

# Usefulness of Micro Enterprise Development (MED) Model

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## Abstract

*This article evaluates the usefulness of micro-enterprise development (MED) model to its primary beneficiaries i.e. micro-entrepreneurs for their enterprise's performance growth. It is a tool for enterprise creation and development implemented through a program named MEDEP by Ministry of Industry. Field survey of micro-entrepreneurs of Banepa and Chaurideurali has been conducted to collect their opinion on the benefits realized through MED model for their enterprise performance growth. Descriptive research design is used to describe the benefits entrepreneurs have realized from the model. Both the results from descriptive and inferential data analysis have proved the positive utility of MED model for enterprise performance growth, although the relationship between MED model and Enterprise performance growth is significantly moderated by industry types. Conclusively, the model is beneficial to start-up enterprises for growth and sustainability. Therefore, the model is useful to be replicated by other standalone skill and enterprise training providers in Nepal.*

**Keywords:** *micro-entrepreneurs; BDS, MED, enterprise performance.*

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## Introductory Background

According to OECD (2017) definition of Micro and Small Enterprises (MSEs) are contextualized by different nations. In another word, the definition of MSEs differs from country to country based on their state of economic and industrial development. Davis and Vladica (2005) have identified various obstacles hindering the growth of micro-enterprises (MEs). They have suggested not to overlook such obstacles. In the similar manner, OECD (2017) and other various research studies have suggested to prepare a conducive environment for micro-enterprise development and growth. Availability of funding support; plan and policies for private sector development; and government role as a facilitator are few examples of a conducive environment to microenterprise promotion

Research on MSEs reveal various growth and sustainability obstacles. Similarly, research studies have also commonly stated that MSE play important role as backbone of the counties' economy and advocated to promote MSE for utilization of available skill and resources as well as generate employment.

Steel and Webster (2001; cited by Okeyo, Gathungu, and K'Obonyo (2014) have stated that Business Development Services (BDS) is an enterprise support tool (p. 13). They consider various advantage of BDS to enterprise growth and sustainability. Business Development Service is promoted by various countries for enterprise promotion. BDS package is generally considered a non-financial enterprise support service consisting multiple enterprise support components. Goel et al. (2015) have also identified that countries are making continuous efforts for the promotion of SMEs through the application of different programs and policies.

From the above paragraphs, we understand that there are trending priorities of many countries to promote SMEs.

From the empirical evidences, countries have well understood the importance of SMEs for their economic development. Through promotion of SMEs, locally available raw materials; natural resources; skills, and technologies can be best utilized.

Shah (2007) found BDS as a tool to nurture start-up enterprises and assist an idea to grow into a commercially viable product or service. Bajracharya et al. (2005) have stated that Micro Enterprise Development Program (MEDEP) under Ministry of Industry has named its BDS package as 'Micro-Enterprise Development' (MED). This model is used to micro-enterprise creation and development in Nepal. The MED model also contains various enterprise development components offered in an integrated manner.

## **Literature Review**

Micro-Enterprise Development Program (MEDEP) was initiated in the year 2001 in Nepal. It has the objective of poverty elimination by promoting micro-enterprises. In their study, Thapa and Mathema (2001) stated that MEDEP was initiated by the Ministry of Industry (MoI) and funded by UNDP. The components of enterprise support service under the MED model are delivered by the consulting firms called Micro-Enterprise Service Providers (MEDSPs). MEDSPs are hired on an annual contractual basis (MEDEP 2017). The MED model's is effective since it has applied a holistic approach while offering different components of BDS.

Sharma; Nakarmi and Koirala (2021) stated that 'Nepal desires for high economic growth through human capital development' (p. 14) is Nepal's national policy agenda. Handicrafts has been a valuable part of Nepalese heritage representing great tradition and Nepal's proud culture. Nepal is continuously making effort of enterprise promotion. Government of Nepal, therefore, implemented many programs, provisioned policies, and conducted various skill-trainings. Department of Cottage and Small Industry (DCSI) is one of the pioneer institutions promoting small scale based skill and enterprises in Nepal. (Singdel; 2015; pp. 38-40). Basnet (2001) has found that women were involved in the cottage industry. To be involved in this business, they do not require high-level formal education. They were using it as an alternative side profession for extra earning in their leisure period. She further states that cottage industry was a part of the routine life of Nepalese women.

Sharma (2021) stated that there are various government, NGOs. and private institutions are involved in Technical Education and Vocational Training (TEVT) in Nepal. According to Ministry of Education, student intake capacity of such institutions is 130 thousand till 2019 to conduct both long-term and short-term TVET courses. The Ministry has further revealed that this number is approximately more than 25% of youths entering each year in job market. This data indicates much more scopes for skill and enterprise development initiation in Nepal since 75% youths entering the job market have not been captured yet. Kafle (2007) has also similar finding. He also has stated that we still have to do much more in producing skilled labor forces in the country (p. 6).

Gaihre (2019) states that Nepal has evidenced wealthy existence of the Technical and Vocational profession and given the example of ancient wood carvings and architectural works. According to Kafle (2007), separate TVET schools were established gradually in Nepal. CTEVT is an evolving institution established in 1989 to produce technical manpower in Nepal next after DCSI. (Bajracharya et al. 2005).

Despite of various efforts of Government to promote micro, cottage, and small scale enterprises prior to 1990, Khatri (2018) identifies that policy provisions only after 1990s have contributed to prepare major foundations in this regard. Industrial Policy-2010 can be referenced as a strong policy foundation having balanced focus on small scale. This policy guideline has suggested to allocate different funds for the promotion of existing, new, and sick enterprises. As per the Nepal's plan guidelines to alleviate poverty, one of the initiation of MoI is implementation of MED in 1998. Industrial policy 2010 has also suggested to promote micro-enterprises through BDS support. According to Industrial Policy 2010, features of micro and cottage enterprises are presented in the table below (MoI, 2010).

Table 1

Features of Micro and Cottage Enterprises as per Industrial Enterprise Act-2016

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Enterprise Category	Criteria
Micro-enterprises	<ul style="list-style-type: none"> <li>• Upto Nine employees including the owner</li> <li>• Annual sales not exceeding NRs. 50,00,000</li> <li>• Less than 20 KW energy consumption</li> <li>• Less than NRs. 5,00,000 investment in Fixed Assets (except building and land)</li> </ul>
Cottage enterprises	<ul style="list-style-type: none"> <li>• Traditional technology and skills based enterprises</li> <li>• Labor oriented. Based on locally available raw material, arts, culture, and technology</li> <li>• Consumption of less than 10 KV energy</li> <li>• Other features as stated in Annex 2 of IEA</li> </ul>

Source: (Summarized from Industrial Enterprise Act 2016).

Industrial Enterprise Act- 2016 is the replacement to Industrial Enterprise Act 1992. The ‘micro enterprise’ is new category of enterprise added by both Industry policy 2010 and Industrial Enterprise Act 2016.

Among various standalone training providers, Bajracharya et al. (2005) have found MDEDEP’s MED model is designed as a holistic BDS package. Thapa and Mathema (2001) stated that MED was designed and launched to promote micro-enterprises in Nepal to support the poverty alleviation plan. Figure below shows various support services included in the MED model which are holistically delivered to micro-entrepreneurs.

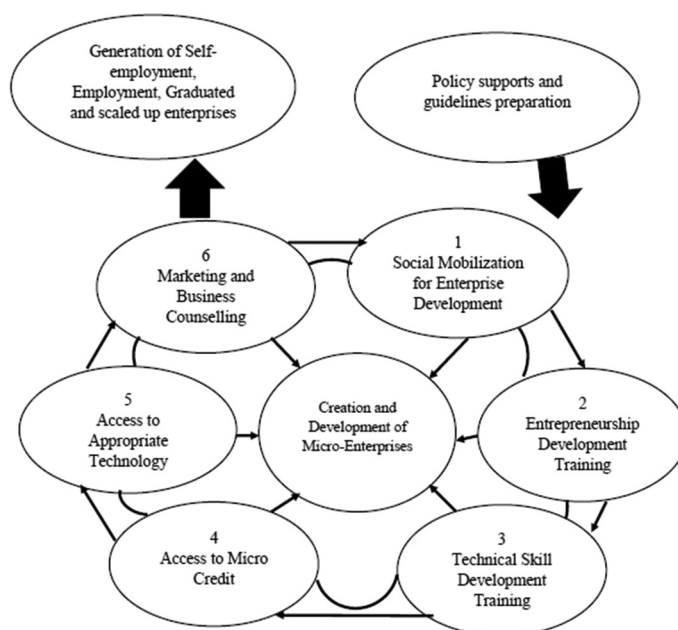


Figure 1: Integrated BDS services under the MED model

Source: (Adapted from Impact Assessment of MEDEP (p. 22), by Narma Consultancy Pvt. Ltd. 2010).

### Conceptual Framework

Mengstie (2016) has stated that BDS has a significant impact on enterprise performance. He has found BDS components have made positive impact on enterprise performance. Based on research framework used by Mengstie (2016), a conceptual framework is designed taking MED models BDS components as independent variables and enterprise performance growth as dependent variable in this study. Relationship among dependent and independent variables are hypothesized as:

H<sub>1</sub> Services offered through the MED model are effective for micro-enterprise performance growth

H<sub>2</sub> Industry types moderates the relationship between MED service components and Enterprise performance growth.

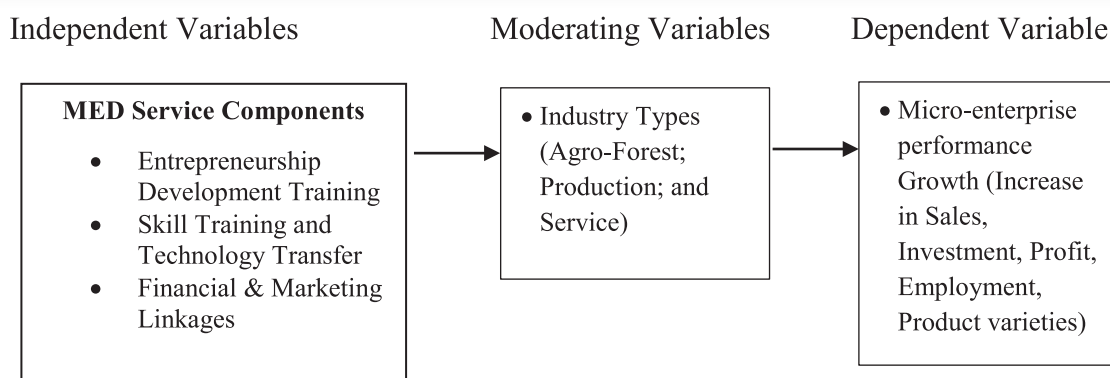


Figure 2: Conceptual Framework

Source: (Researcher’s construct. Conceptual framework to assess the impact of MED services on enterprise performance.)

### Research Methodology

Kavrepalanchowk is situated near Kathmandu valley having 6 Urban and 7 rural municipalities (DCCO-Kavre, 2024). MEDEP had initiated its MED model in this district from the year 2007 and created 2998 micro-entrepreneurs till the end of the project in 2018. Experts also judged this district as one of the best sample for this study, since MED program was continuously run for more than 12 years and same BDSPO had delivered the BDS in this district making it more information oriented and having close contact with the created micro-entrepreneurs. Compared to other districts Kavrepalanchowk district has created targeted entrepreneurs by the program. Therefore, this district is selected as a sample district for the study.

Banepa representing urban area creating 430 and Chauri Deurali representing rural area creating 456 micro-entrepreneurs are selected as sample area of study. Therefore, the total targeted population for the purpose of this study is 886 and has been divided into three business categories i.e. production, manufacturing, and service sector. The sample size is 269 based on Krejcie and Morgan (1970; cited by Pant; 2012). Therefore, stratified sampling has been used to compute the sample size from each stratum. Proportionately 130 samples were targeted to interview from Banepa and 139 from Chauri Deurali. A systematic sampling technique has then been used to collect data for each randomly selected micro-entrepreneur.

Primary source i.e. survey is used to collect opinion of micro-entrepreneurs on the effect of BDS components to their enterprise performance. Questionnaires were prepared in Five-Point Likert Scale to collect the opinion. Quantitative analysis techniques have been applied while analyzing data. Descriptive research design has been used for this research to describe the phenomenon. To show the relationship between independent variable i.e. MEDEP’s BDS service components and dependent variable i.e. enterprise performances; causal-comparative model has been applied.

### Data Analysis and Results

#### Offered MED service components to micro-entrepreneurs

MED service components are BDS supports delivered to micro-entrepreneurs for enterprise creation and development. The offered service components and their usefulness is given in the Table 2. Similarly, industry types of created micro-enterprises is given in the Table 3.

Table 2

Major BDS Supports delivered under the MED Model

Areas of support and Variable Name	Specific BDS Support Components
Entrepreneurship competency development (Entr_Devt)	Entrepreneurship Development Program, Start and Improve Your Business (SIYB) package designed in an association with ILO

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Areas of support and Variable Name	Specific BDS Support Components
Skill Development and Technology Transfer (SD_TT)	Skill Development Trainings on various demand-based sectors; product development supports, technology grant supports, testing and transfer of appropriate technology
Financial Access Support and Market Linkage Support (FA_MLS)	Support making access to financial institutions, assistance to micro-entrepreneurs to be linked with local financial institutions; initiate and mobilize their own group savings etc./ Trade shows, exhibitions; linkages with Kosheli Ghar/Saugat Griha etc.

Source: (Compiled from Consolidated Progress Report 1998-2003 by MEDEP, 2005)

### Industry types of micro-enterprises

Among a total 269 MEDEP found created micro-enterprises in three major categories i.e. agricultural and forest-based; production-based, and service-based. Among them, 58.73% were found highly active, 16.72% active, 7.43% partially active, and 17.01% inactive in their business throughout the year. Among the created enterprises 83% enterprises found survived. This rate is considered successful in delivering BDS components as stated by Bajracharya et al. (2012).

Table 3

#### Micro-Enterprise Industry Types

(N=269)

Industry Types	Frequency	Percentage
Agricultural and Forest-based	146	54.3%
Production-based	95	35.3%
Service-based	28	10.4%

Source: (Field survey, 2022)

From the field interview, many of them have been observed capable to add more business or products and identify profitable business and switchover. This is also a good sign of entrepreneurship development from the MED model.

### Descriptive Analysis Result on benefits realized from each MED service components

Entrepreneurs were provided options in Five Point Likert Scale to express the benefits they have realized from different MED service components and its usefulness in their business performance growth. The summary of opinion expressed by entrepreneurs on usefulness of those components is presented in Table 3.

Table 4

#### Extent of Benefits Realized from each MED Components and Enterprise Growth Performance

(N=269)

Items	Descriptions	Mean	Std. Dev.
1	Benefits realized from Entrepreneurship Development Training	3.22	0.985
2	Benefits realized from Skill Development Training and Technology Transfer	3.79	0.792
3	Benefits realized from Financial Access and Market Linkage Support	2.76	0.855
4	Opinion on Enterprise Growth Performance	3.20	1.28

Source: (Field survey, 2022)

Note: Five Point Likert Scale and assigned value to measure the usefulness of MED service components: VLE = Very Large Extent (5); LE = Large Extent (4); SE = Some Extent (3); LE = Little Extent (2); and VLtE = Very Little Extent (1).

### Results from Inferential Statistical Analysis

Analyzed results of correlation and regression tests has been presented below in Table 5 and 6 respectively.

Table 5

Correlation between Dependent and Independent Variables

	Growth_Perform	Entr_Devt	SD_TT	FA_MLS
Growth_Perform	1			
Entr_Devt	0.914	1		
SD_TT	.851	.896	1	
FA_MLS	.812	.796	.720	1

The value calculated from correlation analysis among MED service components and enterprise growth performance are found positively strong. It indicates that MED service is useful to enterprise growth performance.

### Impact of MED service components on enterprise growth performance

H<sub>1</sub>: MED service components have a statistically significant impact on the growth performance of micro-enterprises.

Table 6

Multiple Regression Analysis Result

Model	R2	F	Sig.a	Coefficients			
				Coefficients	T	Sig	
1	.859	539.069	0.000	(Constant)	-5.850	-7.238	.000
				Entr_Devt	.594	9.978	.000
				SD_TT	.156	3.007	.003
				FA_MLS	.227	5.943	.000

a. Predictors: (Constant), FA\_MLS, SD\_TT, Entr\_Devt

b. Dependent Variable: Growth Performance

In summary, the result of the multiple linear regression shows that at a 95% confidence level, the null hypothesis is rejected and concluded that there is a significant relationship between MED and enterprise growth performance. This finding also match with finding of Samson (2014). He has found out that Business Development Service has explained 77 percent enterprise growth at a 95 percent confidence level. Similarly, Mengsite (2016) has also found out that BDS has explained a 75.5% relationship with firms' performance at a 99 percent confidence level. In summary, we can conclude that MED has a positive impact on enterprise growth performance.

### Test of moderating effect among industry types and enterprise growth performance

A hierarchical regression test is performed to analyze the moderating effect of industry types to MED services and enterprise growth performance as presented in table 7.

H<sub>1</sub>: Industry Types have a significant moderating effect between MED service and enterprise growth performance

Table 7

Moderation Effect of Industry Types on MED Service and Enterprises Growth Performance

Model	R <sup>2</sup>	F	Sig.	Coefficients			
				Coefficients	T	Sig	
1	.853	1545.866	0.000a	(Constant)	-7.576	-12.250	.000

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Model	R <sup>2</sup>	F	Sig.	Coefficients			
2	.856	526.958	.000b	MED	.422	39.318	.000
				(Constant)	-6.350	-8.098	.000
				MED	0.421	38.922	.000
				Agro-Forest based	-1.245	-2.459	.015
				Production-based	-0.657	-2.510	.013

a. Predictors: (Constant), MED

b. Predictors: (Constant), MED, Production, Agro\_Forest

c. Dependent Variable: Enterprise Growth Performance

Calculated statistics shows that the enterprise industry categories have moderated the relationship between MED service and enterprise growth performance. This finding match with Salia (2017; cited in Vasan; 2020). She has found that type of business category was significantly related to enterprise performance. In conclusion, various research has evidenced that types of industrial enterprise categories have significantly moderated the relationship between business development services and enterprise growth.

## Conclusion

MED model is successful in creating and supporting enterprise growth. Since it is a government initiation, other standalone training providers could also replicate or learn and customize their programs for more effectiveness. Similarly, government should also make policies for replicating this model through other ministries' enterprise and skill development programs. Furthermore, academic researchers should also research in other dimensions of this types of models i.e. benefits to employment generation, economic development, policy impacts, and BDS market development.

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