procedural complexities that they faced. They recommended expanding the horizon of agricultural insurance policies to address many forms of agricultural insurance in the country, as the agricultural insurance policies are being limited

The suggestion also included making the insurance policies inexpensive and financially feasible for small-scale farmers. Similarly, they have also suggested making the agricultural insurance program under the budget of the local-level government. Some small-scale farmers also suffer from a misconception that agricultural insurance is like an agricultural loan. To their understanding, paying a premium is like paying interest on the loan. In this way, insurance has been understood as an extra economic burden, rather than a way out to tackle possible risks in the agricultural sector.

Partnerships between the domestic insurance industry and cooperatives/MFIs will be critical to the development of agricultural insurance in Nepal. For a number of years, agricultural mutual insurance has operated outside the Insurance Law; nevertheless, as this program expands, this is neither desirable nor sustainable. Nepal's legislative and regulatory structure may be changed to support the growth of mutual cooperative insurance for farmers.

Consequently, small-scale farmers are essential to the Nepalese economy; nonetheless, they are insufficiently enabled by the agricultural insurance policy in Nepal. Therefore, giving farmers access to agricultural insurance coverage is essential. A specialized technical support unit, named the Nepal Agricultural Insurance Technical Support Unit (NAITSU), should be established to assist stakeholders in the advancement of agricultural insurance in Nepal. The principal responsibilities of NAITSU encompass:

Collecting and administering data and information;

1. Evaluating insurance demand;
2. Developing and pricing products;
3. Delivering training to insurance companies, microfinance institutions, agricultural cooperatives, and farmer collectives; and
4. Initiating awareness campaigns.

Robust collaborations with line ministries (MoAC, MoF), non-governmental organizations, the local insurance market, agricultural cooperatives, the financial sector, and the Nepalese government, particularly the Insurance Board.

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