

# **Baseline Survey Report on Metallic Utensil subsector for SEP project implemented by SDS**



Prepared by

Abu Darda  
Consultant

October 2022

Letter of Submission

28 November, 2022

Mohammad Saiful Islam  
Coordinator (Agri) & PM – SEP metallic Utensils Project  
SDS, ShariatpurSadar, Shariatpur.

Subject: Submission of Report on Baseline study for 'Sustainable Enterprise Project (SEP) of SDS – Metallic Utensils Sub-Sector

Dear Sir,

Greetings! The Sustainable Enterprise Project (SEP) support microenterprises in business clusters and supports the expansion of innovative economic activities conducive to a more sustainable environment. The project focuses on areas that are environmentally stressed and vulnerable to climate change and natural disasters to promote sustainable technologies and practices among ME's at vulnerable areas of Bangladesh.

I am happy to submit the report on the Baseline Study of the project SDS is implementing. On Metallic Utensils sub-sector has been well designed to support the goal of the main SEP project. I hope the baseline study report will help to understand the progression and achievement of the goals and specific objectives.

With Best Regards,

Abu Darda  
Independent Consultant  
+8810713117896  
Email: mail.darda@gmail.com

## Table of Contents

1	Introduction.....	7
1.1	Background .....	8
1.2	Literature Review of Metallic Utensils of Bangladesh .....	8
1.3	Overall Objectives of the Study .....	9
1.4	Specific Objectives of the Baseline Study .....	9
1.5	Methodology.....	10
1.5.1	Survey Design .....	10
1.5.2	Desk Reviews.....	10
1.5.3	Sampling and sample size .....	11
1.5.4	Selection of Respondents .....	11
1.5.5	Data Collection: Organization method and Tool .....	11
1.5.6	Data Analysis and Reporting .....	12
1.5.7	Ethical consideration.....	12
1.5.8	Limitation .....	12
2	Findings.....	14
2.1	Study Location.....	15
2.2	Business Credentials .....	16
2.3	ME-Dynamics .....	16
2.3.1	Growth of the ME .....	17
2.3.2	Type of assistance ME received .....	18
2.4	Certification Information .....	18
3	Marketing and Sales Analysis.....	20
3.1	Market Development.....	21
3.2	Working effects on Human Health .....	21
4	Environmental parameters .....	22
4.1	Type of waste.....	23
4.2	Dumping of waste and their management.....	23

4.3	Sales of waste.....	24
4.4	Lighting conditions.....	24
4.5	Safe sanitation facility.....	24
4.6	First AID & PPE Condition.....	24
4.7	Condition of Air.....	25
5	Covid 19 Impact.....	26
5.1	Operation of workshop's during Pandemic.....	27
5.2	Revenue Scenario during Covid-19.....	27
5.3	Support need for business.....	27
6	Constraints and Problems faced by the ME's.....	29
6.1	Constraints.....	30
6.1.1	Lack of financial capital.....	30
6.1.2	Lack of modern technological Problem.....	30
6.2	Recommendations.....	30
6.2.1	Solidify the business Identity.....	30
6.2.2	Increase the workers capacity and skill through training and workshops.....	30
6.2.3	Facilitate multi-level of support to cope with COVID impact.....	31
6.2.4	Facilitate for awareness and practice on Environmental Parameters.....	31
6.2.5	Certification.....	31
6.2.6	Facilitate Market Development Activities.....	31
7	Conclusion.....	33
7.1	Conclusion.....	34
8	Annexure.....	35
8.1	Annexure 01: Table of Scale for Data analysis.....	36
8.2	Annexure 02: Terms of Reference.....	45

## Executive Summary

In Bangladesh most of the commonly used household products are made from brass, bell metal or copper – Cooking pots, pitchers, plates, tumblers and bowls are made in diverse shapes and sizes. A variety of other products like tableware, tabletop and wall hangings are often made out of sheet metal by alternatively hitting and hammering the metal.

ME's of Bangladesh are went through a tough manner according to various segments even after the pandemic scenario it went coarse. To understand the insights of ME's exposures, workshop capacity, and revenue impacts and many other relevant things to develop a project proposal aiming for comprehensive resilience building, this assessment has conducted qualitative studies along with conducted interview to the ME's owners and employees. Besides, literature review and field observation of the study areas helped to get a better insight into the ground reality.

94% of MEs have primary level of education. Usually ME's have only one workshop as their business with a working space of 13.44 square feet. On an average one ME works for 9.17 hours a day. 78% of the workers are skilled as per the MEs opinion and 22% of the workers semi-skilled. None of the MEs have any sort of license or certification not even Trade license which is the most basic licensing requirement from government.

Based on selling their metallic products like Plate, Bati, Dish, snoops, vessels, jug, lamp Average monthly sales of ME's 30948 BDT. Monthly average expenditure of ME's 16827 BDT

Monthly average waste sales of ME are 8017 BDT. In this segment we found that 86% Construction/demolition waste are produced in ME's workshop. Three (9%) Hazardous, Liquid and non-liquid waste are produced. Organic and bio-degradable wastes are in 3% and others waste shows 2%.

All the workshops are poorly managed in terms of environmental safety and workplace instruments. There is not enough lightning and air is too dim. No safety equipment or labeling are marked inside the workshop. There is no toilet or even proper hand washing facility available for the workers.

During covid 97% of the MEs were partially opened, however, owners had to reduce the number of employees and used finances from their savings to keep the workshop cost running.

Most of the workshops are heavily constraints by lack of finance and they used very traditional methods and tools. Hence interventions are needed here to improve the

physical facilities inside the workshop. Modern tools and equipment shall be provided to the workshops and so does the worker needs to be trained on using those equipment.

97% of the products are sold outside Shariatpur districts, though the pricing MEs receive are not satisfactory to them. There should be more marketing and sales related activities with effective marketing communication and networking.

# 1 Introduction

## 1.1 Background

Sustainable Enterprise Project (SEP) project is jointly financed by Palli Karma-Sahayak Foundation (PKSF) and World Bank. The objective of SEP is to increase the adoption of environmentally sustainable practices by targeted microenterprises. SEP has selected 30 lead districts as the project working area to demonstrate the project impact on different sub-sectors. The project prioritizes a selected number of polluting microenterprise business clusters and supports the expansion of innovative economic activities conducive to a more sustainable environment.

SDS implementing this sub-project in Shariatpur Sadar upazila under Shariatpur districts of Bangladesh. This 02 year's 27 May 2021 to May 2023 sub-project will support to achieve global goals of the main SEP project. The sub-project activities will be implemented in the business clusters of Metallic Utensils subsector to improve the overall business and environment of the microenterprises.

SDS has taken initiative to conduct a baseline survey through an individual consultation understand the present business, economic and environment status of microenterprises, entrepreneur and their enterprises under Metallic Utensil sub-sector in the sub-project working area as baseline. A total of 60 micro enterprises will get different technical and financial supports through the sub-project.

## 1.2 Literature Review of Metallic Utensils of Bangladesh

Metal crafting in Bangladesh is an ancient tradition with the earliest object, a punch-marked coin, having been made in the first century BC at Wari-bateswar, Narsinghdi. Based on traditional knowledge and the inherent skills of the artisans the craft attained a high standard.

Artisans over the years have produced an amazing range of cast and worked objects in metal, from temple-icons made by the lost-wax process to ornamental studs, like the one Nawab Sirajuddoulah wore during *darbar* (now in the Victoria and Albert Museum, London). However, the most commonly crafted metal products were and continue to be vessels and utensils, in numerous shapes and sizes. These objects of daily use combine aesthetics with form and function to meet the everyday needs of their users.



Metals used in crafting have traditionally been copper, bronze (copper and tin alloy), brass (copper and zinc alloy), bell (tin and copper alloy) gold, silver, iron, *panchaloha* (literally, five

metals, an alloy of copper, brass, lead, silver, gold) and *ashtadhatu* (alloy of silver, gold, copper, zinc, lead, tin, iron, mercury)<sup>1</sup>.

The artisans employ a number of techniques to craft the metal – including among others shaping, casting- both solid and hollow, engraving, enameling and repousse work.

### 1.3 Overall Objectives of the Study

The baseline survey will be conducted with a view to obtain a snapshot assessment of the current business, economic, environment and climatic conditions of the micro-entrepreneurs who are likely to participate in the project activities, so that the changes related to the project interventions and their progress can be evaluated after the project period. Moreover, the survey will establish the baseline situation on a significant number of variables relevant to sales, profit, employment, asset creation, environment and health and safety situation etc. by the project participants.

### 1.4 Specific Objectives of the Baseline Study

1. Estimate the number of MEs operating in the survey areas, and the types of activities that are performed by these MEs;
2. Evaluate the growth rates of these firms and their potentials, identifying which types had the highest growth and the reasons behind it, to promote the future growth of the sector;
3. Identify the structure of the ME sector, regarding gender, type of ownership, and the employment generated, i.e., how many are owned by women? How many people are employed in each enterprise? Is there any causal relationship across these dimensions?
4. Evaluate the contribution of the ME sector to the household income, the importance of this income in the overall household income generation and its uses;
5. Assess the existing status of relevant adaptive environmentally sustainable indicators like, air, soil, water quality (WQ), health and environmental safety (HES), waste management and climatic problems of the project;

---

<sup>1</sup> Source: Encyclopedia of Intangible Cultural Heritage (Asia InCH).

6. Show the impact analysis of COVID-19 for individual value chain actors and suggest there, what possible measures should be taken to overcome economic, social, health (according to WHO/IEDCR guideline) and environmental consequences faced by the individual MEs on their value chain network due to COVID-19.
7. Identify the types of assistance that the MEs have received and their sources, as well as their future need for technical, managerial and financial assistance;
8. Identify the general problems (access to inputs, output and credit markets, etc.) and problems related to the common service facilities in the business clusters including existing socio-economic and environmental condition faced by the ME sector (government regulations, tax burdens, certification, marketing and relevant problems related).
9. To provide benchmark information for measuring project achievements and impact (at the project impact, outcomes and outputs levels based on the project proposal, result framework and/or theory of change;
10. To identify benchmarks and indicators those can be used as a point of reference for monitoring and evaluation of the project.

## 1.5 Methodology

### 1.5.1 Survey Design

The baseline survey employed quantitative survey approach and in particular survey questionnaires. The method was purposively selected in order to collect quantitative data needed to set appropriate indicator targets. Development of data collection tools which contains questions related to the relevant adaptive environmentally sustainable indicators like, air, water quality (WQ), health and environmental safety (HES), waste management and climatic problems of the project and finalize the tools in consultation with SDS and PKSF (incl. region-specific instruments to assess current scenario).

### 1.5.2 Desk Reviews

For the purposes of identifying key deliverables and parameters for the baseline survey, desk review was among the methods employed for the survey. Review of the secondary data/relevant literature and project documents, relevant past reports and important secondary data punching in Microsoft Excel and analysis of data using widely recognized statistical software like, SPSS or Stata; Analyze data and present to the project team before preparing the draft report.

### 1.5.3 Sampling and sample size

We have used stratified random sampling method for determining the samples. Total 60 (100%) MEs engaged in utensils production has been surveyed for the baseline study purpose.

### 1.5.4 Selection of Respondents

Both purposive and simple randomized questionnaire: MEs Interview was used in the survey dictated by the nature of the category of the beneficiary considered. To fairly decide on the selection of respondents, participants (enumerators) were asked specific questions and marked those in a guided manner.

### 1.5.5 Data Collection: Organization method and Tool

The data collection was carried out between 16th to 18th of October 2022. Volunteer enumerators supervised and guided by SDS's staff. All the required data has been collected from the 11 villages of Shariatpur Sadar along with Palong Thana. Prior to the field data collection, data collector were well trained on the basis of baseline survey and were extensively exposed to the questionnaires for this baseline survey.



This was followed by field pretesting exercises to familiarize the enumerators with the eventual field work. Although other methods (e.g. desk reviews, observations) have been used in the survey, questionnaire of ME's Interview was the key tool used for collecting primary data for this baseline survey.

### **1.5.6 Data Analysis and Reporting**

The data were analyzed using Excel Pivot Tables, an advanced data analysis tool within MS Excel. The analyzed data was crosschecked for consistency and presented in form of tables, graphs, charts and figures where appropriate. For ease of understanding, important sections and/or elements of the analyzed data were explained in brief narratives. The process information was triangulated with information gathered through desk reviews and project information. After all the above, a draft baseline report was produced.

### **1.5.7 Ethical consideration**

Ethical practices were carefully explained and discussed with data collection team during pre- data collection training. It involved proper introduction of data collector, explaining the purpose of the baseline survey, how the information would be used, the participant's voluntary participation and freedom to exit/refuse participation at any stage without consequences. All this was done with the aim of obtaining informed consent of each participant before proceeding with data collection. During the field data collection, the survey team led by enumerators met local ME's of each locality/village for introduction and to seek their consent for the baseline survey. In every engagement and/or meeting with the local participants, the survey teams respected cultural norms and practices. As the survey used specific questionnaires relevant to workshops, the survey team ensured that interviewed selected a place where s/he was comfortable with, and norms were respected. Finally, at the end of the questions/discussion, the data collectors thanked the respondents for their time, willingness and effort to provide data for the baseline survey.

### **1.5.8 Limitation**

This survey didn't happen without limitations. The following were both the expected and experienced limitations during the baseline survey. Firstly, there were few questions of which respondents had to answer those by assuming and in that case enumerators had to depend on their answer. Secondly, in some instances, followed questioner is suitable

for the workshop owners but those who are doing business by focusing on retail trade or bulk trade at the same location are quite out of focused.

## 2 Findings

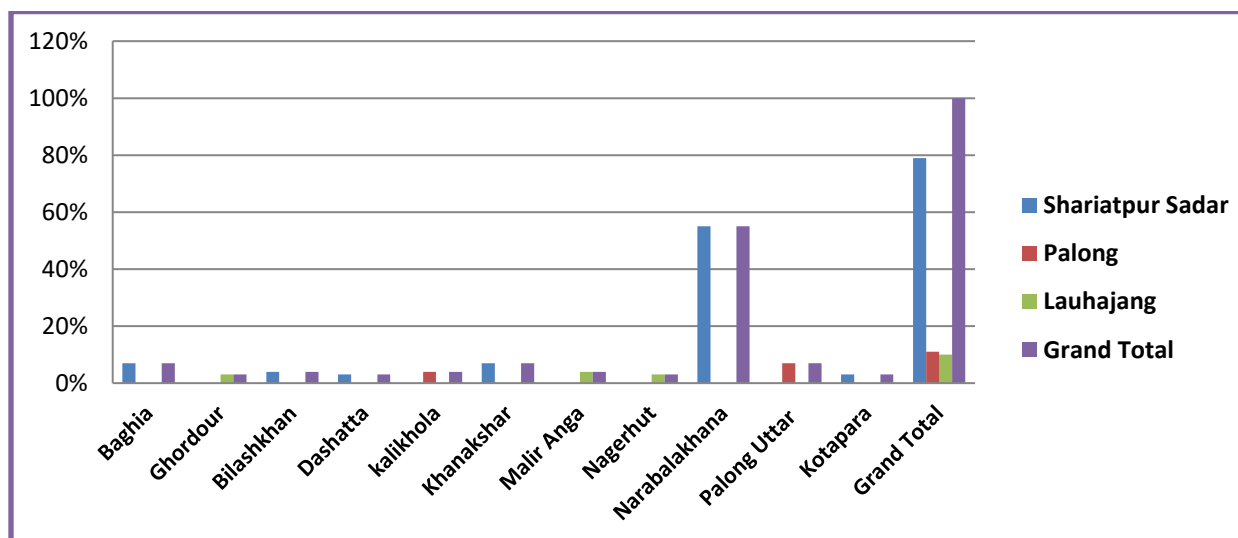
## 2.1 Study Location

The baseline survey was carried out 11 locations of Shariatpur Sadar, Palong and Lauhajang thana.

**Table 1: Sample Distribution of the study**

	Baghia	Ghordour	Bilashkhan	Dashatta	kalikhola	Khanakshar	Malir Anga	Nagerhut	Narabalakhana	Palong Uttar	Kotapara	Grand Total
<b>Shariatpur Sadar</b>	7%	0%	4%	3%	0%	7%	0%	0%	55%	0%	3%	79%
<b>Palong</b>	0%	0%	0%	0%	4%	0%	0%	0%	0%	7%	0%	11%
<b>Lauhajang</b>	0%	3%	0%	0%	0%	0%	4%	3%	0%	0%	0%	10%
<b>Grand Total</b>	7%	3%	4%	3%	4%	7%	4%	3%	55%	7%	3%	100%

Majority (93%) of the respondents were male. Female respondents constituted only 7% in this survey.



**Figure 1: Location wise distribution of MEs**

Seventy nine percent (79%) of the overall respondents were interviewed in Narabalakhana of Shariatpur Sadar, 11% from Palong and rest of the 10% from Lauhajang thana.



## 2.2 Business Credentials

The baseline sought to understand the business credential portion by measuring few things from those ME's workshop own or rented, tenure of the workshop from the inception date along with respondent's educational level. Almost 100% of the workshop owned by the respondents and their average tenure of business is 28.06 years.

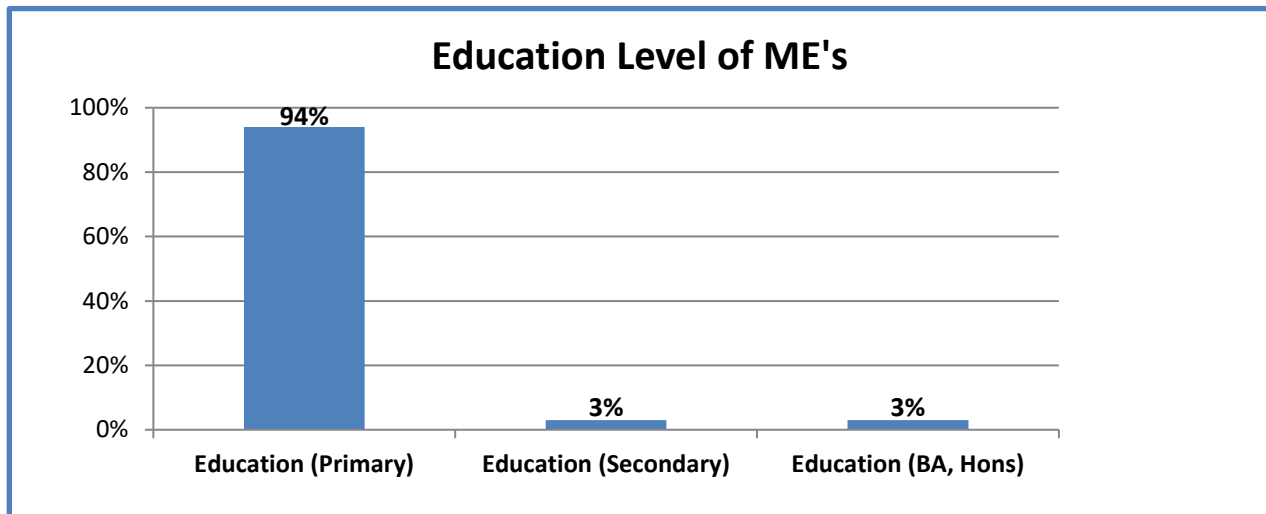


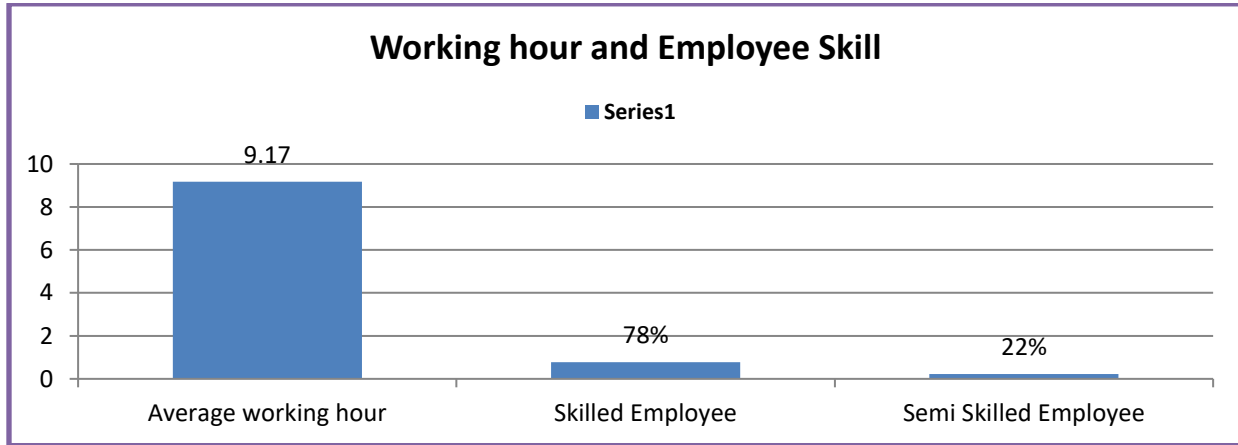
Figure 2 : Education Level of MEs

On the contrary, Ninety four (94%) of the ME's (Owner) education level is Primary, 3% are Secondary, rest of the 3% are BA (Hon's). In this survey we found that all of the respondents owned workshop but they don't have any brand name, trade mark and even a logo.

## 2.3 ME-Dynamics

We understand the practice related to ME's dynamics, the survey asked questions on how much space in workshop, working hours, products type, and client's visits in average, employees along with technical persons they have. In this survey we found that ME's workshop average space in square feet is 13.44 from those 8 square feet is lowest and 30 square feet is the highest. Average working hour 9.17, daily client visit in average in a workshop is 3.75 from those lowest is 1 (one). Our survey team gathered data from 29 workshops in cumulative they have 51 employees from those 78% are skilled and 22% are semi-skilled employees.

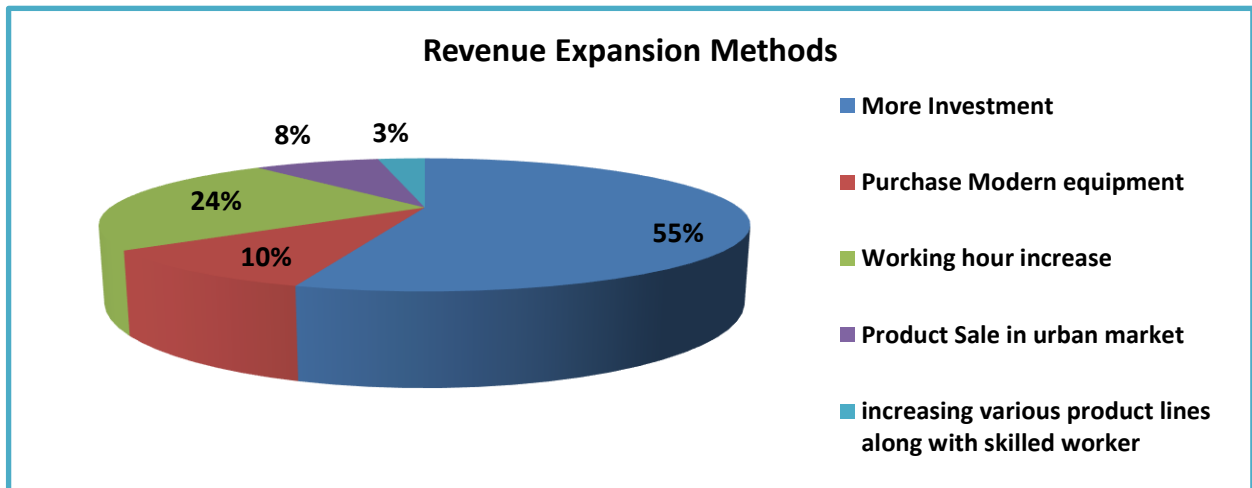




Most of the cases (100%) we found that those workshops don't use any Biodegradable Packaging Material for their Product.

### 2.3.1 Growth of the ME

The baseline showed that 14% of the workshop owners able to expand their business in last three years and 86% unable to do so in context of covid-19 impact, investment inability, high cost of skilled labor as well as raw materials. In this survey the project wanted to know from the owners that what are the major services that he/she could offer to increase the revenue from those 55% confirmed they need **more investment**, 10% confirmed that they need to purchase **modern equipment's** to increase the revenue. **Working hour increase** and lower cost of production can be revenue booster confirmed



from 24% of the respondents.

Eight (8%) respondents think that suitable **urban market** can be revenue earning source. Three (3%) respondents assured that **increasing various product lines along with skilled** worker may help to increase revenue. The below chart shows ME's business expansion situation in last three years and their thoughts to increase the existing revenue.

### 2.3.2 Type of assistance ME received

The survey found that 98% ME's didn't take any loan from any bank or financial service system. 2% took their loan from the government bank. None of the workshop owner has received any technical training even their subordinates also don't have such training besides on job training which is very traditional. Survey shows also 10% ME's wants to get to train and maintenance about polishing machine. Seventeen (17%) ME's believe that they need support to get cheap price raw materials and low cost labor. At the same time 24% respondents wants to have support to buy modern equipment. Rest of the 49% thinks that they need investment support.

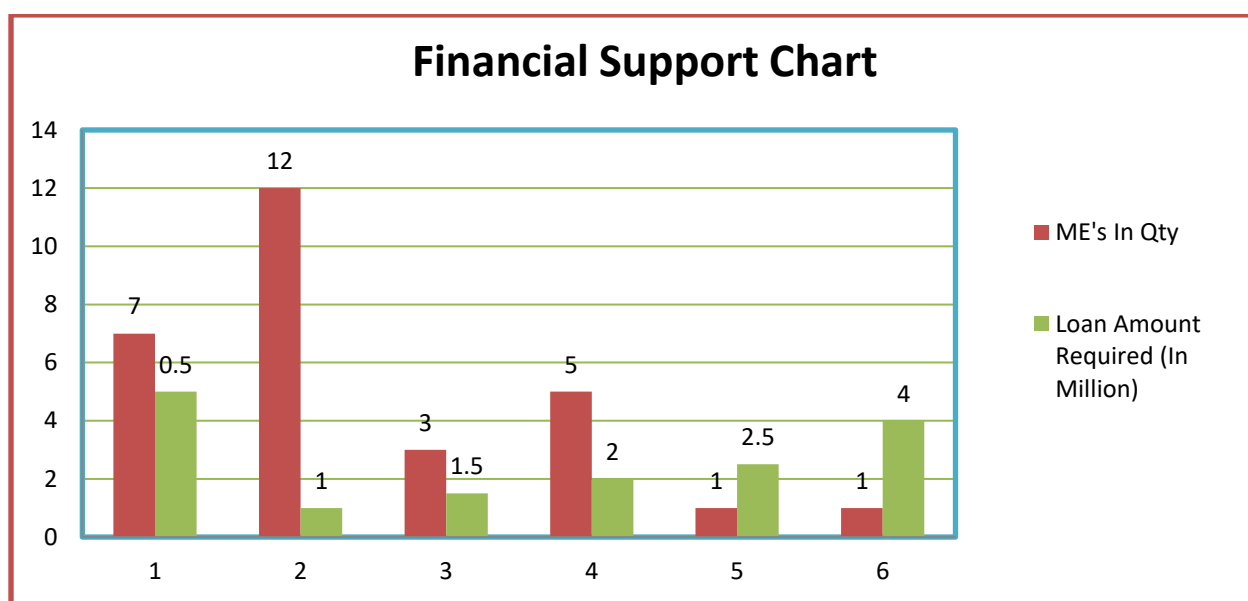


Figure 4: Financial Support Chart

## 2.4 Certification Information

The survey asked a specific question to determine the type of certification/license of ME's workshop which are namely 1) Trade License 2) TIN Certificate 3) VAT Registration Certificate 4) Registration of Industrial Investment Project 5) Factory Layout Approval 6) License of Factory 7) Membership Certificate (Any) 8) Import Registration Certificate

(Applicable for Import Business) 9) Export Registration Certificate (Applicable for Export Business) 10) Environment Clearance Certificate 11) Fire License 12) Registration of Trademark 13) BIN Certificate **but unfortunately none of the ME's have above certificates or license.**

# 3 Marketing and Sales Analysis

### 3.1 Market Development

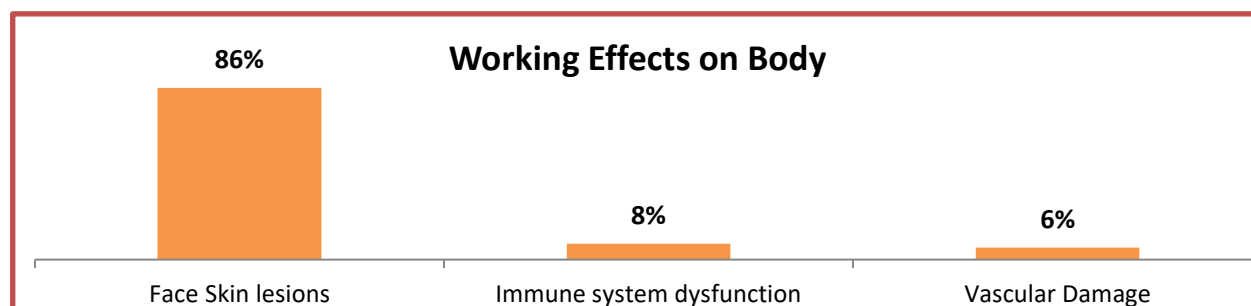
The baseline showed that only 3% of the respondents sell their products to the local market and 97% outside of Shariatpur. Based on selling their metallic products like Plate, Bati, Dish, spoons, vessels, jug, lamp they earn 5K-10K in a month in percent of sixty six (66%), 10K-20K is 17% as well as 20K-40K monthly income has been secured by rest of the 17% ME's. Most of the cases respondents are sell their products to the retail end directly. We have also found 2% of retail who actually sold their products to the customers from their end.

Monthly Income in Thousand	Number of ME's	In Percent (%)
5K – 10 K	19	66%
10K – 20 K	5	17%
20K – 40 K	5	17%

Table 2: Monthly income of ME's

### 3.2 Working effects on Human Health

Here the questions were about to adequate hygiene practice regarding health and safety issues as well as working effects on body of an employee while working with metallic utensils. Answer of a disease type 86%



told that they are facing Skin Lesions, Eight (8%) face difficulties of Immune system dysfunction and 6% of them are face vascular damage and may need to heal more than 2 weeks to recover, sometimes few months along with more than 5K of treatment cost. On the contrary, 100% of the respondents told that they face burn and cut in their occupational accidents.

## 4 Environmental parameters



Figure 5: Hazardous Outdoor in front of a Metallic Workshop

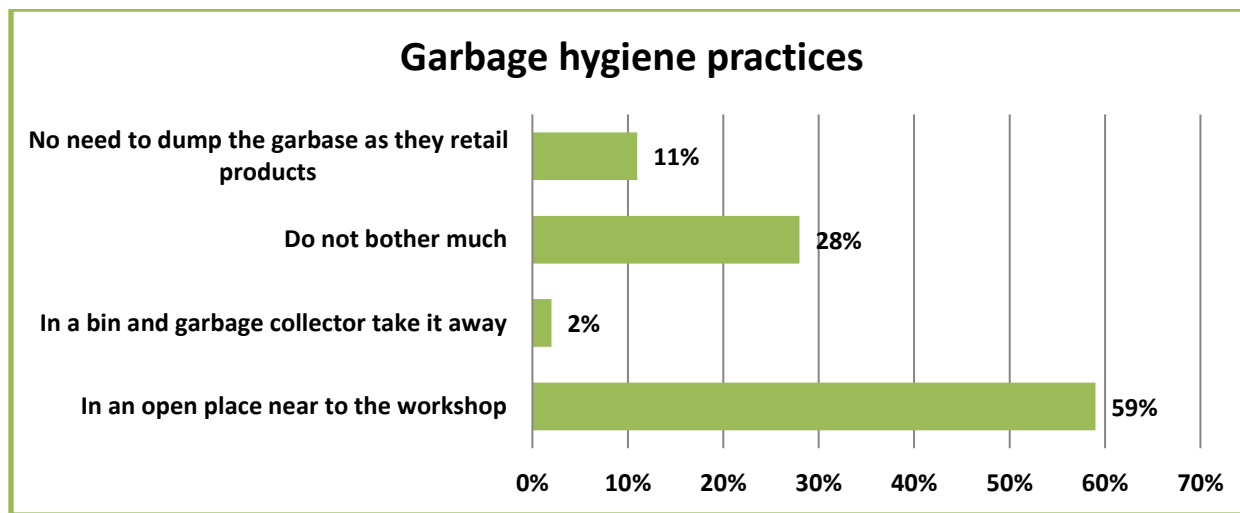
## 4.1 Type of waste

The study found that organic and bio-degradable wastes as well as hazardous, liquid and non-liquid wastes are produced from the workshop's. In this segment we found that 86% Construction/demolition waste are produced in ME's workshop. Three (9%) Hazardous, Liquid and non-liquid waste are produced. Organic and bio-degradable wastes are in 3% and others waste shows 2%

Organic and bio – degradable waste (Food, Cloths),	Hazardous, liquid and non-liquid, grease and other chemicals	constructional/de molition waste	Others
<b>3%</b>	<b>9%</b>	<b>86%</b>	<b>2%</b>

## 4.2 Dumping of waste and their management

The indicator for adequate waste management practices was calculated based on their responses on all 17 parameters.



**Figure 6: Garbage Hygiene Practices**

11% of the wastes are sold to waste collectors where as 28% of the respondent do not bother about the waste and left it unattended. 59% of the respondents prefer to dump the wastage to nearby open space.

### 4.3 Sales of waste

3.86 KG of waste produce in average every day from a workshop and 97% of the respondents sell those to the local market in average of 8,017/= BDT every month, that can be identical upon the size of workshop.

### 4.4 Lighting conditions

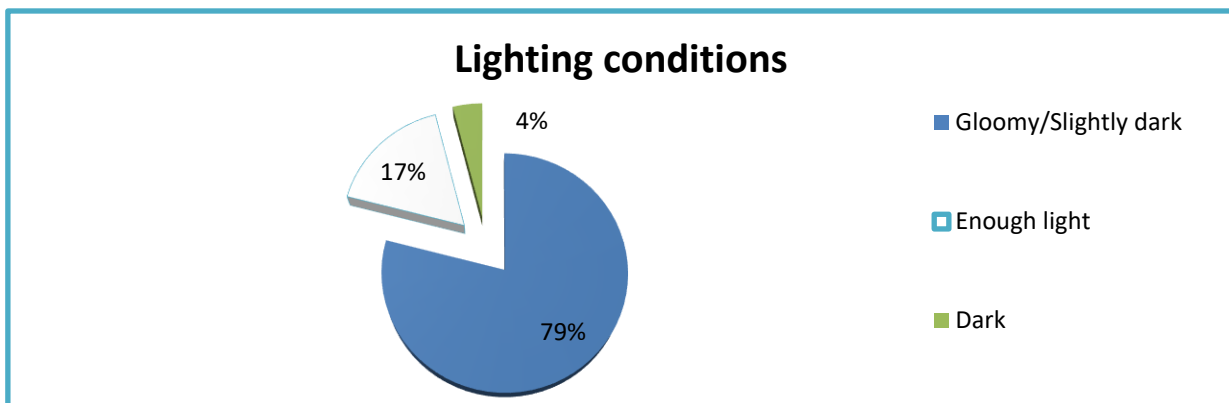


Figure 7 : Lighting Conditions

We found few important data that shows lighting conditions in day time in the workshops are not that suitable as 79% of those are Gloomy/Slightly dark, Seventeen (17%) have enough light and Four (4%) are literally dark.

### 4.5 Safe sanitation facility

The baseline study shows that in terms of sanitation facilities, 97% workshop has no suitable sanitation facilities and 80% workshop has no such safe drinking water facilities for the employees.

### 4.6 First AID & PPE Condition

Study shows, none of the workshop has any first aid box within the quick proximity and even none of a worker wears PPE while on the working hour.



## 4.7 Condition of Air



Figure 8 : Smoky Air inside the workshop with poor lighting

79% workshop's air qualities are Smoky/Foul Smell of oil/Exhaust gas and 21% are clean and free from smell. None of the workshop has symbols or any navigation, any hanging item over the ceiling/roof or wall along with designated hand washing facilities.

# 5 Covid 19 Impact

## 5.1 Operation of workshop's during Pandemic

During the pandemic scenario respondents were affected much, 97% of those were partially open and only 3% respondents were given the positive answer that they remain open during that time. Many workshop owners reduced the workers and used saving amounts for living during shutdown. From those

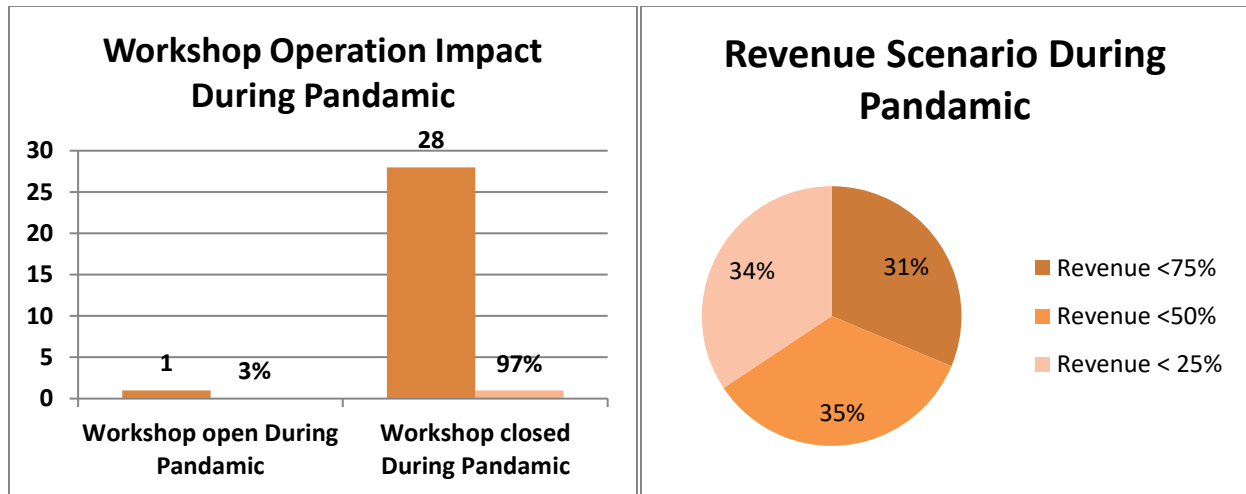


Figure 3 Workshop Operation Impact during Pandemic & Figure 4 Revenue Scenario during Pandemic

## 5.2 Revenue Scenario during Covid-19

31% respondents told that their revenue drop down to 75% during the pandemic, 34% directly faced 50% revenue down at the same time, in another slab revenue went down to 25% of thirty four (34%) workshops. All of the Respondents told that those times were critical enough even for their survival. Till now none of respondents are unable to overcome the pandemic loss.

## 5.3 Support need for business

As a consequence, 76% respondents thought that they need both financial and technical support to overcome and 24% believe that they need cash/financial support to turn around their business.

Figure 9: Types of Support Need for Business



# 6 Constraints and Problems faced by the ME's

## 6.1 Constraints

### 6.1.1 Lack of financial capital

ME's financial problem is one of the main reasons that they were unable to increase their production, due to this reason they can't even buy the required raw materials. In our observations and respondents conversation found that 96% of the ME's have direct financial problem and rest of the ME's (4%) have financial demands to increase their business.

### 6.1.2 Lack of modern technological Problem

Study found that 90% ME's have such problem who wants to introduce the new technologies to their workshop. They want to buy new machines like **Polishing machine** and other relevant machines that can help them to produce suitable products within a short time. They had to work on manually which is very time consumable.

## 6.2 Recommendations

After completions of this baseline study there are some portions where needs to develop in a religious manner.

### 6.2.1 Solidify the business Identity

In a business credentials 100% ME's have to name for their workshops, they don't have any brand name, trade mark or even a logo. This needs to be change because every entity (ME) should have those things at least a name for their workshop.

### 6.2.2 Increase the workers capacity and skill through training and workshops

Most of the ME's own their workshop but in a manner of skilled employee they just have 78% and 22% semi-skilled employee (who are trained in a traditional way at the time of their job). This 22% semi-skilled person needs to train before they start the job. On job training is risky for anyone who is new to this job. We found that 78% skilled persons are also trained in that way (On job training).

### **6.2.3 Facilitate multi-level of support to cope with COVID impact**

We found that due to the covid-19 impact ME's revenue went down drastically and even they were unable to overcome the pandemic loss till now. ME's are ready to increase working hour if they can find a suitable investment and they demand, which should be in below percent than a bank does. ME's can be guided by technical support and even managerial support sometimes, that they can take decision where to buy raw materials in a cheap price and how to grow their business by selling their products in a suitable market.

### **6.2.4 Facilitate for awareness and practice on Environmental Parameters**

We found that 100% ME's are not bothered much about their waste management, lighting condition of the workshop, type of lights are using in the workshop, sanitation facility and even safe drinking water facility. In other conditions we found that none of the ME's have first aid box, designated hand washing facilities, air quality of the maximum ME's are not that suitable at all. It's been recommended that in every parameters of environment, ME's need to change the entire scenario otherwise, it will affect the workshop's environment along with employees health issues are also been related to this.

### **6.2.5 Certification**

After baseline study we found that none of a ME's have any kind of certificate or license. This situation needs to be change straightway they should have had the Trade License, TIN, VAT Registration, License of factory, Fire License, Environment clearance license, BIN Certificate at least.

### **6.2.6 Facilitate Market Development Activities**

In context of market development ME's needs to have low price raw materials for the production, due to these reason we have to develop or find a chain market from where ME's can buy raw materials in low cost on the contrary, can sell those not only outside of Shariatpur they should have develop a plan to sell the products to directly to the consumers or even in online. ME's should think to export their products to the abroad where many suitable markets are available. They should increase the working hours and even they need to train their employees who are getting on job training and are very slow in work, skilled workers seems to transfer from ME's to ME's with a suitable transfer amount which can be 2 or 3 hundred thousand along with month wise salary. There

should be a pipeline where every quarter or even a year some skilled workers will come to this platform.



# 7 Conclusion

## 7.1 Conclusion

The survey provided an in-depth understanding of the baseline information and data through which key project indicators were established. According to the conducted baseline study we went through very procedural ways and found some important as well as very interesting findings will be the key factors to judge the entire condition of a ME from those assessments area. Study went through individual ME's business condition, ME's growth rate and along with existing financial condition. Environmental conditions of workshops, skilled and semi-skilled employee percentage along with their training procedures. This baseline study shows that maximum ME's need financial and technical support to increase their business simultaneously in pandemic scenario how much their revenue went down has

also been reflected in this study. Day to day price hike of raw materials is now one of the main reasons of their low trend in revenue. Health and safety issues are mentionable in the workplace of the ME's as they didn't bother much about this. Almost 100% of the ME's employee didn't even wear the PPE and they even don't bother much regarding waste management, lighting condition.

There were various problems has been marked during the baseline study from those, ME's low financial strength was the most important thing at the same way increasing the price of raw materials, unskilled or semi-skilled labor and even lack of suitable market for primary sales of their products are mentionable facts. Moreover, traditional techniques of production and employees are till now trained in a traditional manner.

# 8 Annexure

## 8.1 Annexure 01: Table of Scale for Data analysis

This exercise provided a guide to the field sampling procedure that is summarized in the following table.

<b>Table of Scale</b>				
<b>Particulars</b>		<b>Description</b>	<b>Ranking Scale</b>	
<b>A. Business Credentials</b>	Name of the ME/Workshop	Name Exist or Not	Exist (Name)/ Not Exist (0)	
	Owner's sex	Men or Women	Men (1)/ Women (2)	
	Business Address	Address	Mentioned Address	
	Year of Establishment of the workshop	Duration of Business Tenure	Mentioned Figure	
	Owners' education level	Primary		1
		Secondary		2
		SSC		3
		HSC		4
		BA (PASS)		5
		BA (Hon's)		6
		Masters/Post Graduate		7
How many workshops do you own	Mentioned Figure	Mentioned Figure		
Do you have any brand name?	Yes or No	Yes (1)/No (2)		
Do you have any trademark	Yes or No	Yes (1)/No (2)		
Do you have any logo?	Yes or No	Yes (1)/No (2)		
<b>B. ME-Dynamics</b>	Area/space of the workshop (sqft)	How much space in Sqft	Mentioned Figure	
	Business hour / workshop open (within 24 hour)	Working Hour	Mentioned Figure	
	Average clients per day (numeric)	Daily Clients in average	Mentioned Figure	

	Ownership of the workshop space	Own	1
		Rented	2
		Leased	3
	If rented or leased, monthly rent in BDT?	Monthly Rent	Mentioned Figure
	Total number of employees	Employees	Mentioned Figure
	Number of technical person of the workshop?	Technical Persons in workshop	Mentioned Figure
	Please mark the types of Products you make in the factory	Lamp	1
		Dish/Bati	2
		Snoops	3
		Plate/Thala	4
Lamp sheat		5	
Jug		6	
Others (Science Equipment)		7	
Do you use Biodegradable Packaging Material for Product?	Yes or No	Yes (1)/No (2)	
<b>C. Growth of the ME</b>	Yearly revenue of the workshop? (last three years) 2019/2020/2021	Revenue last 3 Years	Mentioned Figure
	In last three years, did you able to extend your business?	Yes or No	Yes (1)/No (2)
	If No, what is the main reason that you could not expand your business?	Covid Impact	1
		Investment Issue	2
		High cost of raw materials	3
		Covid 19 Impact along with lack of skilled worker	4
		Covid Impact and Investment Both	5
		Those who able to expand business	6
	Need more investment	1	

	According to the owner, what are the major services that he/she could offer to increase the revenue?	Need more investment which will increase production and profit margin	2
		Need to purchase modern equipment to increase revenue	3
		Working hour increasing, low cost product purchase	4
		Need suitable market to sell the materials that can expand revenue on the contrary low price of raw materials and labor cost can also be a reason to expand business	5
		Need to sell the products to the urban area which can assure more revenue	6
		Increasing working hour and production of products	7
		Increasing various product line along with skilled worker may help to increase revenue	8
	Tell us your expenditure per month to run the workshop.	Expenditure to run workshop	Mentioned Figure
<b>D. Environmental parameters</b>	What types of wastes are produced in you workshops?	i. Organic/Bio degradable waste (Food, Cloths)	1
		ii. Hazardous, Liquid and non-liquid waste	2
		iii. Construction/demolition waste	3
		iv. Electronics waste	4
		v. Others (No waste produce here)	5
	Where do you dump the garbage/waste normally?	i. In an open place near to the workshop	1
		ii. In a bin and garbage collector take it away	2
		iii. Do not bother much	3
		iv. No need to dump the garbage as they retail products	0

	In an average what quantity of waste your workshop produce every day?	Waste qty in average	Mentioned Figure
	Do you sell Waste?	Yes or No	Yes (1)/No (2)
	If Yes, how much do you sell per Month in BDT?	Monthly waste sell amount	Mentioned Figure
	What is lighting condition in day time? (Observation of the enumerator)	i. Enough Light	1
		ii. Gloomy/Slightly dark	2
		iii. Dark	3
	What type of light/bulb they use? (Observation of the enumerator)	i. Energy Efficient Light	1
		ii. Non energy efficient/Regular Bulb	2
	Do the workshop have safe sanitation facilities for its worker? (Observation of the enumerator)	Yes or No	Yes (1)/No (2)
	Do the workshop have safe drinking water for the workshop? (Observation of the enumerator)	Yes or No	Yes (1)/No (2)
	Do the workers wear PPE (Personal Protection Equipment)? (Observation of the enumerator)	Fully/Partially/Not at all	1/2/3
	Do the workshop have any first aid box within the quick proximity? (Observation of the enumerator)	Yes available (Can See)/Available (In close door/box)/Not available at all	1/2/3
What is the air quality inside the workshop at the time of the interview?	i. Smoky/Foul Smell of oil/Exhaust gas	1	
	ii. Suffocating	2	
	iii. Clean and free from smell	3	

	(Observation of the enumerator)		
	How many children working in your workshop?	i. None/ ii. 1/iii. 2/ iv. More than 3	1/2/3/4
	Do the workshop have a valid (expiry date) fire extinguisher? (Observation of the enumerator)	Yes or No	Yes (1)/No (2)
	Do the workshop has designated hand washing facilities? (Observation of the enumerator)	i. Yes and soap is available	1
		ii. Yes but soap is not available	2
		iii. No designated spot for hand wash	3
	Do the workshop have symbols/markings for navigation?	Yes or No	Yes (1)/No (2)
Does the workshop have hanging items over the celings/roof/wall?	Yes or No	Yes (1)/No (2)	
<b>E. COVID 19 impact</b>	Was the workshop open during COVID-19 pandemic situation in 2020 and in 2021?	i. Yes/ii. Partially open/iii. No	1/2/3
	What are financial loss you have to encounter?	i. Revenue drop down to 75%	1
		ii. Revenue drop down to 50%	2
		iii. Revenue drop down to 25%	3
		iv. Revenue drop down to Zero	4
	Were you or any of you worker affected by the COVID-19	Yes or No	Yes (1)/No (2)
	What have you done to survive during COVID-19 shutdown?	i. Took loan	1
ii. Reduce the number of workers		2	
iii. Sell assets		3	
iv. Used saving amount		4	



		v. Reduce the family cost	5
		vi. Others	6
	Was there any social negativity you have to face due to the covid pandemic?	i. Yes, People avoided my workshop	1
		ii. Yes, my family went to village/elsewhere as I was publicly operating	2
		iii. Yes, I have to live alone	3
		iv. Yes, peoples attitude was changed	4
		v. No	5
	Do you think you have overcome from the pandemic loss?	Yes or No	Yes (1)/No (2)
	If No, what is your suggestion in terms of support you need to overcome?	Need cash/financial support	1
		Need technical support	2
Need both financial and technical support		3	
Others		4	
<b>F. Type of assistance ME received</b>	Did you take loan from any bank/financial service system?	Yes or No	Yes (1)/No (2)
	If Yes, from where you took loan?	i. Bank/Financial Institution	1
		ii. Relative/Friends	2
		iii. Money Lender (Mohajon)	3
		iv. NGO's (Micro Credit)	4
	Did you (the owner) receive any technical training?	Yes or No	Yes (1)/No (2)
	If yes from where?	i. Government Institute	1
		ii. Private/Company	2
		iii. NGOs	3
		iv. On Job Training (Traditional way)	4
v. Training from abroad		5	
vi. None		0	
Did the worker (s) receive any training?	Yes or No	Yes (1)/No (2)	

	If yes from where?	i. Government Institute	1
		ii. Private/Company	2
		iii. NGOs	3
		iv. On Job Training (Traditional way)	4
		v. Training from abroad	5
	What support you need in terms of technical support?	To train and maintenance about polishing machine	1
		How to get cheap price raw materials and low cost labor	2
		To buy modern equipment	3
		Need training for polishing	4
		Investment Support	5
	What support you need in terms of managerial support?	To train and maintenance about polishing machine	1
		How to get cheap price raw materials and low cost labor	2
		To buy modern equipment	3
		Need training for polishing	4
		None	0
	In terms of financial support how much do you need?	Financial Support	Mentioned Figure
	Where you want to spend the money?	i. Expanding Business	1
		ii. Buy modern equipment	2
		iii. Buy spare parts	3
iv. Others		4	
<b>G. Certificati on Information</b>	What type of certification/license you have for your workshop? See the list and write down the serial number.	i. Trade License	1
		ii. TIN Certificate	2
		iii. VAT Registration Certificate	3
		iv. Registration of Industrial Investment Project	4
		v. Factory Layout Approval	5
		vi. License of Factory	6
		vii. Membership Certificate (Any)	7

		viii. Import Registration Certificate (Applicable for Import Business)	8
		ix. Export Registration Certificate (Applicable for Export Business)	9
		x. Environment Clearance Certificate	10
		xi. Fire License	11
		xii. Registration of Trademark	12
		xiii. BIN Certificate	13
		xiv. No License/Certificate at all	14
<b>H. Market Development</b>	Where you sell your product?	i. Local Market	1
		ii. Outside of Shariatpur	2
		iii. Outside of Bangladesh	3
		iv. Online	4
	What types of product mainly bought customer?	i. Dish/Bati	1
		ii. Snoops/Chamoose	2
		iii. Vessels/Jug	3
		iv. Plate/Thala	4
	How much tk do you profit in a month?	i. 5K-10K	1
		ii. 10K-20K	2
		iii. 20K-40K	3
		iv. >40K	4
	How to sell your product	i. Producer to Customer	1
		ii. Producer to Retailer	2
		iii. Middle Man to Customer	3
		iv. Others	4
<b>I. Working Effects on body</b>	What types of disease occurred by technician or ME's	i. Immune system dysfunction	1
		ii. Vascular Damage	2
		iii. Skin Lesions	3
		iv. Nervous system disorders	4
	How long you suffered from this disease	i. 1 Week	1
		ii. 2 Weeks	2
		iii. More than 2 weeks	3
		iv. Nothing	4
			i. Less than 1000

	How much taka needed for recover from this disease	ii. Less than 5000	2
		iii. More than 5000	3
	Occupational accidents	i. Cut	1
		ii. Chemical Spillage	2
		iii. Burn	3
		iv. Other	4
	Diseases associated with professional activity	i. Eczema/Dermatitis	1
		ii. Rhinitis	2
		iii. Musculoskeletal Injury	3
		iv. Asthma/Depression/Burnout/Anxiety	4

## 8.2 Annexure 02: Terms of Reference

### Terms of Reference (ToR)

#### Terms of Reference (ToR) of a Baseline Study

##### 1. Background

Sustainable Enterprise Project (SEP) project is jointly financed by Palli Karma-Sahayak Foundation (PKSF) and World Bank. The objective of SEP is to increase the adoption of environmentally sustainable practices by targeted microenterprises. SEP has selected 30 lead districts as the project working area to demonstrate the project impact on different sub-sectors. The project prioritizes a selected number of polluting microenterprise business clusters and supports the expansion of innovative economic activities conducive to a more sustainable environment.

SDS implementing this sub-project in Shariatpur Sadar upazila under Shariatpur districts of Bangladesh. This 02 year's 27 May 2021 to May 2023 sub-project will support to achieve global goals of the main SEP project. The sub-project activities will be implemented in the business clusters of Metallic Utensils subsector to improve the overall business and environment of the microenterprises.

SDS has taken initiative to conduct a baseline survey through an individual consultation understand the present business, economic and environment status of microenterprises, entrepreneur and their enterprises under Metallic Utensil sub-sector in the sub-project working area as baseline. A total of 60 micro enterprises will get different technical and financial supports through the sub-project.

##### 2. Overall Objectives of the Study:

The baseline survey will be conducted with a view to obtain a snapshot assessment of the current business, economic, environment and climatic conditions of the micro-entrepreneurs who are likely to participate in the project activities, so that the changes related to the project interventions and their progress can be evaluated after the project period. Moreover, the survey will establish the baseline situation on a significant number of variables relevant to sales, profit, employment, asset creation, environment and health and safety situation etc. by the project participants.

##### 3. Specific Objectives of the Baseline Study:

1. Estimate the number of MEs operating in the survey areas, and the types of activities that are performed by these MEs;

2. Evaluate the growth rates of these firms and their potentials, identifying which types had the highest growth and the reasons behind it, to promote the future growth of the sector;
3. Identify the structure of the ME sector, regarding gender, type of ownership, and the employment generated, i.e., how many are owned by women? How many people are employed in each enterprise? Is there any causal relationship across this dimensions?
4. Evaluate the contribution of the ME sector to the household income, the importance of this income in the overall household income generation and its uses;
5. Assess the existing status of relevant adaptive environmentally sustainable indicators like, air, soil, water quality (WQ), health and environmental safety (HES), waste management and climatic problems of the project;
6. Show the impact analysis of COVID-19 for individual value chain actors and suggest there, what possible measures should be taken to overcome economic, social, health (according to WHO/IEDCR guideline) and environmental consequences faced by the individual MEs on their value chain network due to COVID-19.
7. Identify the types of assistance that the MEs have received and their sources, as well as their future need for technical, managerial and financial assistance;
8. Identify the general problems (access to inputs, output and credit markets, etc) and problems related to the common service facilities in the business clusters including existing socio-economic and environmental condition faced by the ME sector (government regulations, tax burdens, certification, marketing and relevant problems related).
9. To provide benchmark information for measuring project achievements and impact (at the project impact, outcomes and outputs levels based on the project proposal, result framework and/or theory of change;
10. To identify benchmarks and indicators those can be used as a point of reference for monitoring and evaluation of the project.

#### 4. Scope of work

---

A detailed activity plan shall be developed after signing of the ToR. The study entails following scope of assignment:

- Review of the secondary data/relevant literature and project document available;
- Develop methodology including study plan and key questions to be answered;
- Development of data collection tools which contains questions related to the relevant adaptive environmentally sustainable indicators like, air, soil, water quality (WQ), health and environmental safety (HES), waste management and climatic problems of the project and finalize the tools in consultation with SDS and PKSF (incl. region-specific instruments to assess current scenario).
- Pre-testing of the research tools in one or two communities and adaption and re-appropriation of the tools if needed;

- Training of the enumerators / data collectors;
- Fieldwork for data collection;
- Collect, clean data and preparation of transcript;
- Share data analysis plan with SDS and PKSF;
- Data punching in Microsoft Excel and analysis of data using widely recognized statistical software like, SPSS or Stata;
- Analyze data and present to the project team before preparing the draft report;
- Develop Table of Contents (ToC) for approval and prepare a first draft of the report and presentation of the draft for feedback;
- Incorporate feedbacks and finalize the report.
- The respondents of the survey should include both direct possible MEs (treatment group) and non-beneficiaries (control group). There should be 100% MEs of the sample size from the program area should be under control group

## 5. Methodology

The individual/firm is expected to develop appropriate methodology (most preferably, a mixed method) to meet the objectives of the assignment. The methodology includes statistically reliable and acceptable sampling method and its estimation, appropriate study method and so on. Appropriate triangulation in data collection method is anticipated in the proposed methodology as per need. The methodology and relevant instruments/tools should be adjusted in consultation with SDS and PKSF and finalized before implementation. However, it would be appreciated if the researchers come up with any innovative methods and/or ideas under appreciation of the scope of the assignment. The following methodology and research tools will be employed (but not limited to) during the research study: a) literature compilation and desk review (for secondary data collection); b) Household interviews/survey in the targeted stakeholders; c) Focus Group Discussions in targeted communities; d) Interviews with key stakeholders and e) In-depth interview.

## 6. Study locations

The study shall be conducted in a number of Unions Shariatpur Powrashoba and Palong respectively.

## 7. Outputs and deliverables

Both the draft and final reports shall be written in English and should ideally consist of no more than 50 pages (excluding annexes). The report should, at a minimum, include the following contents:

- **Executive Summary:** a tightly drafted, to-the-point document including the key issues of investigation, major findings;
- **Introduction:** Background and purpose of the study, scope, key questions and short description of the context;

- **Methodology** includes the study design, location, duration, sample size, sample size calculation, subject and selection method/criteria, inclusion and/or exclusion criteria of respondent, procedure methodology, data processing, statistical analysis and so on;
- **Key findings** with regard to the questionnaire formulated structured along the objectives and results (and associated indicators) of the logical framework of the project and the additional data points considered to be relevant in analyzing the target group's socio-economic and environmental conditions, metallic utensils and sustainable entrepreneurship.
- **Conclusions** based on evidence and analysis
- **Annexes** (ToRs, timetable of the study, references, data collection instruments, output of all collected data in tabular format)



## 8. Reporting

The consultant shall:

Present a detailed study plan to SDS within three days of signing of the ToR

Finalize the questionnaire and other tools based on field tests and the feedback of SDS. Present the draft survey report in a debriefing session with SDS. Submit the final report within 5 working days of getting feedback from SDS on first draft.

## 9. Mode of Payment

- ✓ **1st Payment** (15% of total contract value): The 1<sup>st</sup> payment will be made upon submission and acceptance of the inception report.
- ✓ **2nd Payment** (50% of total contract value): The 2<sup>nd</sup> payment will be made upon submission and acceptance of the draft report.
- ✓ **Final Payment** (35% of total contract value) will be made upon acceptance of the final report.
- ✓ **VAT and Taxes will be deducted at source upon government rules from each payment.**

## 10. Timeframe

The study shall be conducted expectedly in two months from start of the study, and is scheduled to preferably start in the **(27/09/2022 instead of 15/03/2022)** . The consultant will submit the final report latest by **(30/01/2022 instead of 15/05/2022)**. The timeframe will be finalized as agreed by the consultant and SDS A time plan following the below-given format for the assignment has to be submitted by the consultant and to be agreed by SDS

## 11. Profile of the Consultant

- Should have minimum master's degree in Environmental science/Development Studied/Social Science/MBA/related subject.
- At least 10 years of professional experiences along with 5 years of experiences in related sub-sector
- Specific Subsector Study Experience will be added value
- Experience of evaluating any projects/sectoral study funded by Multilateral Development Bank or any other UN agencies will preferable.
- Experiences of two projects evaluation/sectoral study will be required for
- Publication in peer reviewed journal will be added value
- She/he should have required knowledge and skills to use widely recognized statistical software, such as SPSS or STATA.
- Consultant previous Experience in this region/ similar nature of study/ survey works will get preference - minimum 2 nos. of similar experience.
- Language skill English will be get preference.

## 12. Ethical Considerations

There will be nothing in the assignment which may be harmful for the respondents in terms of legal or ethical ground. No one would be forced to provide information for the assessment. The research objectives will be clearly explained to all the respondents of the assessment before collecting data from them. S/he will be abstained from data collection from any person who will deny or show any reluctance in providing information. Verbal consent with signature or thumb impression of the respondents, therefore, would be taken before collecting data. The researchers will be highly committed to the respondents to keep the privacy of their information and source of data as well as will put heartiest endeavour to be unbiased in collecting data. The research report will not reveal the identity of the respondents.

### 13. Disclaimer:

The SDS management reserves the right to amend the terms of reference at any time as required upon mutual discussion with the lead researcher. SDS reserves the right to terminate the contract at its sole discretion in case of non-compliance of the terms and conditions that will be finally agreed.

### 14. Proposal Submission

Interested candidate are requested to submit a technical proposal, updated Curriculum Vitae and financial proposal by **09/06/2022 instead of 31/01/ 2022** in the following address. The technical and financial proposal should be made in consideration of the attached ToR.

Address:

Mohammad Saiful Islam

Coordinator (Agri) & PM – SEP metallic Utensils Project

SDS, Shariatpur Sadar, Shariatpur.

[msislam4852@gmail.com](mailto:msislam4852@gmail.com), [sds.shariatpur@gmail.com](mailto:sds.shariatpur@gmail.com), [sdsutensil2021@gmail.com](mailto:sdsutensil2021@gmail.com)