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# A comprehensive study on sustainable entrepreneurship for cottage, micro, small, and medium enterprises in Bangladesh

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ARTICLE INFO	ABSTRACT
Received: 13 Dec. 2022	The present study aims at identifying dominant factors for sustainable entrepreneurship for cottage, micro,
Received: 13 Dec. 2022 Accepted: 16 Feb. 2024	small, and medium enterprises (CMSMEs) in Bangladesh. For the convenience of study EFA and CFA models were developed for analyzing, identifying, and confirming the factors harbouring sustainable CMSMEs. Four factors were considered and analyzed such as sources of funds and loans, the opportunity to sell the products, the background of entrepreneurs, and governmental support to examine the extent to which they contribute to entrepreneurial sustainability. The study reports that three factors (sources of funds and loans, the opportunity to sell the products, and governmental support) have a significant and positive effect on the sustainability of CMSMEs entrepreneurship, and these could be considered as an indicative to achieving sustainable entrepreneurship for CMSMEs in a market environment.
	<b>Keywords:</b> cottage, micro, small, medium, enterprises, sources of funds and loans, opportunity to sale products, background of entrepreneurs, governmental support, entrepreneurship sustainability

## **INTRODUCTION**

The COVID-19 pandemic had a debilitating impact on the world economy. The global economy had showed a sign of recovery about a year after the first brunt of shock the world economy suffered due to an outbreak of the COVID 19 pendamic. Even if growth had plummeted by 5.0% compared to pre-pandemic projections, global economic output was predicted to be increased by 4.0% in 2021 (The World Bank, 2021). However, recovery were inconsistent around the world since some economies were able to restore output faster than others, irrespective of their severity of the losses and ability to recover. Developed countries (3.1%) were expected to recover at a slower pace (5.7%) than the underdeveloped countries (Giroud & Ivarsson, 2020). As a result, many economies, including Bangladesh's, were supposed to be suffering from a slow recovery. According to an official estimate of the Government of Bangladesh, Bangladesh's GDP growth in fiscal year (FY) 2020 was 5.2%. The growth of Bangladesh economy has been substantially stronger than that of other countries throughout the epidemic, albeit lower than the expected 8.2% for FY 2020 and the lowest in the recent decade (Center for Policy Dialogue, 2014). CMSMEs, as in other emerging markets, have developed into an economic force in Bangladesh. It has made a substantial contribution to creating job opportunity, ensuring agriculture-based industrial development, handicrafts, small tools and equipment, and so on. On the other hand, the COVID-19 pandemic created a barrier to the development, thwarting sustainability of CMSMEs in various ways, giving rise to company closures, production and job losses, and drops in sales and income due to a 66-day total nationwide shutdown in the second quarter of 2020 for curbing the spread of contagious corona virus. The authority and central bank of Bangladesh implemented several policies to assist CMSMEs by launching a BDT 200 billion working capital financing package at 4.0% interest, a BDT 100 billion new loan strategy against such funds, a loan guarantee system, and a beginning fund in addition to current financing facilities during the pandemic (Policy Note, 2021).

Entrepreneurs are motivated to establish new businesses by taking risks and enjoying the rewards. Entrepreneurs are also known as innovators since they tend to develop new products, services, and business processes. They can contribute to the development of economy by bringing in the new ideas about market with the requisite skills and initiative. Profits, reputation, and prospects for expansion await the risktaking entrepreneur. Entrepreneurs that fail in their businesses eventually incur money losses besides loss of market. An entrepreneur is a coordinator in a capitalist economy. Entrepreneurs are involved in the mobilization of various resources and the formation of capital. Entrepreneurs

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are supposed to be practicing high level of perseverance for and having maximum dedication to their ventures. A study on the importance of motivation for an entrepreneur's success can hardly be overstated. There are two kinds of motivational factors-internal and external (Ranasinghe, 2020). Sustainable entrepreneurship is described as the process of how new products and services are exposed, created, and exploited and for what economic, emotional, interpersonal, and ecological aspects are found to be affecting or influencing the generation of social and environmental gains for the people in the years to come. Incorporating environmental factors tends to broaden and dramatically modify the definition of entrepreneurship (Cohen & Winn, 2007). Self-sustaining entrepreneurship refers to a concept of developing one's business in a way that it works by itself without physical presence or direct control of the entrepreneurs (Muñoz & Cohen, 2018). On a global scale, both large and small businesses have identified and translated entrepreneurial intention as a strategic plan. The main goal of this study is to identify the dominant factors responsible for sustainable entrepreneurship. The study endeavours to discover that focus should be given to motivations, challenges, and techniques for creating a sustainable entrepreneurship process in CMSMEs (Sendawula et al., 2018). Forceful conventional and immense pressures have been found to be logical to favor long-term entrepreneurial engagement in CMSMEs. The owners and managers of CMSMEs are now facing pressures to withstand the competition pervading from micro to macro-level and subsequently from local to global level, due to the businesses being saturated because of COVID-19 giving rise to total disruption of supplychain.

Business operations related to education, understanding, and knowledge are significantly affected by significant competitive advantages, ecological standards, commercial mobility, and ethical challenges (Wahga et al., 2018). The primary purpose of this study is to add to the developing field of sustainable entrepreneurship research by identifying the effects of experience and education on business owners' and managers' sustainability orientation. They found that human capital determinants are positively associated with enterprise sustainability values and receive a lot of support (Feddes, 2018). A study discovered that entrepreneurial intentions are positively affected by entrepreneurial orientation, selfefficacy, entrepreneurial mindset, and perceived control over behavior (Alamineh, 2019).

## BACKGROUND

The COVID-19 epidemic had a wide-ranging impact on businesses. During the COVID-19 pandemic situation CMSMEs suffered a lot because of total disruption of supplychain across the glob. There is no exact information on their sufferings due to this pandemic situtuaion, but they had lost output and income due to declining demand, awaiting payments due to massive supplychain discruptions resulting from an urgency for maintaining social distance arising out of COVID-19 pandemic situation. They also encountered funding shortages with more emphasis of financial support to larger enterprises to suvive such morid situation in many countries. The scholars, governments, and policymakers felt that it was essential to develop legislation and extend financial support to help businesses recover pandemic-related losses during and after the COVID-19 pandemic. Because of the COVID-19 pandemic, growth rate declined to 5.2% in 2020, down from 8.2% in 2019. Despite this, it was one of the top five fastest-growing emerging sectors in the world economy (World Bank, 2019).

CMSMEs are the country's social and economic foundation. This sector contributes significantly to our country's economic progress. CMSMEs are especially well suited to densely populated nations like Bangladesh, where the sector can offer a significant number of job opportunities for a relatively small investment. They are intended to increase employment, reduce poverty, and strengthen the nation's economy. As part of its venture capital program, Bangladesh Bank has played a significant role in developing and implementing CMSME sector pilot projects, following in the footsteps of the authorities. As part of its policy intervention and inclusive growth promotion program, the Bangladesh Bank has prioritized providing financial access to cottage, micro, and small businesses, particularly women entrepreneurs. CMSMEs are critical to our economic development. Because it is laborintensive and takes less time to manufacture while requiring less capital and cheaper startup costs, CMSME sector catalyzes higher national revenue and job possibilities. CMSMEs are known all over the world for their unique contribution to economic development and employment creation (Katua, 2014). CMSMEs have emerged as one of the most necessary elements for addressing social and economic issues and accomplishing growth targets in both developing and developed nations. In emerging economies, CMSMEs are increasingly recognized as significant sources of job creation and as proponents of economic growth (Dhanah, 2016). Empowering small and medium-sized businesses will be the main driver of economic growth. The productivity of economic firms will rise when technological innovation is combined with economic growth, and human welfare will rise as a result. Economic policies, capital investment support, and talent acquisition capacity enhancement all appear to have a positive effect on the growth of CMSMEs, with a coefficient of determination of 97.6%. The government should prioritize technological innovation to boost the productivity of local economic companies (Surya et al., 2021). Similar to one study, a technical innovation-based economic expansion strategy is suggested for policy decisions in hopes of increasing the productivity of community economic enterprises (Surva et al., 2021). This article explores the importance of CMSMEs in a certain economy. It will also highlight the contributions of CMSMEs. The importance of small and medium-sized businesses (CMSMEs) to a country's local economic development has long been recognized (Ayandibu & Houghton, 2017).

Sustainable entrepreneurship refers to a business approach frequently employed by significant corporations, particularly industrial ones. Following their collapse, a slew of sustainability certifications emerged. CMSMEs have almost consistently disregarded and refused the concept of sustainable entrepreneurialism due to the emergence of difficult and costly means of obtaining it. The question of

Table 1. Classification of CMSMEs	(World Bank, 2019)
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Tune of industry	Cottage industry	Micro industry	Small industry		Medium industry	
Type of industry	Cottage muustry		Manufacturing	Service	Manufacturing	Service
Invested amount	Below one million	One to 7.5 million	7.5 to 150 million	One to 20 million	150 to 500 million	20 to 300 million
Number of employees	Maximum 15	16-30	31-120	16-50	121-300	51-120

whether CMSMEs could manage to do business in an environmentally friendly manner arises because the advantages concerning risk management, economic partnerships with significant firms, and a positive reputation are vast improvements (Ratten, 2018). Sustainable business can aid in the resolution of ecological concerns. The mental perspective of CMSMEs operators is a crucial aspect of their lengthy economic involvement. Original thought work, on the other hand, is limited. A critical component of their sustained economic engagement is the operators of CMSMEs' mental perspective. On the other hand, original thought is scarce. It has positively and significantly impacted attitudes and perceptions (Koe et al., 2015). Given Uganda's collectivist economy, where sustainability is a top priority for the majority of citizens, this conclusion was not unexpected. Regulators should develop and closely monitor small businesses' workflow, people and skills, environmental conservation, partner, economics, strategies, promotional, and revenue components if Uganda wants to encourage entrepreneurial intentions (Kimuli et al., 2021). There is an indication of paradigm reformulation and the establishment of incremental rules at the macro level. At the medium level, government and private institutions have collaborated to inspire and promote business ideas, company plans, and existing businesses. Some variables, such as programs, rules, and institutions, have been implemented to support entrepreneurship and firm creation (Patiño et al., 2020). Recent surveys indicate that an expanding number of organizations have accepted that sustainable development should and can be blended into the institution's entrepreneurship assistance or that sustainability operations should be combined and strengthened with business acumen. This outcome supports policymakers' expectations that sound investment be addressed in further education to train future "green entrepreneurs" with the requisite mindset (Fichter & Tiemann, 2018).

This study starts with a literature review on the exploitation of opportunities. The theoretical underpinning for the idea that market imperfections are sources of opportunities is, as follows: Researchers investigate the kinds of entrepreneurial possibilities that are particularly likely to appear as a response to each of the various market flaws, and we use examples to highlight how inventive business remedies to such faults have been produced. This section concludes with a multiple-view overview of our results. Furthermore, we propose two research directions: the connection between marketplace defects and entrepreneurship development and the developing topic of entrepreneurial behavior.

# CMSMES CLASSIFICATION IN BANGLADESH

Bangladesh lacks a uniform system of CMSMEs, there is considerable uncertainty, and there is a failure to assess the

effects of administration and foreign monetary support. In 2003, the researcher used multiple definitions, for instance, definitions by the Bangladesh Bureau of Statistics, annual census records, the Bangladesh trade policy, and the World Bank Group. In 2016, industrial policy's definition of CMSMEs gained widespread acceptance as a uniform policy term. The value of fixed assets (apart from land and buildings) and/or the number of employees used to calculate the characteristics of CMSMEs (**Table 1**).

In several nations, including Bangladesh, small and medium-sized enterprises (CMSMEs) are becoming more important as engines of economic growth. Small and mediumsized businesses (CMSMEs) provide affordable employment and flexible economic opportunities. Many of CMSMEs are export-oriented, showcasing their capacity for global competition. Given the importance of SMEs to the Bangladeshi economy and the difficulties they face, it is obvious that measures must be taken to encourage the development and growth of CMSMEs. The steady and sustainable growth of the nation's CMSMEs will be seen as one of the instruments for reducing poverty and increasing employment in policy measures (Zaman & Islam, 2019). Environmental degradation can be fought through sustainable entrepreneurship. The owner-managers cognitive processes in CMSMEs are crucial parts of sustained entrepreneurial involvement. The results demonstrated that while attitudinal and perceptual elements had a positive and significant influence, normative factors had no discernible influence on such a propensity. Therefore, it is crucial to concentrate on building sufficient sustainability competencies, forming a positive sustainability attitude, and creating appealing sustainable business practices to promote sustainable entrepreneurship (Koe et al., 2015). "Sustainable entrepreneurship" is a term used to describe a strategy primarily employed by big, largely industrial businesses because there are now complex and expensive ways to obtain it. CMSMEs have largely ignored and rejected this idea of sustainable entrepreneurship. Given that the advantages in terms of risk management, business partnerships with major corporations, and favorable reputation may be significant, the question of whether CMSMEs can afford to conduct business sustainably arises (Ratten, 2018). The following model, which illustrates the research objectives and hypotheses, was created using concepts from literature.

# **OBJECTIVES**

- 1. Investigating the factors affecting CMSMES entrepreneurial sustainability in the post pandemic saturated market is the main objective of this study. The following are the more specific objectives.
- 2. Examining the factors facilitating CMSMEs to survive the present competition.

3. Drawing a model depicting the entrepreneurship sustainability influenced by the interplay of entrepreneurs' background, government supports, opportunity to sales, and sources of fund.

## **STATEMENTS OF HYPOTHESES**

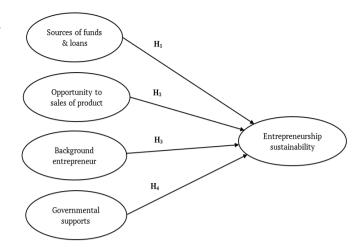
- H1. In the highly competitive environment for small and medium-sized enterprises in Bangladesh today, sources of funding and loans have a positive impact on the sustainability of entrepreneurship.
- H<sub>2</sub>. The opportunity for product sales has a favorable impact on the viability of entrepreneurship for Bangladesh's small and medium-sized business owners in the current saturated market.
- H<sub>3</sub>. The background of the entrepreneurs has a positive impact on their ability to sustain their businesses in the currently excessively saturated market for Bangladesh's small and medium-sized business owners.
- **H4.** Governmental support has a favorable impact on the viability of the sustainability of entrepreneurship for small and medium enterprises in Bangladesh.

## **METHODOLOGY**

This study used a survey methodology, with questionnaires as the main tool that were developed based on goals and hypotheses. There were two sections in the questionnaire. The demographic data was in part 1, and the verifiable factors under four constructs influencing the sustainability of CMSMEs were in part 2. A five-point scale ranging from strongly disagree (point value one) to strongly agree (point value five) was used to determine the pertinent aspects of identifying business sustainability. **Figure 1** shows theoretical framework.

#### **Sampling Technique**

The responses for the survey were collected using a simple random-sampling design. It was thought to be the best situation for gathering data because it was simple to get in touch with respondents, they were readily available, and it took less time and money to collect their responses. The total number of participants was 593 corteges, micro, small, and medium-sized businesses in the study's overall sample. The answers provided by each respondent collected using survey questionnaires that handed out to them as well. CMSMEs in Bangladesh operating in Dhaka were given questionnaires. Data were gathered from both males and females, as both are employees and owners of businesses and contribute equally to the success of the enterprises. The various sources used to collect data include bookshops, apparel shops, stationary retailers, textile component retailers, beauty shops. confectionary, jewelry, carpet, metal products, and service providers (mechanics, electric, restaurants, etc.). Journals, annual reports, conferences, the internet, books, magazines, and other sources were used as secondary data sources.



**Figure 1.** Theoretical framework (Source: Authors' own elaboration, using SPSS version 26 AMOS 23)

#### **Data Analysis Methods**

Data were collected, processed, and then presented thorough a variety of tables and figures. Descriptive statistics, reliability checks, Keiser Meyer Olkin (KMO) and Bartlett's test, EFA, and CFA factor analyses have been used to meet objectives of the study. The one-way ANOVA test was used to confirm the results of the hypotheses. Statistical package for social sciences (SPSS) version 26 AMOS 23 was used to process and analyze the data in order to build a structural relationship.

## **FINDINGS & ANALYSIS**

#### **Descriptive Statistics**

For the convenience of better understanding demographic chareacteristics of the respondents are shown in Table 2. Table 2 shows that 593 respondents were falling under four categories of age groups. 211 respondents belonged to age group of 36-45, occupying 35.6% of the total respondents, 173 respondents belonged to age group of 46 and above, forming 29.2% of the toal, and 163 to age group of 26-35, forming 27.5%. Of the total respondents 76.2% were male and 141 23.8% wer female. The respondets have also been classified according to their educational levels. Of the total respondetns 266 respondents had HSC degree, while 153 entrepreneurs under study had SSC degree. A small number of employees only 18 in number had post graduation degree, forming 3.0% of the total number of respondents. Most of the respondets were married forming 84.7%. Table 2 shows age distribution of enterprises under study. Largest group, 175 respondents, had four to six years of business experience; 168 respondents had 11 to 15 years of business experience; and 84.1% (29.5%, 16.2%, 28.3%, 2.9%, and 4.9% consecutively) had a business that had been in operation for more than four years.

## **Internal Reliability**

**Table 3** displays the instrument's internal reliability, which was determined using Cronbach's alpha. In comparison to the benchmark of 0.70 set by Nunnally (1978), Cronbach's alpha was 0.924, which is higher.

Table 2.	Demograph	ic statistics	s of resi	pondents

Variable	Category	n	%
	15-25	46	7.8
	26-35	163	27.5
Age group (years)	36-45	211	35.6
	46+	173	29.2
	Total	593	100
	Male	452	76.2
Gender	Female	141	23.8
	Total	593	100
	Below SSC	47	7.9
	SSC	153	25.8
	HSC	266	44.9
Educational level	Graduation	105	17.7
	Post-graduation	18	3.0
	Diploma	4	.7
	Total	593	100
	Single	91	15.3
Marital status	Married	502	84.7
	Total	593	100
	Unemployed	100	16.9
	Private job	133	22.4
Employment history	Entrepreneur	102	17.2
Employment history	Public job	124	20.9
	Other	134	22.6
	Total	593	100
	Below 1 year	14	2.4
	1-3	94	15.9
	4-6	175	29.5
Age distribution of husinesses (age)	6-10	96	16.2
Age distribution of businesses (age)	11-15	168	28.3
	15-20	17	2.9
	20+	29	4.9
	Total	593	100
	1-5	30	5.1
	5-15	308	51.9
	15-25	68	11.5
Number of employees	25-35	28	4.7
	35-50	139	23.4
	50+	18	3.0
	Total	593	100

Note. Source: Primary data

As a result, it is obvious that the instrument utilized in this investigation had high internal reliability and could be used confidently for further statistical analysis and interpretation.

Cronbach's alpha, Spearman-Brown, and other tests were used to evaluate the internal consistency of the first data collection instruments (Cronbach, 1951; Gerbing & Anderson, 1988; Gorsuch, 1983; Nunnally & Bernstein, 1994; Stewart, 1981).

Cronbach's alpha, Spearman-Brown, and coefficient values greater than 0.70 provide a good alternative for modeling questionnaire findings within the reviewed population (Nunnally & Bernstein, 1994).

## Principal Component Analysis for Entrepreneurship Sustainability

**Table 4** displays two tests that evaluate the data's suitability for structure detection. KMO measure of sampling adequacy is a statistic that shows the proportion of variance in variables that may be attributed to underlying factors. High

#### Table 3. Results of internal reliability test

n	Cronbach's alpha	Cronbach's alpha on standardized items			
30	0.924	0.930			
Not	Note. Source: Primary data				

Table 4. KMO &	Bartlett's	test
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KMO measure of sampling	.902	
	Approximate Chi-square	10,616.484
Bartlett's test of sphericity	df	435
-	Significance	.000
Note Source Drimary data		

Note. Source: Primary data

numbers (near one) often imply that a factor analysis of the data may be worthwhile. If the value is less than 0.50, the factor analysis results are unlikely to be meaningful. Bartlett's sphericity test investigates the hypothesis that the correlation matrix is an identity matrix, implying that the variables are unrelated and thus unsuitable for structure detection. Small values at the significance level (less than 0.05) indicate that a factor analysis with the data may be advantageous.

**Table 4** displays KMO sample adequacy metric and Bartlett's test of sphericity for principal component analysis (PCA). In this case, KMO is 0.902, indicating that the sample is suitable for PCA.

### **Principal Axis Factoring**

Principal axis factoring laid down a good starting point for establishing connections and relations between the proposed groups as the basis for the subsequent construction of the structural model.

In the present research, factor analysis has been performed with 30 variables divided into four groups: sources of funds and loans, opportunities for product sales, entrepreneurial background, and governmental support. The results of the factor analysis are presented in **Table 5**. **Table 5** displays the findings of the exploratory factor analysis on the 30 questions of mediating and dependent variables. Eigenvalues of the four factors are greater than 1.0, accounting for 66.9% of the total variance. With a sphericity score of 490.660 and a KMO value of 0.902 (**Table 4**), the Bartlett test was significant at 0.000, indicating that the exploratory factor analysis was adequate.

Entrepreneurship sustainability was rated favorably on four dimensions: funding and credit sources, product sales opportunities, entrepreneur history, and government support. In addition, all cross-loading values were less than 0.3, whereas all factor loadings were more than 0.5. There were no results that might be considered invalid. The internal consistency test with Cronbach's alpha is the most commonly used method for testing dependability. Reliability defines as regularly obtaining similar results while repeating the same measurements.

It requires measuring the same concepts repeatedly to arrive at the same progress to analyze the reliability of the list of measurements. The internal consistency of the measurements was evaluated using Cronbach's alpha (**Table 6**). A single dimensionality test must be performed before an internal consistency test can be established for the list of measurements.

	Initial Eigenvalues	5		Extraction SSL		Rotation SSL
Total	% of variance	Cumulative %	Total	% of variance	Cumulative %	Total
10.551	35.171	35.171	10.188	33.960	33.960	6.747
2.691	8.969	44.141	2.255	7.517	41.477	6.442
1.887	6.290	50.431	1.504	5.014	46.491	7.954
1.526	5.087	55.518	1.100	3.667	50.157	4.690
1.277	4.256	59.774	.847	2.822	52.980	4.425
1.112	3.707	63.481	.628	2.094	55.074	4.257
1.014	3.379	66.859	.521	1.738	56.812	2.135
.954	3.180	70.040				
.822	2.739	72.779				
.814	2.713	75.492				
.742	2.472	77.964				
.652	2.173	80.137				
.583	1.944	82.082				
.563	1.877	83.958				
.524	1.748	85.706				
.476	1.586	87.292				
.450	1.499	88.791				
.399	1.330	90.122				
.383	1.275	91.397				
.376	1.254	92.651				
.338	1.126	93.777				
.317	1.057	94.834				
.288	.960	95.793				
.256	.852	96.646				
.214	.714	97.360				
.196	.654	98.014				
.171	.571	98.586				
.170	.565	99.151				
.149	.498	99.649				
.105	.351	100.000				
	10.551           2.691           1.887           1.526           1.277           1.112           1.014           .954           .822           .814           .742           .652           .583           .563           .524           .476           .450           .399           .383           .376           .338           .317           .288           .256           .214           .196           .171           .170           .149	Total% of variance10.55135.1712.6918.9691.8876.2901.5265.0871.2774.2561.1123.7071.0143.379.9543.180.8222.739.8142.713.7422.472.6522.173.5831.944.5631.877.5241.748.4761.586.4501.499.3991.330.3831.275.3761.254.3171.057.288.960.256.852.214.714.196.654.171.571.170.565.149.498	10.551 $35.171$ $35.171$ $2.691$ $8.969$ $44.141$ $1.887$ $6.290$ $50.431$ $1.526$ $5.087$ $55.518$ $1.277$ $4.256$ $59.774$ $1.112$ $3.707$ $63.481$ $1.014$ $3.379$ $66.859$ $.954$ $3.180$ $70.040$ $.822$ $2.739$ $72.779$ $.814$ $2.713$ $75.492$ $.742$ $2.472$ $77.964$ $.652$ $2.173$ $80.137$ $.583$ $1.944$ $82.082$ $.563$ $1.877$ $83.958$ $.524$ $1.748$ $85.706$ $.476$ $1.586$ $87.292$ $.450$ $1.499$ $88.791$ $.399$ $1.330$ $90.122$ $.383$ $1.275$ $91.397$ $.376$ $1.254$ $92.651$ $.338$ $9.60$ $95.793$ $.256$ $.852$ $96.646$ $.214$ $.714$ $97.360$ $.196$ $.654$ $98.014$ $.170$ $.565$ $99.151$ $.149$ $.498$ $99.649$	Total% of varianceCumulative %Total10.55135.17135.17110.1882.6918.96944.1412.2551.8876.29050.4311.5041.5265.08755.5181.1001.2774.25659.774.8471.1123.70763.481.6281.0143.37966.859.521.9543.18070.040	Total% of varianceCumulative %Total% of variance10.55135.17135.17110.18833.9602.6918.96944.1412.2557.5171.8876.29050.4311.5045.0141.5265.08755.5181.1003.6671.2774.25659.774.8472.8221.1123.70763.481.6282.0941.0143.37966.859.5211.738.9543.18070.040	Total% of varianceCumulative %Total% of varianceCumulative %10.55135.17135.17110.18833.96033.9602.6918.96944.1412.2557.51741.4771.8876.29050.4511.5045.01446.4911.5265.08755.5181.1003.66750.1571.1274.25659.774.8472.82252.9801.1123.70763.481.6282.09455.0741.0143.37966.859.5211.73856.812.9543.18070.040.8222.73972.779 </td

#### Table 5. Total variance explained

Note. SSL: Sums of squared loadings; Extraction method: Principal axis factoring; <sup>a</sup>When factors are correlated, sums of squared loadings cannot be added to obtain a total variance; & Source: Primary data

### Table 6. Reliability of measurement items

Cronbach's alpha	Number of items
0.803	5
0.655	4
0.539	5
0.794	5
	0.803 0.655 0.539

Note. Source: Primary data

It is possible that a factor is a significant variable if it exceeds 0.4 of the factor-loading range. **Table 6** demonstrates that all factors or variables are necessary variables. **Table 4** and **Table 5** display the results of Cronbach's alpha test. Cronbach's alpha is usually reported as having a cutoff point of 0.7 or higher, although there is no universally accepted formula for calculating the right degree of reliability (Nunnally, 1978). All four components were deemed credible because their respective Cronbach's alpha scores were 0.803, 0.655.761, 0.539, and 0.794.

#### **Correlation Analysis**

Relationships between entrepreneurial dimensions and entrepreneurial sustainability are shown in **Table** 7. Entrepreneurial sustainability and sources of funds and loans (r=0.589 & p=0.000), entrepreneurial sustainability and opportunity to sell products (r=0.655 & p=0.000), entrepreneurial sustainability and background of entrepreneur (r=0.460 & p=0.000), entrepreneurial sustainability and the entrepreneur's background (r=0.460 & p=0.000), and entrepreneurial sustainability and government support (r=0.647 & p=0.000) are all positively and significantly correlated. We accept the alternative hypotheses  $H_1$ ,  $H_2$ ,  $H_3$ , and  $H_4$ . Path diagram displays the findings of the confirmatory factor analysis for sustainability in entrepreneurship. The CFI value is 0.700, and the GFI value is 0.737, which indicates that the model is fitted moderately, and the RMSEA value of less than 0.123 implies that the model is fitted statistically.

RMSEA is greater than 0.05; these values are statistically acceptable, but no further modifications will be helpful because of these factors. It is required to find some unique variables for increasing the value of RMSEA. **Figure 2** shows proposed research diagram (CFA).

#### Table 7. Correlations matrix

	Sources of funds & loans	Opportunity to sales of products	Background of entrepreneurs	Governmental support	Entrepreneurship sustainability
Sources of funds & loans	1				
	0.539**	1			
Opportunity to sales of products	0.000				
Background of entrepreneurs	0.716**	0.506**	1		
	0.000	0.000			
Covernmental support	0.654**	0.719**	0.535**	1	
Governmental support	0.000	0.000	0.000		
Entropropourchin sustainability	0.589**	0.655**	0.460**	0.647**	1
Entrepreneurship sustainability	0.000	0.000	0.000	0.000	

Note. \*\*Correlation is significant at 0.01 level (2-tailed) & Source: Primary data

e5	Profit earning condition		
@22	Sources of Fund Collection		
►	Sources of Loan Collection	68 Source of	$\bigcirc$
@2	Investment opportunity	58 Source of Funds and Loans	( e23 )( e24 )
@1	Available investors are ready to invest		$\wedge \qquad \qquad$
@9 <b>—</b>	Available customer	.57	2
e8	Available information and communicatio		
@7 ►	Proper use of human resources	Opportunity to Sales of Product	-1.9704 Profit Business Growth Stability
e6	Easy marketing opportunuty		
@14	Education		81 49 84 7.74 .66
@13	Father's Occupation	24	XLL
@12 ►	Mother's Occupation		(   Y )
@11	Family background	Background of Entrepreneur	Entrepreneurship
@10	Personal experience	37	Sustainability
@20	Famility support		79%
@18	Government support	63	
@17	Tax facility		
@16	Low legal formalities	Governmental Supports	(-75)
@15	Established national business policy		(e25)
@21	Secure Business environment		

Figure 2. Proposed research diagram (CFA) (Source: Authors' own elaboration, using SPSS version 26 AMOS 23)

### **Regression Analysis**

The findings of the regression analysis of entrepreneurship sustainability are displayed in **Table 8**. R-squared score for this model is 0.529, indicating that the independent variable accounted for 53.0% of the variation in the dependent variable. Three factors—including the availability of funds and loans, the opportunity to sell the products and government support—were shown to be strongly related to sustainable entrepreneurship.

On the other side, the entrepreneurs' background has no significant impact on sustainable entrepreneurship because its p-value is greater than 0.05 (p>0.05). So, an entrepreneur's

background has no significant positive effect on a sustainable entrepreneurial business model.

The alternative hypothesis has been accepted, and the null hypothesis  $(H_3)$  is rejected since this entrepreneur's background has no positive and significant impact on the durability of entrepreneurial activity.

# CONCLUSIONS

Entrepreneurial process and CMSMEs's growth are closely tied, and they could be considred as a seamise twins having

Table 8. Regression ana	lysis of entreprene	urship sustainability
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Model —	Standardized coefficients	- Т	Significance
	Beta		
(Constant)		5.768	.000
Sources of funds and loans	.274	6.006	.000
Opportunity to sales of products	.364	8.727	.000
Background of entrepreneur	043	-1.037	.300
Governmental support	.230	5.018	.000
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Note. R-square=.529; adjusted R-square=.525; F=164.781; Significance: F=.000<sup>a</sup>; <sup>a</sup>Predictors: (constant), governmental support, background of entrepreneur, opportunity to sales of products, & sources of funds & loans; <sup>b</sup>Dependent variable: Entrepreneurship sustainability; & Source: Primary data

reciprocating influence on each other. The study attempted to investigate the factors affecting CMSMEs' entrepreneurship sustainability. The findings of the study may be considerd as indicative rather than decisive ones. The Sources of Funds and Loans, the Opportunity to sell products, and government support have been found to be the most contributing factors for the sustainability of CMSMEs businesses. In contrast, it is found that the backgrounds of the entrepreneurs have no significant effect on the sustainability of their businesses.

Most businesses began as small businesses or ventures initiated by an individual. After a certain period, due to their smooth continuation these businesses took a new shap with further growth and expansion, marking the presence of a kind of sustainable entrepreneurial leadership. CMSMEs are considered as a means for accelerating the enhancement of an economy, thereby fulfilling various socio-economic goals including poverty alleviation.

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**Ethics statement:** The authors stated that the study did not require an ethics committee approval. However, the highest relevant ethical practices were observed during the study. Written informed consents were obtained from the participants.

**Data sharing statement:** Data supporting the findings and conclusions are available upon request from corresponding author.

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