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EARLY VIEW

# **Micro and Small Enterprises' Development in Ethiopian Construction Industry: The Challenges and Improvement Regulatory Framework**

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**Abstract:** The purpose of this study is to assess the challenges and develop a regulatory framework for sustainable development of Micro and Small Enterprises (MSEs) in the construction industry. A structured questionnaire was used to collect the quantitative data and a semi-structured interview was conducted to get detailed insight about the MSEs development. Descriptive analysis was used for the quantitative data analysis and the qualitative data was analyzed thematically focusing on the challenges and applicable regulatory instruments. The identified internal challenges are associated with management practice, financial capacity, and technical capacity. The external challenges are ineffective policy support and regulation, week registration practice, and demand and price fluctuation. Considering these findings, an improvement regulatory framework with four pillars is developed. Pillars of the improvement regulatory framework are registration and follow-up, access to markets, access to finance, and training and advisory. The identified internal and external challenges are interrelated and situation dependent, therefore, continual monitoring and controlling of the operating environment would help to ensure sustainable development of MSEs. The nature of construction industry in developing countries shares common characteristics, hence the findings and the developed improvement framework can be extended to similar contexts.

**Keywords:** challenges, construction industry, Ethiopia, micro and small enterprises, regulatory framework

## **INTRODUCTION**

Construction organizations' capacity enhancement is among the determinant factors of construction industry development (Ofori, 1980; C21, 1999; CIRC, 2001). Enhancing the capacity of organizations helps to improve the different practices in the industry as competitive organizations can develop capabilities to adopt good practices. Enhancing capacity should necessarily incorporate the development of all levels of construction organizations to enhance competitiveness of the industry comprehensively (Kumaraswamy, 2006). Hence, as MSEs are the bottom level organizations in the industry, it is important to ensure their sustainable development. Importance of the MSEs in different sector is internationally acknowledged (Smith & Whittaker, 1998; Singh et al., 2008; Endris & Kassegn, 2022), but there exist a problem in defining MSEs (NCR, 2011). Due to the absence of a commonly agreed international definition of MSEs, different countries adopt their own approaches (Smith & Whittaker, 1998; Gibson & Vaart, 2008). The various definitions of MSEs use

three basic criteria: number of full time employees, total asset, and total annual turnover (MUDH, 2016). These three criteria may be applied either jointly or separately. Adopting appropriate and clear definitions and incorporating it in the registration system is important to devise effective support and intervention strategies in MSEs development.

MSEs have a substantial contribution in ensuring continual development of the construction industry as they are the future larger companies. In addition, they contribute to the national economy through creating job (Nicholas & Fruhmann, 2014). However, in many cases their development is hampered by a number of internal and external challenges (Iriyanti & Azis, 2012; Wang, 2016). These challenges affect the contribution and performance of MSEs directly and indirectly. The internal challenges should be controlled by the MSEs. However, the external challenges need intervention by the concerned stakeholders. In this respect, the role of government in controlling the external challenges is significant through creating conducive business environment by means of effective regulation and also in supporting growth of the MSEs. Effective intervention needs understanding of the challenges and developing appropriate improvement mechanisms that suit the context. It is in this light that this study focuses on assessing the challenges and developing a regulatory framework for sustainable development of MSEs in the construction industry.

## **LITERATURE REVIEW**

The perception towards the benefits of MSEs development has two dimensions, i.e., considering them as an incubator for future larger companies and job creation mechanism. The level of emphasizes given for either of these dimensions determines the support and intervention mechanisms. As indicated by Tshikhudo (2016), the promotion of the development of MSEs will have a long run effect on poverty alleviation, job creation and encourage entrepreneurship. Considering MSEs as job creation mechanism only can result in proliferation of many MSEs without a vision to grow and affects their sustainability in the market. Hence, there has to be a balance in the perception towards the two dimensions. Sustainable development of MSEs can be characterized by acceptable level of attrition and reasonable pace of growth, i.e., transition to the next category of enterprises. Ensuring this sustainable development needs understanding the potential challenges and the improvement mechanisms. The potential challenges can be categorized into internal and external. The internal challenges are associated with the different capacity dimensions: management practices, financial capacity, and technical capacity. These dimensions of capacity are interrelated (Bajracharya et al., 2018) and are affected by different external factors (Tang & Ogunlana, 2003).

Common causes for the failure of construction organizations are human capital issues, macroeconomic issues, adaptation to market conditions and budget issues (Wong & Ng, 2010). Problems of local contractors in developing countries are lack of qualified manpower, limited access to working capital, shortage of materials, machinery, and poor utilization of the modern technologies (Hillebrandt, 1999; IGC, 2012). The major institutional challenges facing contractor development are regulatory framework, limited training institutions, management know-how, lack of drive to learn, timely payment to contractors by clients, procurement expertise, absence of reliable credit facilities, absence of equipment pools, corruption syndrome, limited research and information, and occupational health and safety concerns (Kiggundu 1999). These are challenges of construction firms regardless of their size. Studies conducted on challenges specific to MSEs in different countries reaffirm these. Dalitso and Peter (2000) identified different barriers and constraints

faced by MSEs in Ghana and Malawi: lack of entrepreneurial and business management skill and training; lack of access to finance; lack of access to appropriate technology; regulations and rules that impede the development of the sector; and weak institutional capacity. Assefa (2014) identified the key constraints to MSEs growth in Ethiopia as access to finance; collateral challenges; marketing challenges; working space constraints; capital goods and machinery challenges; licensing and registration challenges; attitudinal challenges; and institutional coordination problem. Similarly, Mosissa (2013) identified operational challenges of MSEs in Ethiopia as lack of finance, limited skills in construction management, and prevalence of unethical conduct.

Appropriateness of the mechanisms for enhancing capacity are determined by the contextual scenario. Despite the relative difference, the mechanisms of assistance practiced by different countries for small scale contractor development programs are financial support, providing projects, training and advice, and supplying material and equipment (Ofori, 1999). However, such help by government should not create much dependency and it should be monitored and adjusted as the context changes. In addition to facilitating, promotional and supporting efforts of the government, the enterprises also have to make their share of effort in enhancing capacity to cope with the changing operating environment. Organizations should continually review and utilize opportunities to improve their success (Abraham, 2003).

As indicated above, the common challenges are identified by previous studies. However, detail characterization of the challenges will widen the knowledge area; classification of the challenges will help to understand their nature. Similarly, the common MSEs development approaches are indicated by the previous studies. However, appropriately framing the development pillars and associating the pillars with the relevant regulatory bodies and regulatory instruments will help to ensure sustainable development of the MSEs. Hence, this study focuses on addressing these two specific objectives.

## **METHODOLOGY**

Both quantitative and qualitative research approaches were applied to achieve the research objectives. In assessing the internal challenges, three dimensions were adopted: (i) management practice, (ii) financial capacity and (iii) technical capacity. The potential external challenges of MSEs development were identified through literature review and the underlying dimensions were identified through Factor Analysis as discussed in the next section. A structured questionnaire was developed to assess the challenges. A focus group discussion was conducted and comments from the professionals were considered in finalizing the questionnaire. In determining the sample size, suggestion of Gay, Mills, and Airasian (2012) was used; which suggests beyond a certain point, at about 5000 units or more, a sample of 400 people is adequate. The number of MSEs in the country is more than 5,000. Hence, a total of 425 was considered for this study. Purposive sampling was adopted depending on accuracy of the addresses provided in the government register. A total of 346 questionnaire were duly completed which has resulted in 81.41% response rate among which 169 are micro enterprises and 177 are small enterprises. Experience wise it was found that 78% of them have five and less years of experience, 21.1 % have six to ten years' experience and 0.9% have ten to fifteen years' experience.

Three groups were targeted for the interview: the MSEs, major public clients and government departments engaged in MSEs development. The semi-structured

interview focused on the overall performance and issues related to challenges of MSEs, their market share and the general support mechanisms, and monitoring and controlling of the support and regulatory practice. Relevant documents were collected from the concerned government departments.

Two analyses techniques were employed for the quantitative data depending on the size of the variables. The first category is; mean score was used to rate different dimensions of the research constructs, i.e., rating level of the practice and level of challenges on a 5-point Likert scale. The questionnaire was completed by the representative of MSEs; hence, the unit of analysis is the number of MSEs. Mean value of responses is not a whole number, hence for interpretation purpose, mid-points of two adjacent scales is considered (Tripathi & Jha, 2017). Therefore, for interpretation, the adopted range of mean score are  $\mu \geq 4.5$  (Very High/Excellent),  $4.5 > \mu \geq 3.5$  (High/Good),  $3.5 > \mu \geq 2.5$  (Moderate/ Average),  $2.5 > \mu \geq 1.5$  (Low/Poor), and  $\mu < 1.5$  (Very Low/ Very Poor).

The second category is; where there are large number of variables, in such case, factor analysis was conducted, e.g. management practice and external challenges. In testing appropriateness of the data for factor analysis, Kaiser-Meyer-Olkin Measure of Sampling Adequacy and Bartlett's Test of Sphericity were conducted. Minimum suggested standards for KMO is 0.5 (Hair et al. 2010; Field 2013). Bartlett's test shows whether the correlation matrix is significantly different from an identity matrix. The data to be suitable for analysis, Bartlett's Test of Sphericity has to be significant (Field 2013). The KMO was found to be 0.961 for management practice and 0.872 for the external challenges which are above the minimum and the Bartlett's Test of Sphericity is found to be significant. To examine the internal consistency of the scale, the Cronbach's alpha (Ca) test was performed. The results are 0.963 for management practice, 0.79 for financial capacity related, 0.893 for technical capacity and 0.868 for external challenges. Cronbach's alpha value of 0.7 or higher is considered acceptable, hence, these results indicate that there is greater internal consistency of the scale.

The qualitative data was analyzed focusing on different themes related to the research specific objectives. Finally, a focus group discussion was held on the developed regulatory framework with professionals from different background; and the comments were incorporated.

## **ANALYSIS AND DISCUSSION**

Implementation of MSEs development recommendations to mitigate the challenges majorly takes two approaches, i.e., voluntary, and mandatory approaches. The challenges are interrelated, internal challenges can be manifestation of external challenges, e.g., the financial factors are majorly associated with external challenges. Internal challenges can be controlled by the MSEs through willful implementation of the best practice recommendations. Though it is difficult to clearly separate, classification of the challenges will help to devise appropriate and effective intervention mechanisms.

### **MSEs' Internal Challenges**

The dimensions adopted to assess the internal challenges are: (i) management practice, (ii) financial capacity related and (iii) technical capacity related.

## Management Practice

The mean scores in Table 1 show that while majority of the variables are average, thirteen variables are slightly larger than average. However, the interview findings indicate that the management practice is poor. The factor analysis has resulted in two underlying components with a cumulative variance of 62.81%. Seven practice areas were found to be cross loaded under the two components. Management practice areas are correlated (Ramirez et al., 2004), example, monitoring and controlling of performance of the enterprise determines the response to changes, in turn response to change is affected by effectiveness of the organization structure. Hence, the cross loading is logically acceptable as these areas are explicitly or implicitly related with the extracted components. The cross loaded items were not included in factor interpretation. Though these items were excluded due to statistical reasons they need improvement as they would help the enterprise to mature and develop. To represent the variables converged together, the components are named as; component 1 (*organization structure and project management*) and component 2 (*coping with the competitive business environment*).

Management practice is the application of a broad range of skills, management knowledge and experiences for efficient and effective delivery of the process. To organize and run the business process effectively and efficiently, MSEs need management capability (Singh et al., 2008). The expected management practice level is related to the size of the companies that would match the size and complexity of the projects. Hence, the selected knowledge and skills to assess the practice were limited to specific areas. As explained by Ofori (1999), contractor development programme must enable the enterprise to mature and develop commercial, managerial and administrative skills, credibility in commercial circles, and experience in pricing complete contracts while accepting increasingly greater risk and contractual responsibility.

**Table 1 MSEs' Management practice**

Management practice	Mean	Rank	Factor Analysis	
			Component 1	Component 2
Contract document interpretation ability	3.42	16	.736	
Cash-flow management ability (i.e., ensuring uninterrupted supply of working capital)	3.33	19	.776	
Inventory management ability	3.35	18	.780	
Credit management ability	3.30	20	.693	
Time management ability	3.52	11	.710	
Effective organization structure (clarity and effectiveness of division of duties and responsibilities)	3.52	12	.762	
Leadership ability	3.61	5	.716	
Effective communication ability	3.70	1	.591	
Training and development of employees	3.23	21	.621	
Commitment of the enterprise members	3.52	13		.588
Monitoring and controlling of performance of the enterprise	3.49	14	.522	.561
Good record keeping /documentation	3.54	9	.628	
Response to changes	3.56	8	.503	.572
Implementation of health and safety	3.22	22		.570

**Table 1 MSEs' Management practice**

Management practice	Mean	Rank	Factor Analysis	
			Component 1	Component 2
issues				
Adoptability to the changing environment (i.e., working in different geographical location/zone than area of establishment)	3.54	10		.768
Readiness to handle increased size of projects	3.69	2		.804
Readiness to handle increased number of projects	3.63	4		.805
Project planning ability	3.64	3	.523	.649
Project estimating ability	3.57	7	.596	.567
Appropriate accounting practice	3.43	15	.570	.581
Strategic Planning (i.e., understanding the business environment and forecasting the future)	3.42	17	.523	.611
The ability to standardize process to increase efficiency and productivity	3.60	6	.510	.604
Variance Explained (%)			33.82	28.99

### **Organization Structure and Project Management**

This component includes: (i) contract document interpretation ability, (ii) cash-flow management ability, (iii) inventory management ability, (iv) credit management ability, (v) time management ability, (vi) effective organization structure, (vii) leadership ability, (viii) effective communication ability, (ix) training and development of employees and (x) good record keeping /documentation.

Majority of the MSEs are cooperatives, hence, developing effective organization structure, i.e., clearly defining duties and responsibilities of the partnering member in the enterprise is important. During the interview it was found that, lack of clarity of role of the partners is one of the sources of conflict among the members. Performance of MSEs is associated with nature of organization structure, e.g. small number of employees and a flat organizational structure, reflects a short-term business orientation (Lijauco et al., 2020). Improving this needs leadership ability, and it is also important to identify the skill gap and fill it through training and development. Access to market is one of the important dimensions for development of MSEs. The major method of getting a project in construction industry is competition, hence, bid/contract document interpretation ability and estimation skills are important knowledge areas. Improving estimation practice is highly associated with good record keeping and documentation practice.

After getting a project, successfully completing the project is determined by the other factors: cash-flow management ability, inventory management ability, credit management ability, time management ability and effective communication ability. As underlined by Tshikhudo (2016), the critical attributes required by MSEs to have better performance, among the different management practices, are producing quality work, good cash flow management, good contractual understanding, having a business plan, effective communication channel, maintaining good relationships with clients, proper record keeping, sensible operating costs, recruiting qualified staff and availability of effective marketing strategies. Similarly, Muriithi

(2017) indicated that poor management is the challenges of MSEs in African countries that arises from the fact that most MSEs owners lack managerial expertise. Irrespective of the company size, as a project-based company, any construction company needs to build effective project management system.

### **Coping with the Competitive Business Environment**

This component includes: (i) readiness to handle increased number of projects, (ii) implementation of health and safety issues, (iii) adoptability to the changing environment (i.e., working in different geographical location/zone than area of establishment), (iv) readiness to handle increased size of projects, and (v) commitment of the enterprise members.

One of the purposes of MSEs business is being an incubator for the future larger companies which is a key contribution for development of the construction industry. Most of the variables under this component: readiness to handle increased number of projects, adoptability to the changing environment and readiness to handle increased size of projects are important to improve strategic management practice. Developing and maintaining good strategic management practice is important for the MSEs to cope with the competitive business environment (Appels 2010; Adendorff, Appels, and Botha 2011). Most construction MSEs can hardly demonstrate the ability to meet promotion criteria such as management competencies, capacity, training and innovativeness which would enable them to compete in a growing construction economy (Gasa, 2012). This is majorly affected by commitment of the enterprise members.

### **Financial Capacity Related Factors**

This dimension assesses financial capacity of the enterprises. Financial capacity is the ability to finance projects and arrange financial resources to run the business. As indicated in Table 2, the finding indicates payment delay by the client is the common practice with mean value of 3.75. This is among the challenges that affect performance of the MSEs. Unlike the larger companies, MSEs have no option as sources of finance; hence, this practice needs to be improved. Similarly, the availability of credit providing institutions for MSEs and the ability to own/ rent appropriate machinery and equipment is not satisfactory. These show that access to finance is a challenge which limits financial capacity of the MSEs (Tshikhudo, 2016).

### **Technical Related Factors**

Technical capacity refers to the equipment owned and related operating staff with the required skills to efficiently utilize the equipment, expertise in work methodology, level of standardization and the ability to foresee technological adoptions to maintain reputability. As the finding in Table 2 indicates, experience/knowledge is not a problem with a mean value of 3.65. This result is consistent with the response to one general question, soliciting as whether there is a member among the cooperative partners with educational background relevant to construction; it was found that among the 346 enterprises 87% of the enterprises are having a member with educational background relevant to construction. However, this seems contradicting with the other factor, the ability to efficiently utilize machinery and equipment is average with the mean value of 3.29. Similarly, the efficiency of the enterprise in integrating new technology into the business system and process is average with the mean value of 3.17. From these it can be inferred that, though the members have educational qualification, they need tailored training to be effective in utilizing the resources. In addition, it is indicated that the mean value for owning



the appropriate machinery and equipment is 3.02 which is average. This is associated with the above dimension, which shows that access to finance is a challenge which limits financial capacity of the MSEs.

**Table 2 Financial and Technical capacity related factors**

<b>Financial related factors</b>	<b>Mean</b>	<b>Rank</b>
Adequacy/ availability of credit providing institutions for MSEs	2.68	6
Collateral requirement to get credit	3.24	4
Level of interest rate	3.38	2
Requirements to get advance payment	3.35	3
Payment delay by the client	3.75	1
The ability to own/ rent appropriate machinery and equipment	3.17	5
<b>Technical related factors</b>		
Efficiency of the enterprise in integrating new technology into the business system and process	3.17	4
Owning the appropriate machinery and equipment	3.02	5
The ability to efficiently utilize machinery and equipment	3.29	3
Adequacy of Technical Staff	3.43	2
Experience/knowledge of the staffs	3.65	1

### **MSEs' External Challenges**

The mean scores in Table 3 indicate the effect of majority of the variables is high. The Factor analysis resulted in three underlying components with a cumulative variance of 55.1%. Three factors were found to be under loaded: (i) project location problem, (ii) corruption and (iii) negative attitude towards MSEs. The under loaded variables were excluded from the factor interpretation. Though these items were excluded due to statistical reasons, they are among the challenges that affect MSEs development, especially as the ranking in Table 3 indicates corruption is the second top factor. The interview results also indicated that corruption is the major challenge. This is consistent with previous studies, Muriithi (2017) indicated as corruption is among the major challenge facing MSEs businesses in Africa. This ill practice forces MSEs to divert their well-intended finances to non-financial activities. To represent the variables converged together, the components are named as: component 1 (*ineffective policy support and regulation*), component 2 (*weak registration practice*) and component 3 (*demand and price fluctuation*).

**Table 3 External challenges to MSEs development**

<b>External challenges to MSEs development</b>	<b>Mean</b>	<b>Rank</b>	<b>Factor Analysis</b>		
			<b>Component 1</b>	<b>Component 2</b>	<b>Component 3</b>
Demand fluctuation; fluctuation of project availability	3.80	3			.798
Price fluctuation (i.e., material price, labor, etc.)	4.16	1			.859
Project location problem; influence of project location other than area of the enterprise's	3.29	13			

**Table 3 External challenges to MSEs development**

External challenges to MSEs development	Mean	Rank	Factor Analysis		
			Component 1	Component 2	Component 3
establishment					
Corruption	4.05	2			
Bureaucracy during registration and renewing license	3.64	6		.554	
Political instability	3.70	4	.687		
Problems in creating interlinkage with other institution	3.40	11	.623		
Ineffectiveness of government policy and regulation	3.53	8	.751		
Lack of satisfactory government support, e.g., lack of mentoring, insufficient award of contract/works	3.66	5	.631		
Political intervention	3.21	14	.608		
Negative attitude towards MSEs	3.36	12			
Intense competition	3.57	7		.579	
Registration and certification problem; tough requirement to upgrade	3.40	10		.851	
Lack of periodical discussion with concerned stakeholders on the engagement condition of MSEs	3.50	9		.712	
Variance Explained (%)			21.37	19.41	14.32

***Ineffective Policy Support and Regulation***

This component includes: (i) political instability, (ii) problems in creating interlinkage with other institution, (iii) ineffectiveness of government policy and regulation, (iv) lack of satisfactory government support, e.g., lack of mentoring, insufficient award of contract/works and (v) political intervention.

Effective policy support and regulatory system that improve strategic vision of the MSEs is important. This is supported by previous studies, e.g., Didibhuku and Mvubu (2008) indicated that inadequate support from government is among challenges of MSEs development. Bakar et al. (2011) also noted that political stability and peaceful environment is among the success factors of MSEs development. Muriithi (2017) also underlined on the importance of government support for development of MSEs. These challenges are associated with the general challenges in the industry. The national construction policy outlines the weaknesses, problems and performance constraints of the construction industry as: low capacity and capability of local contractors and consultants; erratic work opportunities/demand; ineffective procurement systems; corruption; lack of institutional support mechanisms; poor

working environment; weak regulatory framework; low productivity and quality; and low technological base (MUDC, 2013). So, it's important to give due attention for effectiveness of the policy support and regulatory system.

### **Week Registration Practice**

This component includes: (i) bureaucracy during registration and renewing license, (ii) intense competition, (iii) registration and certification problem; tough requirement to upgrade, and (iv) lack of periodical discussion with concerned stakeholders on the engagement condition of MSEs. It is important to revisit the registration system to align with the classification of MSEs. The experience of other countries shows that the MSEs development programs are aligned with their registration system (CIDB-South Africa, 2011). This is important as it can be a target for both the enterprise and the concerned government bodies to monitor and control the progress/growth of the enterprises. Periodical discussion with concerned stakeholders on the overall MSEs business is important to devise appropriate and timely intervention. The interview finding indicated that, to have a common voice and address their interest the MSEs have to establish association like other business entities.

### **Demand and Price Fluctuation**

This component includes: (i) demand fluctuation (fluctuation of project availability) and (ii) price fluctuation (i.e., material price, labour, etc.). Access to market, getting a project, is a key for sustainability and growth of enterprises. However, the findings indicate that it is very difficult to get a project; among the 346 MSEs, 49% of the enterprises were found to be temporarily enactive or totally inactive. During the interview, majority of the respondents raised common issues associated with the difficulty of getting a project, due to fierce competition or corruption. They are not able to get adequate number of projects to run the enterprise actively throughout the year. This shows demand fluctuation, and it is associated with the general economy and the price fluctuation in the industry.

### **Regulatory Framework to Ensure Sustainable Development of MSEs**

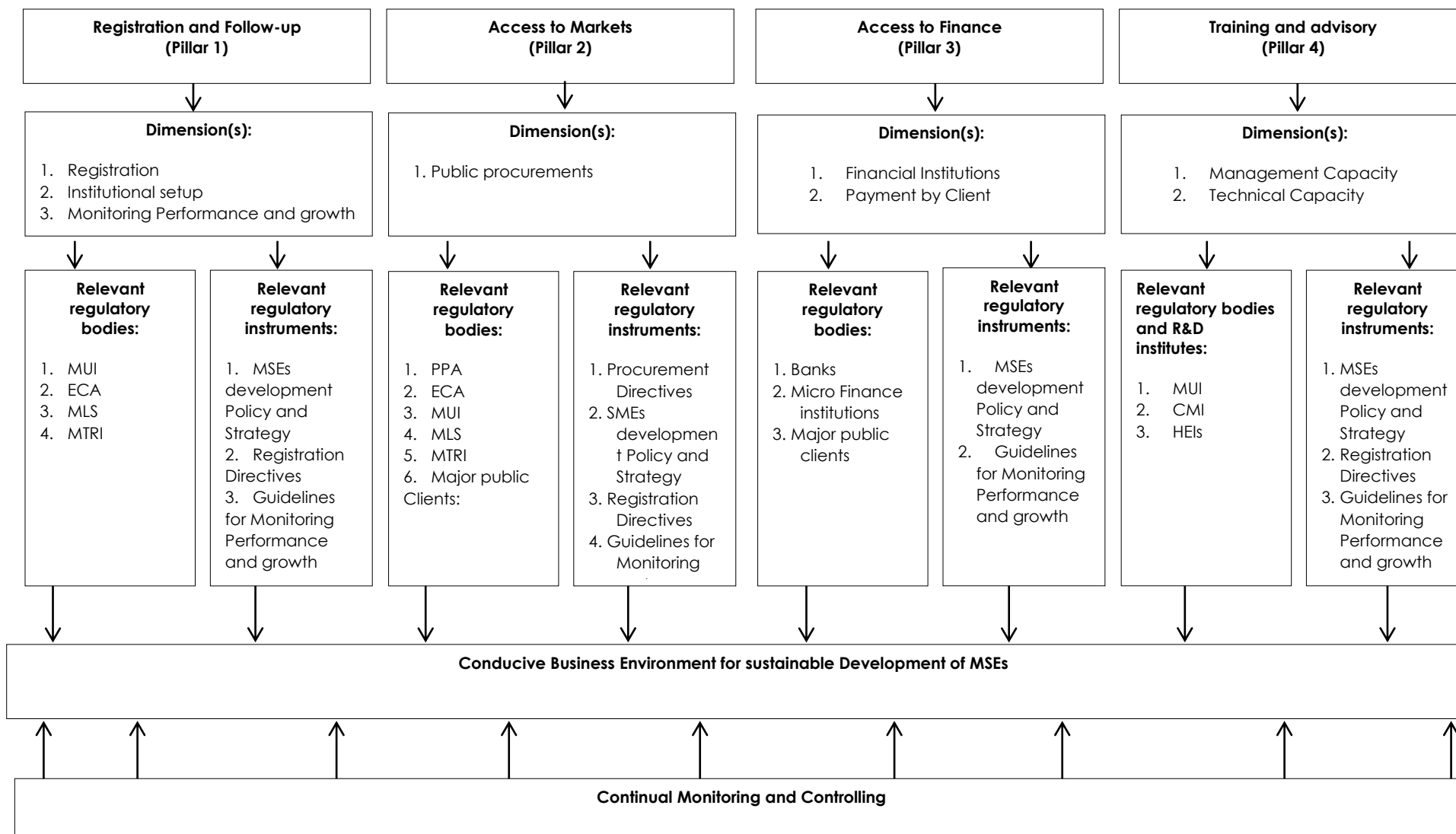
There are some frameworks for MSEs development, e.g., OECD's SME policy index (OECD et al., 2020). However, these are generic not specific to construction industry. Hence, it is important to develop MSEs development framework specific to construction industry. The above findings were used as an input to develop the regulatory framework. Starting with defining the pillars, four steps were adopted in developing the framework. The adopted pillars are: (i) registration and follow-up, (ii) access to markets, (iii) access to finance, and (iv) training and advisory. After defining the pillars, the next activities were defining dimension(s) of the pillars, identifying the relevant public bodies, and indicating the relevant applicable regulatory instrument(s). Detail of the developed regulatory framework is indicated in Figure 1. Finally, a focus group discussion was held on the developed regulatory framework with professionals from different background; and the comments were incorporated.

### **Registration and Follow-up**

Registration and follow-up is important pillar for development of MSEs which is one indicator of government responsiveness, and it has three dimensions: registration system, institutional setup, and monitoring performance and growth.

The definition of MSEs and the registration system has significant role in development of the enterprises. Importance of defining MSEs are: (i) to create a basic framework for the purpose of providing differentiated support to micro and small enterprises, (ii) to create a uniform basis for institutions mandated to provide support to micro and small enterprise development, (iii) to ensure that data and information to be collated and shared on micro and small enterprises have a common ground, (iv) to enable the monitoring and evaluation of the various kinds of support to be provided to MSEs using common criteria, and (v) to harmonize the national definition of micro and small enterprises with the international definition (MUDH, 2016). Registration provides information to facilitate regulation and management of the industry, generate revenue for capacity development programs and it facilitates procurement as a general prequalification criterion. Registration also helps to set targets for firms and professionals to grow. Hence, the definition and classification of MSEs has to be aligned with the registration directives. It will help to devise appropriate intervention mechanisms for the respective categories.

One of the duties of Ministry of Urban and Infrastructure (MUI), specifically its affiliate, Ethiopian Construction Authority (ECA), is registering and issuing certificates of competence for professionals, and registering and determining grades of organizations. This shows as, ECA has significant stake in this regard. Concerning the institutional setup, the MSEs development need concerted effort of the stakeholders. MSE development policy and strategy of Ethiopia reaffirms this, the policy document also shows the steering committee's chair is MUI. However, the steering committee has not been active for a long time, so, it is important to make this steering committee functional with the addition of one member that is MSEs' association. So far, there is no MSEs' association; hence, it has to be established. This steering committee has to focus on the overall continual monitoring and controlling of MSEs in construction industry. Continual monitoring and monitoring is important to ensure conducive business environment for sustainable development of MSEs (Nicholas & Fruhmann, 2014).



**Abbreviations:** MUI-Ministry of Urban and Infrastructure, CMI- Construction Management Institute, HEIs-Higher Education Institutes, ECA- Ethiopian Construction Authority, MLS- Ministry of Labour and Skills, PPA-Public Procurement Authority, and MTRI- Ministry of Trade and Regional Integration

**Figure 1 Regulatory Framework to ensure sustainable development of MSEs**

In addition, the MUI has to take the lead in launching different initiatives similar to MSEs development programme of other countries; it has to play its role as umbrella institute for MSEs development in construction industry. The importance of specific MSEs development programme is to have follow up mechanism till the MSEs reach the expected graduation level where the enterprises do not need much support from government. The existing practice mainly focuses on establishing MSEs, there is no clear follow-up mechanism. As indicated in OECD et al. (2020), follow-up and giving second chance for falling business is one of the policy indices. Rather than focusing on promoting establishment of new, strengthening the existing will increase the chance of growth.

The relevant institutes to actively engage in MSEs development are MUI, ECA, Ministry of Labour and Skills (MLS), and the steering committee depending on the mandate conferred on them by law. To achieve these, the applicable regulatory instruments are MSEs development policy and strategy, registration directives, different guidelines for the expected new initiatives/ MSEs development programme. So far, different guidelines have been developed by different bodies, e.g., Addis Ababa city housing guidelines, Amhara Regional state guidelines, etc., but these need to be harmonized nationally.

### **Access to Markets**

MSEs tend to face particularly high barriers and risks in entering new markets due to different internal and external challenges. This pillar has one dimensions; public procurement with three sub dimensions: (i) allocating certain portion of a project to MSEs, (ii) incentivizing of larger companies and (iii) transparency to reduce corruption.

From the current situation, where most of the MSEs are inactive, establishment of new MSEs in mass focusing on job creation only should be avoided. In Ethiopia, there is a plan to increase the market share of MSEs by 10% annually. But there is no clear strategy to achieve the target. Government is the major client, so it can improve this through its procurement system: (i) allocating significant portion of the projects to MSE that much the target, i.e., 10%, and (ii) incentivizing larger companies through prequalification criteria during tendering; incentivizing those who promotes MSEs through subcontracts. However, there has to be a mechanism to verify the support of larger companies to MSEs. This can be tied with registration system; project performance can be a criterion in the registration system. The other subdimension in procurement is transparency; the findings indicated that corruption is one of the challenges in the market. So, it is important to work on transparency through disclosing information about the projects given to MSEs.

The relevant institutes to implement this pillar are Public Procurement Authority (PPA), ECA, MUI, MLS, Ministry of Trade and Regional Integration (MTRI), major public clients in all the sectors (building, road, water works etc.), and the relevant applicable regulatory instruments are procurement directives, MSEs development policy and strategy, registration directives and guidelines for monitoring performance and growth.

## **Access to Finance**

Access to finance is critical to companies' survival and growth. Due to their smaller size, MSEs often face barriers in accessing external financing. This pillar assesses government's efforts to facilitate MSEs' access to financial resources, and effort of public clients for timely payments. The finding indicates that payment delay by the client is the common practice; this is among the challenges that affect performance of the MSEs. Unlike the larger companies, MSEs have no option as sources of finance; hence this practice needs to be improved. In addition, the availability of credit providing institutions for MSEs and the ability to own/ rent appropriate machinery and equipment needs improvement. The relevant institutions to implement this pillar are Banks, Micro Finance institution and public clients, and the relevant regulatory tools to achieve this are: MSEs development policy and strategy, and guidelines for monitoring performance and growth.

## **Training and Advisory**

This pillar focuses on capacity improvement, and it has two dimensions: (i) management capacity with two sub dimensions; 'organization structure and project management' and 'coping with the competitive business environment', and (ii) technical capacity. This pillar is voluntary in nature; difficult to enforce the MSEs to implement the result of the trainings and advisory; it needs mind change of the cooperative members. As discussed earlier, majority of the MSEs are cooperatives, hence, developing effective organization structure, i.e., clearly defining the duties and responsibilities in the enterprise is important. Improving this needs leadership ability, and also it important to identify the skill gap and fill it through training and development. So, having good strategic management practice is important for the MSEs to cope with the competitive business environment. This is majorly affected by commitment of enterprise owners/ partners.

Awareness development has to address the major concerned stakeholders to change the perception towards MSEs business. Muriithi (2017) indicated as one of the challenges facing MSEs is a negative perception from potential customers. The enterprises are perceived to be unable to provide required quality products and services compared to large businesses. This reaffirms the ministry's report (MUDH, 2016). Generally, negative attitude towards MSEs is the core challenge and takes different manifestations of which the major are: lack of knowledge of the potential of MSEs, preference for paid employment and dependency. The perception of larger companies, individuals involving in the MSEs business and the general community, towards MSEs business is found to be average. This will have effect on growth of the MSEs; specially, developing good perception of larger companies is very important as they are one of the market sources to give projects through subcontracting.

The relevant institutions to implement this pillar are: MUI, Construction Management Institute (CMI), and Higher Education Institutes (HEIs), and the relevant regulatory instruments to achieve this are: MSEs development policy and strategy, registration directives, and guidelines for monitoring performance and growth.

## **CONCLUSION**

Ensuring sustainable development of MSEs needs mitigating the challenges. This study has identified the internal and external challenges. Concerning the internal challenges- from the management practice: (i) organization structure and project management and (ii) coping with the competitive business environment are found to be the major challenges. It was also found that payment delay is the common problem. It was emphasized that though the member(s) of the enterprise have the relevant educational qualification, they need tailored training to improve the technical capacity to be effective in mobilizing the resources. The identified external challenges are: (i) ineffective policy support and regulation, (ii) weak registration practice and (iii) demand and price fluctuation.

In construction industry, government act as a major client, promoter, and regulator. So, through integrated strategy it can improve the challenges and create conducive business environment for MSEs sustainable development. To achieve this, a framework is developed with Four pillars: (i) registration and follow-up with three dimensions; (ia) registration system, (ib) institutional setup, and (ic) monitoring performance and growth; (ii) access to markets, that has public procurement as a dimension with three sub dimensions (iia) allocating certain portion of a project to MSEs, (iib) incentivizing of larger companies, and (iic) transparency to reduce corruption; (iii) access to finance with two dimensions, (iiia) financial institutions, and (iiib) public clients timely payments; and (iv) training and advisory with two dimensions; (iva) management capacity and (ivb) technical capacity. Continual monitoring and controlling is important to maintain conduciveness of the business environment. The common relevant institute to actively engage in MSEs development are MUI, ECA, MLS, PPA, CMI, and HEIs and the steering committee depending on the mandate conferred on them by law. To achieve these, the common regulatory instruments are MSEs development policy and strategy, registration directives, procurement directives, and guidelines to be developed for monitoring and controlling MSEs development.

Findings of this study and the proposed regulatory framework will give information for the concerned parties to improve the development of MSEs in construction industry: (i) for the concerned regulatory bodies, it indicates the major pillars in improving the MSEs participation, dimensions and sub dimensions of the pillars, and expected role of the public bodies with the relevant regulatory instruments, (ii) for MSEs, it will give information concerning the internal challenges and importance of establishing association to improve their bargaining power at national level.

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