Role of the Personal Promotional Factors Determining Agri-entrepreneurship Performance in Surkhet District

Hasta Bahadur Pulami*

Abstract

This study focuses on the role of personal promotional factors determining agri-entrepreneurship performance, with a sample size of 405 respondents from infinite small and medium agri-entrepreneurship of Surkhet district. The data were collected using structured questionnaire containing multiple choice questions and Likert scale questions. The survey was conducted in Kartik 2079 on active agri-entrepreneurs. The factors determining agri-entrepreneurship performance were grouped into three main variables, i.e., self-efficacy (SE), creativity and innovation level (CI), and risk preference level (RP). Modeling of multiple regression analysis was used in inferential statistics. The result showed that agri-entrepreneurs' self-efficacy level, creativity and innovation level, and risk preference level have a significant impact on the agri-entrepreneurship performance. Based on univariate analysis self-efficacy has the most significant effect on agri-entrepreneurship performance followed by creativity and innovation skill; and risk preference level. Although variables are jointly regressed in bivariate regression, coefficients are decreased. This study concluded that agri-entrepreneurship performance of agri-entrepreneurs of Surkhet district is more determined by self-efficacy level. Agri-entrepreneurs in the field of agriculture could consider this factor to have better choices while entering or continuing with their agri-entrepreneurships.

Keywords: Self-efficacy, creativity, innovation, risk preference

Introduction

Agri-enterprise is the backbone of a nation. Therefore, the development of agriculture has been regarded as one of the backbones of national socio-economic development in Nepal (Rijal, 2019). Many sectors use agriculture output as raw material to create value or do value addition to meet the needs of the people. Hence, a nation's industrialization and development of manufacturing sector depends on the

* Pulami is a Faculty of Management, Mid-West University. Email: hastapulami98@gmail.com

growth and development of the agriculture sector of that nation **(**Lencucha, Pal, Appau, Thow & Drope, 2020).

Agriculture is one of the top sectors of development; its modernization and commercialization are a big priority of researchers. Entrepreneurship development plays a vital role in national prosperity. Assessment of such an issue especially in academia may have universal significance.

Entrepreneurs have always been recognized for their business ideas. Entrepreneurs are encouraged to develop entrepreneurship to overcome economic crisis and uncertainties (Barnard, 2019). Agricultural entrepreneurship is the management strategy an agricultural business employs in response to the structural change in the agricultural sector; strategies of specialization, diversification and supplementation (Kahan, 2012).

Most developed countries promote entrepreneurs and consider entrepreneurship as very vital to their growth and development. The role of continuous promotion of entrepreneurship in propelling growth of the economy, social status and employment as well as livelihood creation could not be over-emphasized; it is seen as the wealth of the nation (Ezekiel, Omotayo & Olaleke, 2018).

According to Mohlehli and Rantlo (2016), credit access, business plan, infrastructure development, culture, technology and market access have played a great role in entrepreneurship development. Moreover, they have claimed that while government policy on credit is more essential than other factors, cultural factors have no impact.

Different studies have attempted to confirm the role of infrastructure and market situation in determining the success of entrepreneurship, specifically agri-entrepreneurship. For example, Okeke, Oraka and Obasi (2015) have claimed that infrastructural facilities, mainly good roads, standardized market and proximity serve

as the determinants of the financial performance of an enterprise as these aspects help reduce its cost of operation.

Gauchan (2008) has revealed that a few prerequisites are strengthening the broad environmental aspects, including investment in agricultural research, rural road network, market infrastructure development, public support service, training and development, and scientific land reform policy. Similarly, they focused on a balanced approach to transforming the input factors, including improved technical workforce, quality seeds and pesticides, fertilizer and financing adequacy support in agri-entrepreneurship promotion.

Addo (2018) has claimed that personal, technical and general business skills are the determinants of an entrepreneur's success. The overall skill constructs observed in this study comprise creativity and innovation, curiosity, effective communication, commitment, vision setting, tolerance, team building, general management and leading skills. This study further disclosed that motivation, self-confidence and determination were reported as crucial factors influencing the success of agri-entrepreneurship.

Another study has revealed that personal qualities, including self-criticism, leadership, market orientation and a sense of innovation and creativity, are crucial factors for successful entrepreneurship development (Brockhaus & Horwitz,1986; Nandram & Samson, 2000; as cited in Bairwa, Lakra, Kushwaha, Meena, & Kumar, 2014). Furthermore, the study claimed that personal capacity to manage storage facilities, transit activities, grading, processing, packaging and hands-on skill competence in quality control also confirm the entrepreneur's personal qualities.

Damarla (2015) has explored entrepreneurial qualities, including the capacity to manage a firm backed up by proven skill competence to perform cost-benefit analyses, adherence to ethical compliance, ability to set effective goals, and

cooperation among the members of the supply chain to assure the competence of an entrepreneur. Knowledge of seasonal calendar, identification of key partners on agribusiness and relationship development, value creation of agribusiness, business gap analyses and financial analyses skill development promote the technical competence of an agri-entrepreneur (Ferris, Agricultural entrepreneurship, 2016, pp. 132-161). Further, Khan (2013) has claimed that the level of managerial skills, entrepreneurship spirit, and other technical qualities and competencies are the main promoting factors to successful agri-entrepreneurship. They basically emphasize on creative power, opportunity seeker, confidence, risk-taking and problem-solving skill.

The investigation reported that the promoting factors influencing engagement in agribusiness entrepreneurship had been observed with focus on business network, risk-reducing activities and innovation, as well as, on locus of control (Saghaian, Mohammadi & Mohammadi, 2022). Similarly, it is claimed that self-efficacy and positive perception of society have supported agripreneurship promotion through product and market development of farmers (Choudhury & Easwaran, 2019). The government grant facilities can promote agri-entrepreneurship performance, market and product development, and social perception toward agribusiness entrepreneurship, and support of family members is the backbone for early agripreneur development in any context (Devkota et al., 2022).

Yoganandan et al. (2022) have reported that the level of risk is reduced by empowering the level of self-efficacy; it has been explored that agribusiness entrepreneurship can be promoted through education, management and development education and training. Similarly, Sarmila et al. (2018) have claimed poor business networks, innovation, and research, more bargaining power, high transportation and distribution cost, and a lack of storage facilities are needed for agrepreneur development. Purves, Nibloc and Sloan (2015) confirmed that the factors influencing agribusiness entrepreneurship success have been observed with a focus on socio-

demographics, attitude, and locus of control acceptance. Further, they have claimed that self-efficacy, risk preference and social network are the major determinants.

Therefore, this study aims to identify the factors that affect entrepreneurship promotion, and to analyze the promotional factors: self-efficacy, creativity and innovation, risk preference level, market and product development, society's views of agri-entrepreneurship and business network skills of an entrepreneur in the agribusiness sector in Surkhet district. It also looks at the variables such as disaggregated respondents, locational and time factor related gap which will be fulfilled by this research on agri entrepreneurship.

The contribution of agriculture, forestry and fishery sectors to gross value added was 23.9 percent in the fiscal year 2078/79 (Government of Nepal, 2079). The economic profile of Karnali reveals the lowest economic performance compared to other provinces, which accounts for only 4 percent of national GDP and GVA, and it is generally a small-scale subsistence-based agricultural economy with approximately 80 percent of the population employed in agriculture, fishery and livestock (Government of Karnali Province, 2077).

Therefore, this research aims to fulfil the gap in personal promotional factors: self-efficacy, creation and innovation skill, risk preference level, market and product development skill, society's views on agri-entrepreneurship, and business network skill for determining agri-entrepreneur performance in Surkhet district.

Objectives of the Study

The general objective of this study is to assess the personal promotional factors determining agri-enterprise performance. To accomplish the general objective, the present study specifically aims to:

a. assess the impact of agri-entrepreneurs' self-efficacy on agri-entrepreneurial performance.
b. evaluate the effect of agri-entrepreneurs' creativity and innovation on agri-entrepreneurial performance.
c. investigate the impact of agri-entrepreneurs' risk preference on agri-entrepreneurial performance.
d. find out the impact of all independent variables jointly on agri-entrepreneurship performance

Research hypothesis

To confirm the statistical significance of the link between the various selected constructs of the study, the present researcher considered several hypotheses in terms of the null hypothesis (Ho). The following hypotheses are developed and tested by employing multiple regression analysis tools:

H_{01}: There is no significant impact of self-efficacy of agri-entrepreneurs on agri-entrepreneurship performance.

H_{02}: There is no significant effect of creativity and innovation skills of agri-entrepreneurs on agri-entrepreneurship performance.

H_{03}: There is no significant impact of the risk preference of agri-entrepreneurs on agri-entrepreneurship performance.

H_{04}: There is no significant impact of the all independent variables of agri-entrepreneurs on agri-entrepreneurship performance.

Self -efficacy

Self-efficacy is the belief in one's ability to muster and implement the necessary personal resources, skills, and competencies to attain a certain level of achievement on a given task (Zargham & Hamid, 2016). In other words, self-efficacy

can be seen as a task on specific self-confidence in their abilities to perform on various skill requirements (Mohlehli & Rantlo, 2016).

Creativity and innovation

Creativity is creating new ideas, imaginations and possibilities related to new thinking. The innovation introduces something new in products, services, and processes through experimentation and creativity.; effective in the market related to introducing something new. Innovation may be technological, product-market and administrative (Bairwa et al., 2014).

Risk preference

Risk preference is the level of some initiatives with uncertainty and the chance of potential losses associated with outcomes. Risk-taking is one of the major elements of entrepreneurship. Risk-taking can be described as the willingness of a firm to provide resources for projects where the outcomes are uncertain (Rakicevic, Jaksic & Belgrade, 2018).

Theoretical perspectives

This study mainly depends on two theoretical approaches – one is the entrepreneurial event theory, and the next one is the theory of planned behaviour. The entrepreneurial event theory proposed by Shapero and Sokol (1982) is the first model to shed light on entrepreneurial intention theory (Mustapha & Subramaniam, 2016). This model states that the three main determinants that affect an individual's intention in entrepreneurship are perceived desirability, perceived feasibility and propensity to act.

The theory of planned behaviour is advanced from the theory of reasoned action (Bryman, 2008), implying that intentions are shaped by personal attitudes and subjective norms and govern the actions of an individual. The behaviour of a person

is based on voluntary control and specific planning. It has three antecedents that shape an individual's intention: attitudes towards behaviour, social norms and perceived behavioral control.

Review of Literature

Entrepreneurship is a process of actions of an entrepreneur who is always searching for something new and exploits such ideas into gainful opportunities by accepting the risk and uncertainty. It refers to the capacity to take risks, develop, organize and manage a new business venture to make a profit. Agricultural entrepreneurship relates to marketing and producing various agricultural products and inputs (Ferris, 2012).

Agricultural entrepreneurs classify all activities that help farmers adjust to a free market economy as entrepreneurs, making agricultural entrepreneurs a fairly diverse group with farm activities (Pereira & Martinho, 2020). An entrepreneur is a person who buys factors of production for the production of goods to be sold. S/he is also an innovator or a developer who recognizes, seizes and converts opportunities into workable or marketable ideas, adds value through time, effort, skills, and money assumes the risks of the competitive marketplace to implement these ideas, and finally realizes the rewards from these efforts (Kahan, 2012).

Agri-entrepreneurship includes input and output supply and services through backward and forward linkages between the suppliers and consumers, including the storage, processing, marketing, transporting and distribution related to agriculture; the marketing of farm products such as warehouses, wholesalers, processors, retailers etc. (Adonisi & Wyk, 2012). Moreover, all those companies dealing with the economics of farm management and educational and research institutions focusing on the science of agricultural management come under agribusiness's purview (Ali & Mahamud, 2013).

The personal factors of entrepreneurs and their attitudes are also important for the success of their business. According to Laureen (2011), major personal factors of agri-entrepreneurship in business are work-life balance, confidence, positive attitude, risk-taking, commitment, passion, courage, innovation, vision and determination. (Nnamani, Ugbene & Chukwu, 2018).

Filion (2004) stated the three categories of vision have been identified: emerging visions (ideas for future products or services), a central vision (the outcome of one or more emerging visions) in two parts – the outer part, i.e., the market space to be occupied by the product or service. Determination is probably the most important characteristic among commitment and determination, leadership, opportunity obsession, risk tolerance, creativity and adaptability (Singh & Rahman, 2013).

Devkota et al. (2022) have explored promoting factors that attract and involve the youths and understand the awareness and involvement of youth farmers in agripreneurship in Western Nepal. Data were collected from both primary and secondary sources. The ordered logit model is employed in the study based on descriptive and inferential analysis. The research is based on an explanatory research design by identifying farmers' awareness of agriculture entrepreneurship among 324 farmers of Bedkot Municipality, Kanchanpur, Nepal.

Yoganandan et al. (2022) have conducted a study on the effect of demographics and reprographics on the agri-entrepreneur's satisfaction. This study proposes a seven-dimension survey instrument from 784 agri-entrepreneurs which are analyzed using exploratory and confirmatory factor analysis and multiple linear regression. Researchers confirm that satisfaction is influenced by material availability, government support, farm growth, farm income, market performance, cultivation and production and perceived farm image. Similarly, Saghaian, Mohammadi and Mohammadi (2022) have studied the motivational factors that lead to the success of

entrepreneurs in agribusiness. This is seen as affecting the degree of successful investment that accelerates development and economic growth in the agriculture sector in Mashhad, Iran, using a two-stage Heckman approach. Factors affecting the success or failure of agribusiness entrepreneurship have received less attention in the literature. This study aimed to determine the factors affecting agricultural entrepreneurship success and entrepreneurs' profits. The researcher claimed that entrepreneurship experience, risk-taking behaviour, interest rates, and initial capital significantly impact the probability of entrepreneurship success.

Shiri et al. (2021) opined that the research results illustrate the value of human and social resources in fostering entrepreneurship alertness among Iranian students of agricultural higher education in western Iran in the context of entrepreneurial education. They have claimed that entrepreneurship studies have mostly focused on the determinants of entrepreneurial opportunity recognition; few studies have analyzed the factors influencing entrepreneurial alertness. The sample consisted of 254 agricultural students in higher education from Ilam province in the Islamic Republic of Iran, selected by the stratified random sampling method for the study. Modelling of structural equations was used in inferential statistics.

A study was done on agricultural entrepreneurship and entrepreneurial failure in Ghana, a country in sub-Saharan Africa, by exploring failure in a cohort of firms. Using qualitative data from interviews, the researchers identified the reasons for the failure of a group of entrepreneurs associated with a novel agribusiness activity in an otherwise economically attractive market in an emerging economy from 69 respondents who started and exited aquaculture (a form of agribusiness) within a period. The research confirms that social structure can negatively affect entrepreneurial behaviour and outcomes (Adobor, 2020).

Essel, Adams and Amankwah (2019) have claimed that the finding of demographic factors (sex of operator, completion of formal education at basic school level or junior high school), institutional variables (bank investment and training services), and firm characteristics (artisan and craft industry type) conjointly and significantly influence small-scale firm performance (number of employees and sales or monthly revenue) for the fulfilment of objective. In recognition of the agri-entrepreneurs' salient role, several policy interventions have been implemented to enhance job creation functions of small-scale firms, and examined one of these interventions, that is, promotion of small-scale firms in Sunyani municipality of Ghana. A cross-sectional survey involving 200 small-scale firm operators selected through multi-stage sampling was conducted. Both descriptive and inferential analytical tools were used to analyze the data. Descriptive techniques employed included means, frequencies, and cross-tabulations. The inferential analysis included multivariate multiple regression techniques that simultaneously estimate a single regression model with more than one dependent variable.

Tiwari, Bhat and Tikoria (2017) have identified that creativity showed strongest positive relationship followed by emotional intelligence. They studied undergraduate students, an average age group of 20 years, who studied at Primer Technical University of India in 2017. 390 students, including 269 male and 121 female students, were selected using systematic random sampling. 72 items questionnaire was administered to measure the operational variables: emotional intelligence, creativity, moral obligation, attitude toward becoming a social entrepreneur, subjective norms and perceived behavioural control for data analysis correlation analysis employed with chi-squire used to measure goodness fit.

The study conducted by Purves, Nibloc and Sloan (2015) explored the relationship between non-financial and financial factors and firm survival in Australian agricultural firms. It improved the predictive capacity of financial failure

models. This study used mixed-method exploratory case studies across four Australian agricultural firms (two successful and two failed) listed on the Australian Securities Exchange. The result found that using an Integrated Multi-Measured approach provided a higher classification rate for the failed group than those provided by an individual measure. We also discovered that non-financial factors, managers' self-efficacy associated with the agricultural organizations studied, impacted their success or failure.

Development of conceptual framework of the study

A literature review of existing studies and theories on the topic was used to develop the conceptual framework. The following conceptual framework has been developed based on overall reviews and empirical analysis of the research-based evidence. This conceptual framework has been adopted by Addo (2018); Arafat (2018); Rezaei- Moghaddam (2019); Essel (2019); Arabi et al. (2020); Shiri (2021); Saghaian (2022); Devkota (2022).

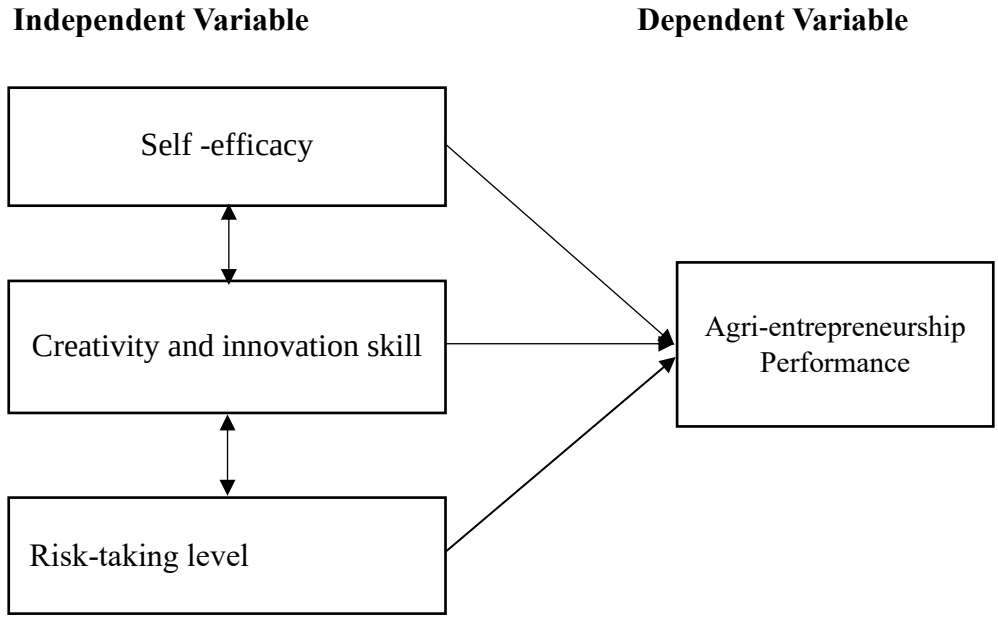

Figure 1: Conceptual framework

Research Methodology

This study is based on the positivism philosophy. The respondent of this study was active agri-entrepreneurs involved in the agri-entrepreneurship sector in Surkhet. By using convenient sampling technique 405 respondent were selected from infinite agri-entrepreneurs in Surkhet district. Primary data were collected from 405 respondents using a structured survey questionnaire. The causal-comparative research design was used. The study population consisted of all registered small-and medium-sized business owners engaged in agribusiness. Non-probability convenient sampling technique was adopted for the study.

Here the population of this research was unknown, so the sample size was estimated at 384 plus a 5% margin, i.e., 403.

The sample size was calculated as follows:

$n= \frac{z^2.p.(1-p)}{c^2}$ (Bill Godden, 2004)

n= Sample Size

p= sample proportion

z = the value of the standard variate at a given confidence level and to be worked out from the table showing are under normal curve

c= Confidence interval expressed as decimal

$n= \frac{(1.96)^2 \times .(0.5) \times (0.5)}{(0.05)^2}$= 384 (approx)

With 5 percent margin of error, 384.16 + 5% of 384.16 = 384+19.2 = 403.36

Validity test

Questionnaires have been developed for the validity of data after referring to the literature reviews. The study's validity will be checked with the help of

agribusiness entrepreneurs based on the study's theoretical framework. The questionnaire was designed with experts' help to assess the research's content and face validity, and it was tested with the help of expert suggestions and guidance within a specific sample of respondents.

Reliability test

For data reliability, pre-testing of the three variables-related questionnaires have been carried out before the questionnaire distribution and using the statistical tool Cronbach's Alpha.

Table 1

Variable-wise Result of Reliability Test Cronbach's Alpha.

Variables	Number of Items	Construct-wise Cronbach's Alpha	Total Alpha	Cronbach's
Self-efficacy	7	0.722		
Creativity and innovation	7	0.710		
Risk preference	7	0.526		

Source: Calculations based on survey 2022

Table 1 presents Cronbach’s alpha value to test the construct-wise reliability. In all cases, the value of Cronbach’s Alpha is greater than 0.5. Hence, it shows a consistent result among the variables.

Data modeling

Univariate and bivariate regression analysis were used to test the hypotheses. Regression models identify the type of mathematical relationship that exists between the variables. Regression analysis techniques help discover the association between variables. The following model has been fit to observe the effect of the independent variable on the study's dependent variable

The univariate model supports determining the relation between independent and dependent variables. As per Shrestha (2021), the model of this is;

Univariate equation	Independent variable	Model No
$AP=\beta_0+ \beta_1SE+\varepsilon_i$	β1 SE = slope of AP with variable S.E., holding other variables constant.	1
$AP=\beta_0+ \beta_1CI+\varepsilon_i$	β1 CI = slope of AP with variable CI, holding other variables constant.	2
$AP=\beta_0+ \beta_1RP+\varepsilon_i$	β1 RP = slope of AP with variable RP, holding other variables constant	3

Similarly, as per Shrestha (2020), the bivariate model helps to determine the relationship between two interrelated dependent variables. The model is;

Bivariate equation	Independent variables	Model No.
$AP =\beta_0+ \beta_1SE+ \beta_2 CI + \varepsilon_i$	$\beta_1SE+ \beta_2 CI$ = slope of AP with variable S.E. and CI, holding other variables constant.	1
$AP =\beta_0+ \beta_1SE + \beta_2 RP + \varepsilon_i$	$\beta_1SE + \beta_2 RP$= slope of AP with variable SE and RP, holding other variables constant.	2
$AP =\beta_0+ \beta_1CI+ \beta_2 RP +\varepsilon_i$	$\beta_1CI+ \beta_2 RP$ = slope of AP with variable CI and R., holding other variables constant.	3

Where,

AP= Agri-entrepreneurship performance

β_1 to β_i = Regression coefficients

AP (Agri-entrepreneurship performance) - (independent variable), which are,

SE = Self-efficacy

CI = Creativity and Innovation

RP = Risk preference

ε = error term

Data Presentation and Analysis

The researcher categorized the total sampled respondents based on gender, marital status, experience level and education status. The gender groups are male and female. Marital status is married and unmarried. Experience levels are up to 3 years, 3 to 5 years and above 5 years; education levels are up to 10 classes, +2 level, bachelor level and master and above level are included.

Table 2

Respondents' profile

Variables	N	Percent	Variables	N	Percent
Gender			**Marital status**		
Male	241	59.5	Married	377	93.1
Female	164	40.5	Unmarried	28	6.9
Total	**405**	**100.0**	**Total**	**405**	**100.0**
Experience			**Education status**		
Up to 3 Years	163	40.2	Up to 10 class	83	20.5
3 to 5 Years	69	17.0	+2 level	202	49.9
Above 5 Years	173	42.7	Bachelor's level	115	28.4
Total	**405**	**100.0**	Masters and above	5	1.2
			Total	**405**	**100.0**

Source: Field survey 2022

Table 2 demonstrates the number of respondents by gender for this study. Based on the findings, more males responded than females. Out of 405 respondents, male respondents consist of 241 (59.5%), while female 164 (40.5%) respondents. Similarly, of the 405 respondents, 93.1 percent are married, and the remaining 6.9 percent are unmarried.

Similarly, Table 2 describes the number of respondents according to their experience level. Based on respondents' responses, out of 405 respondents, 40.2 percent, 17 percent, and 42.7 percent have experience levels of up to 3 years, 3 to 5 years and above 5 years in related fields correspondingly.

Likewise, in the distribution of respondents by the level of education, the greatest percentage out of the total 405 respondents is 49.9 percent of respondents are +2 level and 1.2 percent from master and above as least. Similarly, up to 10 classes and bachelors are 20.5 percent and 28.4 percent, respectively.

Descriptive analysis

This section deals with the aggregate analysis results of the factors affecting individual variables. The respondents were asked to state their agreement and disagreement with each of the 49 statements about their affecting factors (self-efficacy, creativity and innovation skill, and risk preference level to Agri-entrepreneurship and business network skill are independent variables) and Agri-entrepreneurial performance as dependent variable on 5-point Likert Scale items.

Table 3

Descriptive Analysis

Self- Efficacy	Mean	SD
I have achieved better success than other competitors because of non–obstacle working opportunities	4.32	0.778
I have achieved what I expected as the aims	4.13	0.812
My success in entrepreneurship is the product of my self-confidence ability and concepts.	4.2	0.716
success in entrepreneurship is more affected by the ability, controls, and directions of entrepreneurs rather than other external forces	4.37	0.693
In a nutshell, I am responsible myself for the success of entrepreneurship	4.51	0.67
The future of entrepreneurship is based on my action and the way how I manage it	4.29	0.67
I have handled and managed the problems easily because of my commitment to the work plan	4.24	0.701
Creativity and innovation skill	Mean	SD
The old products are improved, and new products are being created as per the changing needs	4.36	0.838
There is improvement in quality and reduction in cost due to the process of product	4.14	0.757
Alternative raw materials and new markets are being searched	4.21	0.742
The other entrepreneurs are ready to involve me in creative activities	4.19	0.722
We should give time to innovate new ideas for successful entrepreneurs	4.31	0.699
Entrepreneurs who work with innovative and alternative ideas become more successful than others	4.33	0.691

Being an imaginative and creative entrepreneur, I follow distinct ways to each work	4.2	0.724
Risk preference level	Mean	SD
Every problem has got solution is the of working in entrepreneurship	4.28	0.909
Understanding clearly the nature of risk while working is supportive in the management of risk	4.25	0.724
Failures develop entrepreneurs to be laborious	4.2	0.896
I enjoy the challenges in the risky situation	3.19	1.192
Entrepreneurs should be aware of their portfolio to be safe from the big risk	4.03	0.801
Risk-taking is a good strategy for possible high success in entrepreneurship	3.54	1.195
The risk-reducing strategies are prepared by the government's policy, and rules	3.94	0.859

Inferential analysis

The respondent perceived their level of agri-entrepreneurial performance as per their self-efficacy (TSE), creativity and innovation skill (TCI), and risk preference level (TRP) in agri-entrepreneurial sectors has been presented in Table 4. The results of univariate regression analysis were adopted to confirm the hypothesis.

Table 4

Univariate Regression Analysis

Model	Intercept	TSE	TCI	TRP	Adj R^2	F test	N
1	1.522 (6.219) **	.717 (16.729) **			.408	279.844	404
2	1.645 (8.945) **		.609 (14.152) **		.330	200.274	404
3	2.682 (14.574) **			.396 (8.478) **	.149	71.868	404

** significance at 5% level

Source: Author's calculation

Table 4 shows the regression results of the effect of self-efficacy (TSE), creativity and innovation skill (TCI) and risk preference level (TRP) on agri-entrepreneurship performance. The result shows that all the variables significantly positively affect agri-entrepreneurship performance when regressed individually

(Models 1, 2 & 3). All the coefficients are positive and statistically significant. It means that the performance of agri-entrepreneurs is dependent on personal promotional factors: self-efficacy, creativity and innovation skill and risk preference level. Though the value of adjusted R2 is low, the F test's low p-value confirms the model's fitness.

Table 5

Bivariate Analysis

Model	Intercept	TSE	TCI	TRP	R^2	F - test	N
1	.821 (4.322) **	.517 (9.203) **	.280 (5.290) **		.445	163.284	404
2	.727 (3.596) **	.644 (14.395)**		.189 (4.655)**	.437	157.934	404
3	1.280 (6.319) **		.530 (11.349)**	.179 (3.987) **	.354	111.732	404

** significance at 5% level

Source: Author's calculation

In table 5, Independent variables self-efficacy (TSE), creativity and innovation skill (TCI) and risk preference level (TRP) are jointly regressed in bivariate regression (Model 1, 2 & 3). The coefficient of self-efficacy (TSE) and creativity and innovation skill (TCI) is positive and significant in Model 1. Similarly, Model 2 self-efficacy (TSE) and risk preference level (TRP) are jointly regressed, and the coefficient of risk preference level (TRP) is found to be positive and significant. Furthermore, when creativity and innovation skill (TCI) and risk preference level (TRP) are jointly regressed, the coefficient of creativity and innovation skill (TCI) related variable is found to be positive and significant.

Key Finding of the Study

As the respondents' self-efficacy kept increasing the average rates of their confidence level, agri-entrepreneurial performance increased uniformly, i.e., higher self-efficacy level and the respondent higher level of agri-entrepreneurial performance. Based on univariate analysis, self-efficacy has the most significant effect on agri-entrepreneurship performance (ß = .717, $p < .01$), followed by creativity and innovation skill (ß = .609, $p < .01$); and risk preference level (ß = .396, $p < .01$). Based on univariate and bivariate regression analysis all the coefficients are positive and statistically significant. Therefore, all independent variables: self-efficacy, creativity and innovation skill, and risk preference level, have a significant positive effect on agri-entrepreneurship performance. Although variables are jointly regressed in bivariate regression, coefficients are decreased.

Discussion and Conclusion

The result of this study also indicates that self-efficacy significantly impacts agri-entrepreneurship performance. In support of this finding (Arabi & Abdalla, 2020) observed a strong positive relationship between agri-entrepreneurs' self-efficacy level and business agri-entrepreneurship performance. In a related study, Tien (2021), Choudhury and Easwaran (2019) and Essel et al. (2019) also reported a significant positive relationship between self-efficacy and agri-entrepreneurship performance. Similarly, Arafat et al. (2018) have found that individuals confident in their skills and knowledge are likely to be a success agri-entrepreneur.

Further, this study finds that creativity and innovation affect agri-entrepreneurship performance. This confirms the results of earlier studies (Mohlehli & Rantlo, 2016). This finding is consistent with the existing literature on entrepreneurship, and the result of the hypothesis is significant, which is the same claim. Same way, some studies claim that the creativity and innovation level of agri- agri-entrepreneurs has

positive impacts on agri-entrepreneurship performance, which denotes that as technical, financial and market risk (Devkota et al. (2022); and Arabi & Abdalla (2020) In and Essel et al. (2019).

Similarly, the study reveals a significant positive relationship between risk preference level and agri-entrepreneurship performance. The finding is also supported by Arafat et al. (2018), Shaowel et al. (2022) and Adobor (2020). Financial risk (interest) and business environment risk could increase agri-entrepreneurship performance. Adversary, Devkota et al. (2022) claimed that 55.7% of the 21–30 age group farmers reported that unknown risk-taking provides opportunities for agri-entrepreneurship performance success.

Based on the present study findings, the agri-entrepreneurial performance of agri-entrepreneurs was positively related to their self-efficacy, creativity and innovation skill, risk preference level on their self-efficacy, creativity innovation skill, and risk preference level agri-entrepreneurship performance. The overall level of agri-entrepreneurial performance was confirmed statistically significant regarding sector-wise disaggregation of the respondents. Selected constructs of inquiry jointly regressed variables have decreased in their role on agri-entrepreneurship performance increase. From the overall descriptive statistical consideration, self-efficacy is a highly positive personal promotional factor. The last one is the risk preference level of agri-entrepreneur impact on performance.

In this study, only personal factors are considered as determining factors in agri-entrepreneurship performance; for future researchers, other factors could be determined. In addition, from the methodological research point of view, a longitudinal study will also serve as a good gap that will help to explore the relationship between personal entrepreneurial factors. Future research should collect the data from the same sample at a different point to accurately examine the causal relationship tests.

References

Abdullah, A. A., & Sulaiman, N. N. (2013, March). Factors that influence the interest of youths in agricultural entrepreneurship. *International Journal of Business and Social Science*.

Addo, L. K. (2018, Nov-Dec). Factors influencing agripreneurship and their role in agripreneurship performance among young graduate agripreneurs. *International Journal of Environment, Agriculture and Biotechnology, 3*(6). doi:http://dx.doi.org/10.22161/ijeab/3.6.14

Adobor, H. (2020, February). Entrepreneurial failure in agribusiness: Evidence from an emerging economy. *Journal of Small Business and Enterprise Development, 27*(2). doi:https://www.emerald.com/insight/1462-6004.htm

Adonis, M., & Wyk, R. V. (2012, May). The Influence of market orientation, flexibility and job satisfaction on corporate entrepreneurship. *International Business & Economics Research Journal, 11*(5).

Agrawal, G. R. (2009). *Marketing Management in Nepal* (4th ed.). Kathmandu: M. K. Publishers & Distributors.

Al-Achi, A. (2019, February). The student's t-test: A brief description. *Research & Reviews: Journal of Hospital and Clinical Pharmacy, 5*(1).

Ali, A. Y., & Mahamud, H. A. (2013). Motivational factors and performance of women entrepreneurs in Somalia. *Journal of Education and Practice, 4*(17).

Alsalam, A., & Naji, H. (2019, April). Factors influencing entrepreneurship development.

Aniodoh, A. N. (2018, January). Promoting youth entrepreneurship in South East Nigeria through co-operatives. *International Journal in Management and Social Science, 6*(1).

Arabi, N. G., & Abdalla, A. M. (2020, April). The role of the ecosystem for entrepreneurship development in Sudan. *WJEMSD*.

Arafat, M. Y., Saleem, I., Dviwedi, A. K., & Khan, A. (2018, August). Determinants of agricultural entrepreneurship: A GEM data-based study. *International Entrepreneurship and Management Journal*. doi:https://doi.org/10.1007/s11365-018-0536-1

Bairwa, S. L., Lakra, K., Kushwaha, S., Meena, L. K., & Kumar, P. (2014, March). Agripreneurship development as a tool for the upliftment of agriculture. *International Journal of Scientific and Research Publications, 4*(3).

Barnard, B. (2019, December 13). Visionary leadership and entrepreneurial vision within entrepreneurship. *Wits Business School*.

Bhattacharya, A. (2010, September). The networking entrepreneur. *Journal of Entrepreneurship, 9*(2).

Bhattarai, S., Nepali, N., Thaller, J., & Anushka. (2013). *Promoting agribusiness innovation in Nepal.* Feasibility Assessment for an Agribusiness Innovation Center.

Bhattarai, S., Nepali, N., Thaller, J., Wohmy, A. T., & Webb, J. (2013). *Feasibility assessment for an agribusiness innovation.* Kathmandu: Agribusiness Innovation Center in Nepal.

Boulton, G., & Lucas, S. C. (2008, September). What are universities For? *League Europian Research Universities (LERU)*, 1–18.

Bryman, A. (2008). *Social research methods* (Vol. 3). New York: Oxford University Press Inc.

Chell, E., & Baines, S. (2010, November). Networking, entrepreneurship and microbusiness behaviour.

Chidi, I., & Okechukwu, O. T. (2014). Critical factors influencing the entrepreneurial undergraduates' decision venturing into agribusiness in Ebonji State: A case study of Ebonji State University. *Journal of Natural Sciences Research, 4*(19).

Choudhury, K., & Easwaran, K. (2019). Agricultural entrepreneurship in lower Brahmaputra valley, Assam. *Journal of Global Entrepreneurship Research, 9*(1). doi:https://doi.org/10.1186/s40497-019-0179-x

Damarla, R. B. (2015, March). Agripreneurship- Issues and opportunities with a simple case study for better handling and post-harvest management of fruits and vegetables.

Devkota, N., Joshi, A., Khanal, G., Mahaputra, S. K., Gautam, N., Paudel, U., & Bhandari, U. (2022, May). Awareness on agricultural entrepreneurship among youth farmers: An empirical study from western Nepal. *Journal of Agribusiness in Developing and Emerging Economies*. doi:https://www.emerald.com/insight/2044-0839.htm

Devkota, N., Poudel, U., & Bhandari, U. (2020). *Research methodology* (1st ed.). Kathmandu: Advance Saraswoti Prakashan Pvt. Ltd.

Dhamarla, R. B. (2015, March). Agripreneurship- Issues and opportunities with a simple case study for better handling and post-harvest management of fruits and vegetables.

Ebert, T., Gotz, F. M., Obschonka, M., Zmigrod, Leor, & Rentfrow, P. J. (2019). Regional variation in courage and entrepreneurship: The contrasting role of courage for the emergence and survival of start-ups in the United States. *Journal of Personality*.

Essel, B. K., Adams, F., & Amankwah, K. (2019). Effect of entrepreneur, firm, and institutional characteristics on small-scale firm performance in Ghana. *Journal of Global Entrepreneurship Research*. doi:https://doi.org/10.1186/s40497-019-0178-y

Ezekiel, A., Omotayo, A., & Olaleke, O. (2018). Entrepreneurs' commitment and business performance in a recessed economy. Academy of Entrepreneurship Journal, 24(1).

Farida, N. (2016, March). Determinants of marketing performance: Innovation, market capabilities and marketing performance. *Jurnal Dinamika Manajemen, 7*(1).

Ferris, S. (2012). *The entrepreneurship development module.* (C. O'Mahoney, Ed.) Lindau, Switzerland: Global Forum for Rural Advisory Services.

Ferris, S. (2016). *Agricultural entrepreneurship.* (C. O'Mahoney, Ed.) Global Forum for Rural Advisory Service.

Filion, L. J. (2004). Operators and visionaries: differences in the entrepreneurial and managerial systems of two types of entrepreneurs. *International Journal in Entrepreneurship and Small Business, 1*(1/2).

Gauchan, D. (2008, January). Agricultural development in Nepal: Contribution to economic growth, food security and poverty reduction. *Socio-Economic Development Panorama, 1*(3).

Ghimire, S., & Koirala, B. (2019). Linkages among expatriates for agribusiness promotion in Nepal: Present scenario. *Scientific Agriculture., 3*(6), pp. 170-172.

Government of Karnali Province. (2077). *First Five Year Planning 2076/77-2080/81.* Birendranagar, Surkhet: Karnali Province Planning Commossion.

Government of Nepal. (2004). *Nepal Agriculture Policy 2061.* Kathmandu: Ministry of Agriculture Development, Nepal.

Government of Nepal. (2006). *Agribusiness Promotion Policy 2006.* Kathmandu: Ministry of Commerce and Supply, Nepal.

Government of Nepal. (2011). *Industrial Policy 2011.* Kathmandu: Department of Industry, Commerce and Supply, Nepal.

Government of Nepal. (2016). *Twenty years agriculture development strategy 2015-2035.* Kathmandu: Ministry of Agriculture Development, Nepal.

Government of Nepal. (2020). *Fiscal policy 2020/21*. Kathmandu: Ministry of Finance, Nepal.

Government of Nepal. (2079). *Economic survey 2078/79.* Kathmandu: Ministry of Finance.

Government of Nepal. (2079, Ashadh). *Industry Report: The fiscal Year 2078/79.* Government of Nepal, Industry, Tourism, Forestry and Environment Ministry. Surkhet: Industry and Consumer Interest Protection Director Office.

Gupta, S. B., & Nain, M. S. (2012, April). Entrepreneurship behaviour and constraints encountered by dairy and poultry entrepreneurs in Jammu Division.

Isaac, P., & Anthony, Y. (2017, March). Analysis of entrepreneurship development in agriculture among small scale farmers agriculture among small scale farmers in Taraba State, Nigeria. *International Journal of Agricultural Research and Food Production, 1*(1).

Jaksic, M. L., Marinkovic, S., & Rakicevic, J. (2017, March 28). Sustainable technology entrepreneurship and development – The case of Serbia. *Management Journal for Theory and Practice Management, 5*(6).

Jemal, A. (2013). Challenges confronting women in micro and small enterprises in Addis Ababa, Ethiopia. *EJBE Journal Article, 3*(1).

Kahan, D. (2012). *Entrepreneurship in farming.* Rome: Food and Agriculture Organization of United Nations.

Kavitha, R., Jayasingam, S., & Anantharaman. (2008). Motivational factors affecting entrepreneurial decision: A comparison between Malaysian women entrepreneurs and women non-entrepreneurs. *Empowerment Practices and Performance, 2*.

Khan, D. (2013). *Entrepreneurship in farming.* Food and Agriculture Organization of the United Nations.

Kothari, C., & Garg, G. (2014). *Research methodology: Methods and techniques* (3rd ed.). Delhi: New Age International Pvt. Ltd.

Laureen, W. (2011). Characteristics of women entrepreneurs in business.

Lencucha, R., Pal, N. E., Appau, A., Thow, A. M., & Drope, J. (2020, January). Government policy and agricultural production: A scoping review to inform research and policy on healthy agricultural commodities. *Globalization and Health., 16*(11), 1-15. Retrieved from https://doi.org/10.1186/s12992-020-0542-2

Malhotra, K., & Das, S. (2016). *Marketing research* (7th ed.). Tamilnadu: Pearson India Education Services Pvt. Ltd.

Malhotra, N., & Das, S. (2016). *Marketing Research* (7th ed.). Delhi: Pearson India Education Services Pvt. Ltd.

Meyer, N. (2018, November 22). Research on female entrepreneurship: Are we doing enough? *Polish Journal of Management Studies, 17*(2).

Mohamad, M. R., Aziz, Z. A., & Radzi, M. S. (2019, January). The effects of marketing mix on small fish farming business performance. *Revista Publicando, 6*(19).

Mohlehli, G. M., & Rantlo, A. (2016, Agust). Factors constraining agribusiness growth in Lesotho. *International Journal of Recent Advances in Multidisciplinary Research., 3*(8).

Muchitra, J. (2018, November). Fostering agribusiness entrepreneurship for Kenyan youth through practice-based education. (D. G. Seife Ayele, Ed.) *Youth Employment and the private sector in Africa, 49*(5).

Mustapha, M., & Subramaniam, P. A. (2016). Challenges and success factors of female entrepreneurs: Evidence from a developing country. *International Review of Management and Marketing, 6*(4).

Naderifar, M., Goli, H., & Ghaljaei, F. (2017). Snowball sampling: A purposeful method of sampling in qualitative research. *Strides in Development of Medical Education*, 1-6.

Naji, A. A. (2017, April 7). Factors influencing entrepreneurship development.

Naji, A. A. (2019, April). Factors influencing entrepreneurship development.

Ngahdiman, I. N., Yeramo, R., Mohamed, Z., & Sharifuddin, J. (2017, July). Factors affecting urban dwellers to practice urban agriculture. *International Journal of Advance Research (IJAR), 5*(7), 1580-1587. Retrieved from https://dx.doi.org/10:2147/IJAROI/4872

Nnamani, E., Ugbene, C. E., & Chukwu, D. C. (2018, April). Effect of entrepreneurship environment on cross-cultural management of selected small and medium scale enterprises in Enugu STATE. *International Journal in Management and Social Science, 6*(4).

Obschonka, M., Goethner, M., & Moeller, J. (2018, December). Entrepreneurial passion and personality: The case of academic entrepreneurship. *Frontiers in Psychology, 9*.

Okeke, A. M., Oraka, E. O., & Obasi, C. C. (2015, October). Analysis of factors influencing entrepreneurship behaviour among Yam agribusiness entrepreneurs in Benue State, Nigeria. *IOSR Journal of Business and Management (IOSR-JBM), 17*(10).

Olowa, O. W., & Olowa, O. A. (2015). Factors affecting entrepreneurship development agribusiness enterprises in Lagos State, Nigeria. *15*. Global Journals Inc.(USA).

Pereira, V. J., & Martinho, D. (2020, March 19). Agricultural entrepreneurship in the European Union: Contributions for sustainable development. *Applied Science*.

Pereira, V. J., & Martinho, D. (2020, February). Agricultural entrepreneurship in European Union: Contribution for a sustainable development.

Purves, N., Nibloc, S. J., & Sloan, K. (2015, January). On the relationship between financial and non-financial factors: A case study analysis of financial failure predictors of agribusiness firms in Australia. *Agricultural Financial Review*. doi:http://dx.doi.org/10.6007/IJARBSS/v8-i13/4804

Rakicevic, J., Jaksic, M. L., & Belgrade, U. (2018, September). Measuring the potential for technology entrepreneurship development: Serbian case. *Management Journal of Sustainable Business and Management Solutions in Emerging Economies, 23*(2).

Regmi, S., & Naharkib, K. (2020, June 24). A SWOT analysis of agribusiness entrepreneurship in Nepal. *Food & Agribusiness Management, 1*(2). doi:10.26480/fabm.02.2020.60.65

Rezaei-Moghaddam, K., & Izadi, H. (2019). Entrepreneurship in small agricultural quick0impact enterprises in Iran: Development in the index, effective factors and obstacles. *Journal of Global Entrepreneurship Research*. doi:https://doi.org/10.1186/s40497-018-0133-3

Rijal, C. P. (2019, February). Management development scenario 2018. *38*. Kathmandu: Management Association Nepal [MAN].

Saac, P., & Anthony, Y. (2017, March). Analysis of entrepreneurship development in agriculture among small-scale farmers in Taraba State, Nigeria. *International Journal of Agricultural Research and Food Production.*, *2*(1).

Saghaian, S., Mohammadi, H., & Mohammadi, M. (2022, June). Factors affecting the success of entrepreneurship in agribusiness: Evidence from the city of Mashhad, Iran. (F. Almeida, Ed.) *Sustainability, 14*(13). doi:https://doi.org/10.3390/su14137700

Sarmila, M., Zaimah, R., NovelLyndon, R., R. A., & Rosmiza, M. (2018, October). Development of agro-entrepreneurs through corporate social responsibility.

International Journal of Academic Research in Business and Social Sciences, 8(13). doi:http://dx.doi.org/10.6007/IJARBSS/v8-i13/4804

Schroeder, R., Meyer, E. T., & Ziewitz, M. (2009, May 1). Social, ethical, and legal issues in presence research and applications. *Peach research in action*, 1-52.

Sekaran, U., & Bougie, R. (2015). *Research methods for business: A skill-building approach* (6th ed.). Delhi: Wiley Indian Pvt. Ltd.

Shaowel, Q., Tianhua, L., & Miao, Z. (2022, March). Predictive factors of the entrepreneurial perfermance of undergraduates. (F.-S. Tsai, Ed.) *Frontiers in Psychology*. doi:https://www.frontiersin.org/journals/psychology#editorial-board

Shiri, N., Mehdizadeh, H., Khoshmaram, M., & Azadi, H. (2021, December). Determinants of entrepreneurial alertness: Towards sustainable agribusiness development. *BFJ*. doi:https://www.emerald.com/insight/0007-070X.htm

Shweta, B. (2014). Characteristics, motivations, and challenges of women entrepreneur. *Journal of Middle East Women Studies, 10*(2).

Singh, H. R., & Rahman, H. (2013, November). Entrepreneurs' personality traits and their success: An empirical analysis. *The International Journal's Research Journal of Social Science and Management., 3*(7).

The World Bank, International Financial Cooperation [WB-IFC]. (2013). *Promoting agribusiness innovation in Nepal: Feasibility assessment for an agribusiness innovation centre.* Washington DC: Author.

Tien, N. V. (2021). Factors affecting business performance: A case study of small and medium enterprises in Ho Chi Minh city. *Journal of Management Information and Decision Sciences, 24*(1).

Timsina, K. P., Ghimire, Y. N., Gauchan, D., Subedi, S., & Adhikari, S. P. (2018). Lessons for promoting new agricultural technology: A case of Vijay wheat variety in Nepal. *Agriculture & Food Security*.

Tiwari, L., & Nepal, G. (2017, December). Financial sustainability of small farmer co-operative in Mid-western region of Nepal. *Journal of Advanced Academic Research, 4*(2), 20-23.

Tiwari, P., Bhat, A. K., & Tikoria, J. (2017). An empirical analysis of the factors affecting social entrepreneurial intentions. *Journal of Global Entrepreneurship Research, 7*(9). doi:10.1186/s40497-017.0067-1

Turay, S. (2016, March). Innovation and entrepreneurship relationship. *SSRN Electronic Journal ·*.

(2016). *Twenty Years Agriculture Development Strategy (ADS) 2015 to 2035.* Kathmandu: Ministry of Agriculture Development (MoAD).

Yoganandan, G., Rahman, A. A., Vasan, M., & Meero, A. (2022). Evaluating agripreneurs' satisfaction: Exploring the effect of demographics and reprographics. *Journal of Innovation and Entrepreneurship*. doi:https://doi.org/10.1186/s13731-022-00193-9

Zargham , F., & Hamid , R. F. (2016). Causal-Comparative Research.

Zhou, L. L., Ayegba, J. O., Ayegba, E. O., Maina, P., & Jie, Z. X. (2021). Impact of dynamic capacities on the performance of food and beverage enterprises in Lagos, Nigeria. *Journal of Innovation and Entrepreneurship*, 2-24. doi:https://doi.org/10.1186/s13731-021-00169-1