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Risk Experience, Identification and Mitigation Practices in Cooperative Societies of Kaski District, Nepal

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Abstract

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Purpose: This study aims to identify the experience of different types of risk, and techniques used to identify and reduce the risk in Saving and Credit Cooperative Societies (SAACOS) of the Kaski District of Nepal.

Methods: The study employed a descriptive research design and along with a quantitative nature of data. Primary sources of data were collected through self-administered close-ended questions distributed to managers/managing/directors/accountants/BOD members of 190 sample cooperatives out of 370 saving and credit cooperatives of the Kaski district using a simple random sampling design. To conclude in line with the stated goals, percentages, mean, standard deviation, and frequencies were employed.

Results: Most of the cooperatives concentrate loans to real estate businesses (38.9%), followed by business(34.7%), and household loans(19.5%). Similarly, the highest level of irregular loans in the real estate sector followed household loans (27%), business (23.8%) vehicles (19.4%), and agriculture and auto loans(5.9%). As the risk experience mean of credit risk (4.11) is higher than others, credit risk is the most prominent risk faced by these institutions. The cooperatives use internal audits, financial statement analysis, and external auditing to identify risk. The cooperatives heavily rely on well-trained board members, economic analysis, and trustworthiness in borrowers as risk mitigation tools.

Conclusion: The study highlights the necessity for integrated risk management strategies that consider new risks and uncertainties, suggesting that cooperatives should adopt more comprehensive risk identification and mitigation approaches to enhance their resilience and sustain member value.

Keywords: Risk management, Saving and credit cooperative societies, Risk mitigation

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I. Introduction

A cooperative is an autonomous association of persons united voluntarily to meet their common economic, social, and cultural needs and aspirations through a jointly owned and democratically controlled enterprise (International Cooperative Alliance [ICA], 1995). Cooperative societies are based on self-help, self-responsibility, democracy, equality, and solidarity. Traditionally cooperative members believe in the ethical values of honesty, openness, social responsibility, and caring for others. In 2016, the ICA's Principles Committee released the Guidance Notes on the cooperative principles, giving detailed guidance and advice on the practical application of the Principles to cooperative enterprise. These Guidance Notes aim to state our understanding of the application of the principles in contemporary terms for the 21st century. The seven principles of cooperatives namely voluntary and open membership, democratic owner control, member economic participation, autonomy and independence, education, training, and information, cooperation among cooperatives, and concern for the community.

Cooperatives face a variety of risks like credit risk, operational risk, strategic and market risk, internal control and IT-related risk, liquidity risk, etc. that may have a significant impact on their financial performance. The study focuses on exploring the experiences of risks encountered by cooperative societies in Kaski District, Nepal. It specifically looks into how these societies identify the various risks they face and the practices they implement to mitigate these risks. The primary purpose of this study is to understand the nature and scope of risks faced by cooperative societies in Kaski District. By examining risk identification and mitigation strategies, the study aims to provide valuable insights that can help enhance the operational efficiency of these societies. Furthermore, it seeks to contribute to the broader understanding of risk management practices within Nepalese cooperatives, with potential implications for policy and development strategies aimed at strengthening the sector.

The study is focused solely on cooperative societies within Kaski District, which may limit the generalizability of the findings to other regions of Nepal. Limited access to comprehensive data on the risk experiences and mitigation practices of cooperative societies may affect the accuracy and completeness of the analysis. Some cooperatives may not have well-documented or systematic risk management practices, leading to potential gaps in the study. Risk identification and mitigation strategies are often influenced by subjective perceptions and the varying levels of experience of those managing the cooperatives. These subjective elements may introduce bias into the data collection process. Lack of sufficient research on the stated topic limited to relating different study variables and findings with the past findings. By addressing these limitations, the study intends to provide a clearer picture of how cooperative societies in Kaski District navigate and manage risks, offering recommendations for improvement and future research directions.

II. Reviews

In common parlance, risk denotes what can go wrong. Risk is the uncertainty of a result, and uncertainty is the presence of unknown covariance probabilities. Risk is the result of ambiguity regarding goals. Risks are not isolated entities; they must be connected to goals. A major risk has the potential to harm one or more important goals. One of the best ways to promote risk management conversations in the boardroom and throughout the organization is to map risk to objectives (Chapelle, 2019). Everyday life and both public and private sector organizations include risk. Risk refers to the uncertainty that surrounds future events and consequences. It is the manifestation of the probability and effect of an occurrence that might affect the accomplishment of an organization's goals (Berg, 2010).

The resources devoted to risk reduction ought to be less than the consequences of inaction, integral to organizational procedures, and included in the process of making decisions. In addition, they have to be methodical and organized, specifically address ambiguity and presumptions, and depend on the finest data accessible. They must be flexible, consider

human considerations, be transparent, and be subject to regular or ongoing evaluations (Dumitrache, 2020). To maximize profits on investments, banks, and other financial organizations take on risks when doing business. These risks may result in losses for these institutions and could negate planned gains. While some may come as surprises, others are expected. Although banks and other institutions usually maintain reserves for anticipated losses, unanticipated circumstances like economic downturns or declining interest rates force them to rely on their capital to mitigate associated losses. This is the point where banks and other financial organizations' existence depends on having strong risk management frameworks in place. By employing effective risk management systems, these establishments will gain proficiency in maximizing their trade-off between risk and return (Safari et al., 2016).

Nirmala et al. (2022), risks and uncertainties are universal occurrences. Uncertainties and risks will always exist, regardless of how capable a person or organization is of making choices. These frequently accompany them with unfavorable outcomes. In many real-life scenarios, it is not only difficult to forecast the course of events, but also difficult to prevent them. Therefore, regardless of the organization, the need of the hour is a clear-cut risk redressal procedure to minimize the damage. The resources devoted to risk reduction ought to be less than the consequences of inaction, integral to organizational procedures, and included in the process of making decisions. In addition, they have to be methodical and organized, specifically address ambiguity and presumptions, and depend on the finest data accessible. They must be flexible, consider human considerations, be transparent, and be subject to regular or ongoing evaluations. Dangers related to climate change, complicated regulations, and cyber security pose serious barriers to risk management. The report emphasizes the necessity of integrated risk management strategies that take into account new risks and uncertainties, encourage regulatory collaboration, and make use of technical advancements (Rumasukun & Noch, 2024).

Table 1 *Types of Risks*

Types of risk	Description
Credit risk	Originates when a counterparty fails to fulfill its obligations under a contract.
Country risk	Refers to dangers related to the borrower's native country's social, political, and economic environments.
Market risk	Resulting from adverse movements in market rates or prices typically most visible in a bank's trading activities.
Interest rate risk	Refers to exposure of a bank's earnings or economic value of assets, liabilities, and balance sheet instruments to adverse movements in interest rates.
Liquidity risk	Arises from the inability of a bank to accommodate a decrease in liabilities or to fund an increase in assets.
Operational risk	Involving a breach in corporate governance and internal control that results in financial losses from fraud, mistakes, etc. It also covers technical system failures.
Fores translation risk	Results from changing the currency of the bank's financial statements.
Transaction risk	Arises from fraud, error, and inability to deliver products and services. It consists of product development and delivery, transaction processing, system management, complexity of products, and internal control environment.
Compliance risk	Results from non - compliance with authorization criteria and other statutory and regulatory requirements.

People risk	Arises from incorrect positioning of personnel, incompetence, unconducive work environment lack of employee motivation, and high employee turnover.
Organizational risk	It arises from a lack of a clearly defined organizational structure delineating duties and responsibilities at each level.
Management risk	Such risks Arise from the incompetent board of senior management and breakdown in corporate governance.
Technology risk	Results from system failure, breach in systems security, programming errors, telecommunication failure, absence of disaster recovery plan, computer-related fraud, etc.
Strategic risk	Arises from adverse business decisions, improper implementation of decisions, or lack of responsiveness to industry changes
Legal risk	Arises from inadequate or incorrect legal advice or documentation resulting in unenforceable contracts or adverse judgments.
Reputational risk	Arises from operational failures, failure to comply with relevant laws, and regulations, and negative public opinion impacting depositors and market confidence in the bank.

Note. Adopted From Bakshi (2005)

The possibility of certain anticipated or unforeseen developments in the financial markets or the economy gives rise to risk. Risk can also result from employee negligence or internal company factors, which lower the intrinsic worth of the company by destroying asset values. Credit risk, market risk, liquidity risk, operational risk, leverage risk, investment risk, and so on are examples of many types of risk. Once more, any risk may be broken down into even more subclasses. To get the total risk assessment, three forms of risk are calculated: market, credit, and operational risks. Credit risk, market risk, operational risk, reputational risk, and liquidity risk are the five main risk categories that cooperative banks have identified (Constantinescu et al., 2015).

Five cooperatives of the Kaski district cannot refund their deposit to their depositors, and the victimized depositors declared and started a movement against the cooperatives (Cooperative Victim, 2024). The cooperatives and total amount of embezzlement are shown in table 2.

Table 2

Embezzled Amount of Cooperative in Kaski District

Serial No	Name of cooperative	Embezzled Amount
1	Suryadarshan saving and credit cooperative	1,354,300,000
2	Mitramilan Saving and Cooperative Ltd.	268,664,646
3	Image Cooperative Ltd.	65,000,000
4	Balidan Cooperative Society Ltd.	10,000,000
5	Bindubasini Saving and Credit Cooperative Ltd.	70,000,000

Sharma (2024) described that negative attitudes towards cooperatives are increasing due to the news like cooperatives cannot refund the deposit on time to the depositors, directors are without contact, Cooperative directors are arrested and sent to jail, depositors gave GyapanPatra to related office, etc. during the whole year of 2023/24. Such problems are seen in some limited cooperatives but whole cooperative sectors are viewed depressingly. Selfish board members, weak monitoring system, urban-centered transactions, poor presentation in production and marketing, high interest rate, encouraging for deposit of large amounts to noncooperative members instead of regular or compulsory deposit of real cooperative members, unhealthy competition among cooperative for demand deposit, increase in short

term liabilities in place of long term of liabilities, more than 50 percent cooperative have less than 5% reserve fund, and investment in real estate business and other business without any financial analysis that increases non-performing assets are some reasons of present problems faced by cooperatives.

In cooperatives, risk identification is the methodical process of identifying and recording any hazards that might compromise the cooperative's capacity to accomplish its goals. It entails a careful examination of both external and internal elements that can endanger the organization's operations, member relations, governance structure, financial stability, and general sustainability. In cooperatives, risk identification aims to identify unknowns or weaknesses early on so that preventative actions may be taken to reduce, transfer, or eliminate these risks. To adapt to changes in the social, economic, or regulatory settings in which it works, the cooperative must maintain its resilience and be able to continue offering value to its members.

The most important step in the risk assessment process is determining the risk's origins. For proactive risk management, the sources must be controlled. The results of the risk assessment process will be better and risk management will be more significant and successful if the sources are well understood. It may not always be possible to conduct a thorough quantitative study of every possible unintentional occurrence that arises from the risk identification of a certain system, facility, or activity. Actuality, risk identification is a screening procedure that eliminates occurrences with minimal or insignificant risk from further evaluation (Berg, 2010).

Risk identification and mitigation are major parts of risk management. Berg mentioned that the risk management steps as establishing goals and context (i.e. the risk environment), identifying risks, analyzing the identified risks, assessing or evaluating the risks, treating or managing the risks, monitoring and reviewing the risks, and the risk environment regularly, and continuously communicating, consulting with stakeholders and reporting.

III. Methodology

The study employed a descriptive research design to comprehensively understand the risk experience, identification, and perception of risk mitigation tools within the cooperative societies of the Kaski district. The research followed a quantitative approach. The total population for the study comprised 370 saving and credit cooperatives registered in the Kaski district, out of which a sample of 190 cooperatives was selected using a simple random sampling technique, ensuring that each cooperative had an equal chance of being included in the sample. The Yamane (1967) formula, N/(1+N(e)2), is used to calculate the sample size. Each member of the population is assigned a unique numerical value on slips of paper of the same size/shape and color. Then, the slips are folded down, mixed up properly in a hat and the required sample of 190 is drawn randomly from the hat without looking.

Data collection was primarily conducted using a structured, self-administered questionnaire. The questionnaire consisted of close-ended questions designed to capture specific insights on risk practices, employing a 7-point Likert scale to measure responses. The scale ranged from "strongly disagree" to "strongly agree" for perception-based statements, and from "very low" to "very high" for assessing the level of risk experienced by the cooperatives. This method enabled the collection of quantifiable data, facilitating an objective analysis of the risk management practices in the cooperatives. Descriptive statistical tools namely frequencies, percentages, mean, standard deviation, minimum, and maximum are employed to achieve the study objectives.

Cronbach's Alpha, internal consistency reliability metric, generated through SPSS was utilized to assess the constructs' reliability in the questionnaire survey which is 89.2. According to Cronbach (1951), it demonstrated the degree to which a group of test items might be regarded as measuring a single latent variable. The theory describes that at least 0.5 or above the aggregate Cornbach's Alpha shows the variables are reliable.

IV. Results and Discussion

Demographic Profile of Respondents

An overview of the respondents' demographic characteristics is provided in Table 3. Of the 190 respondents in total, 145 (76.3%), 24(12.6%), and 21 (11.1%) are managers/ managing directors, accountants, and others (president, secretary, shareholders, etc.), with 106(55.8%) of the respondents being male and the remaining 84 (44.2%) being female. Similarly, Table 3 reveals that only one cooperative (0.5%), with a duration of more than 30 years, 33 cooperatives (17.4%) are between the ages of 21 to 30 years, 136 cooperatives (71.6%) are older in between 11 to 20 years, and 68 only 20(10.5%) of cooperatives that operate for up to 10 years. Regarding the educational qualification of respondents, the majority of responders 98 (51.6%)passed the bachelor level followed by 79 (41.6%) master's degree, and class 12 or, an equivalent degree 13 (6.8%).

Table 3

Demographic Background Features of Respondents

Variables	Features	Frequencies	Percent
Position of	Manager/Managing director	145	76.3
Respondents	Accountant/Finance head	24	12.6
	Others (President, secretary,etc)	21	11.1
Sex	Male	106	55.8
	Female	84	44.2
Age of	Upto 10 year	20	10.5
cooperatives	11 to 20 year	136	71.6
	21 to 30 year	33	17.4
	Above 30 year	1	0.5
Educational	Class 12 or equivalent	13	6.8
Qualification	Bachelor	98	51.6
	Masters and above	79	41.6

Note. Field Survey, 2024

Sector Wise Loan Concentration

Table 4 shows that the Kaski district cooperatives sanction more loans in real estate (38.9%) followed by business/industry(34.7%), household loan (19.5%), agriculture (5.8%), and, equal in education and auto sector (0.5%) as highest one. Similarly, the SAACOS concentrate loans as the second highest in business (29.5%), household (22.6%), real estate (22.1%), agriculture (14.7%), vehicle (8.4%), and education (2.1%) respectively. Table 4 also shows that the third-highest loan concentration is vehicle loans followed by business/industry, household, real estate, agriculture, and education loans with 27.9%, 17.4%, 16.3%,15.8%, and 12.6%, respectively. However, the least loan concentration is in real estate, and then, business, household, vehicle, agriculture, and educational loans respectively. The concentration of loans in the order of first, second, third, fourth, fifth, and sixth are, as shown by the level of fourth highest, auto, agriculture, household, educational, and business.

Table 4

Position of Loan Concentration

Laval	Agric	ulture	Business		Household		Educational		Real estate		vehicle	
Level	n	%	n	%	N	%	n	%	n	%		%
Highest	11	5.8	66	34.7	37	19.5	1	0.5	74	38.9	1	0.5
2 nd Highest	28	14.7	56	29.5	43	22.6	4	2.1	42	22.1	16	8.4
3 rd Highest	24	12.6	33	17.4	30	15.8	14	7.4	31	16.3	53	27.9
4 th Highest	33	17.4	23	12.1	28	14.7	24	12.6	14	7.4	50	26.3
5 th Highest	30	15.8	6	3.2	32	16.8	21	11.1	10	5.3	25	13.2
Last one	17	8.9	2	1.1	7	3.7	38	20	1	0.5	11	5.8
None	47	24.7	4	2.1	13	6.8	88	46.3	18	9.5	34	17.9
Total	190	100	190	100	190	100	190	100	190	100	190	100

Note. Field Survey, 2024

Position of Irregular Loan

Table 5 reveals the position of default/irregular loans provided by Kaski district SAACOS. The first highest irregular loan is in real estate (43.8%) followed by household loans (27%), business/industry(23.8%), vehicle(19.4%) agriculture (5.9%), and, education loan (5.9%). Likewise, the SAACOS are suffering with irregular second highest loans in the household (31.6%), business(23.8%), vehicle (23.7%), real estate (23.5%), agriculture (10.1%), and education (9.9%) respectively. Moreover, Table 5 shows that the third-highest irregular loan is business loans followed by agriculture, vehicle, education loans, household, real estateand with 27.5%, 21.8%, 21.6%, 21.1%,15.8%, 12.4%, and 12.4%, respectively. Besides this, the fourth highest number of irregular loans are in agriculture (24.4%), auto (23.7%), educational loan(19.7%), household (17.1%), real estate (11.8%), and business (9.4%). The order of fifth highest loans are education(25.4%), agriculture (25.2%), auto (9.4%), business (8.8%), real estate (6.5%), and household (5.3%). At last, the least irregular loansare in real estate (2%), and then, auto (2.2%), household (3.3%), business (6.9%), agriculture (12.6%),and educational loans (21.1%) respectively.

Table 5Position of More Irregular/Default Loan

Level	Agric	ulture	Bus	ness	Hous	ehold	Educ	ational	Real	estate	veh	nicle
	n	%	n	%	n	%	n	%	n	%	n	%
Highest	7	5.9	38	23.8	41	27.0	2	2.8	67	43.8	27	19.4
2 nd Highest	12	10.1	38	23.8	48	31.6	7	9.9	36	23.5	33	23.7
3 rd Highest	26	21.8	44	27.5	24	15.8	15	21.1	19	12.4	30	21.6
4 th Highest	29	24.4	15	9.4	26	17.1	14	19.7	18	11.8	33	23.7
5 th Highest	30	25.2	14	8.8	8	5.3	18	25.4	10	6.5	13	9.4
Last one	15	12.6	11	6.9	5	3.3	15	21.1	3	2	3	2.2
Total	119	100	160	100	152	100	71	100	153	100	139	100

Note. Field Survey, 2024

Level of Risk Experience

Table 6 shows the level of risk experienced by 190 sample saving and credit cooperatives. Respondents are required to scale from very low (1) to very high (7) with a 7-point scale. The SACCOS feels more credit risk followed by strategies and market risk, liquidity risk, legitimacy and good governance risk, operational risk, information technology risk and investment risk, internal control risk, reputational risk, and capital risk. Out of the total 10 risks, only the credit risk is above average which has a mean of 4.14 and standard deviation of 1.68.

Table 6
Level of Risk Experience

Types of risk	N	Min	Max	M	SD	Rank
Credit risk	190	1.00	7.00	4.14	1.68	1
Operational risk	190	1.00	6.00	3.07	1.48	5
Strategies and market risk	190	1.00	7.00	3.61	1.55	2
Internal control risk	190	1.00	6.00	2.85	1.46	7
Information technology risk	190	1.00	6.00	2.88	1.38	6
Legitimacy and good governance risk	190	1.00	7.00	3.14	1.55	4
Liquidity risk	190	1.00	7.00	3.29	1.73	3
Investment risk	190	1.00	7.00	2.88	1.69	6
Reputational risk	190	1.00	7.00	2.83	1.63	8
Capital risk	190	1.00	7.00	2.65	1.56	9

Note. Field Survey, 2024

Techniques Used by SAACOS to Identify Risk

Identification of risk is very important to manage risk. Table 7 depicts the techniques of risk identification used by saving and credit cooperatives of the Kaski district. A highly used technique is internal audit and inspection with a mean score of 5.77 and a low standard deviation of 1.4. Like this, the cooperatives used financial statement analysis, external auditing, monitoring external factors like political events, market trends, and economic conditions, brainstorming, incident investigation and research, and scenario analysis respectively as the techniques are scaled above average. The mean of risk assessment workshop and industry benchmarking are 3.98 and 3.89 which falls under the average value of 4 and these are the least used techniques.

Table 7
Techniques Used to Identify Risk

Types of techniques	N	Min	Max	М	SD	Rank
External auditing	190	1.00	7.00	5.37	1.58	3
Risk assessment workshop	190	1.00	7.00	3.98	1.50	8
Scenario analysis	190	1.00	7.00	4.38	1.61	7
Brainstorming	190	1.00	7.00	4.64	1.61	5
Industry benchmarking	190	1.00	7.00	3.89	1.63	9
Financial statement analysis	190	1.00	7.00	5.39	1.57	2
Incident investigation and research	190	1.00	7.00	4.53	1.64	6
Conducting internal audit and inspection	190	1.00	7.00	5.77	1.40	1
Monitoring external factors like political events, market trends, and economic condition	190	1.00	7.00	4.74	1.56	4

Note. Field Survey, 2024

Perception Towards Risk Mitigation Tools

Table 8 shows the opinions of respected respondents toward different risk mitigation tools.

Table 8
Perception TowardsRisk Mitigation Tools

Risk mitigation tools	N	Min	Max	М	SD
Well-trained BOD members and working staff	190	1.00	7.00	6.47	.86
Clearly defined roles and responsibilities of different functionaries regarding risk management	190	1.00	7.00	6.19	.91
Rigid rules and regulations to be followed	190	2.00	7.00	6.00	1.06
A risk management committee is to be formed	190	1.00	7.00	5.98	1.19
A separate powerful and fully responsible government body is to be formed	190	2.00	7.00	5.81	1.14
Analysis of past and present economic position, trustworthiness (credibility), and honesty of borrower	189	2.00	7.00	6.47	.88
Diversification of portfolio	190	1.00	7.00	6.32	1.16
High interest rates for high-risk loans and vice versa	190	1.00	7.00	4.36	1.92
Risk management workshops and training programsare to be conducted regularly	190	2.00	7.00	6.17	.68
Adequacy of capital with sufficient cash reserve	190	2.00	7.00	6.23	.98

Note. Field Survey, 2024

Well-trained BOD members and working staff and analysis of past and present economic position, trustworthiness (credibility), and honesty of borrowers have the highest mean value of 6.47 with SD 0.86 and 0.88 respectively followed by diversification of portfolio, adequacy of capital with a sufficient cash reserve, clearly defined roles and responsibilities of different functionaries regarding risk management, rigid rules, and regulations to be followed, the risk management committee is to be formed, a separate powerful and fully responsible government body is to be formed, and high interest rates for high-risk loans and vice versa

with the mean score 6.32, 6.23, 6.19, 6.00, 5.98, 5.81, and 4.36.

V. Conclusion and Implication

The study "Risk Experience, Identification, and Mitigation in Cooperative Societies of Kaski District, Nepal," highlights the significance of risk management within cooperative societies, particularly in the context of credit and financial risk. Cooperative societies in Kaski District face multiple risks, including credit, market, liquidity, operational, and reputational risks. The analysis showed that credit risk is the most significant concern for these cooperatives, with a high prevalence of irregular and default loans, particularly in the real estate and household loan sectors.

The study also emphasized the importance of proper risk identification techniques, with internal audits and inspections being the most commonly used methods among the cooperatives. Effective risk management in these organizations requires a systematic approach that includes not only risk identification and analysis but also ongoing monitoring and evaluation. Respondents highlighted the need for a well-trained board of directors, staff, and clear risk management protocols as key components in mitigating risks.

Given the findings, there is a clear need for cooperative societies in Kaski District to strengthen their risk management frameworks. This includes enhancing their internal control systems, diversifying their loan portfolios, and developing robust strategies for managing financial and non-financial risks. The implementation of integrated risk management practices, supported by adequate training and regulatory oversight, will be critical to ensuring the sustainability and stability of cooperative societies in the region.

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