

MARKET STUDY ON PRODUCTS MADE IN ROADSIDE METAL WORKSHOPS EXPERIENCE AND LESSONS LEARNT FROM FARIDPUR

Naved Ahmed Chowdhury

Programme Development Unit

Uttam Kumar Saha

Project Officer

Cleaner Technology Programme

INETMEDIATE TECHNOLOGY DEVELOPMENT GROUP
BANGLADESH

Abstract Marketing programs encompass activities ranging from financial management, marketing, customer relation as well as development of business and marketing plan. This study presents an in depth market analysis of the products which considers the extent of the market (local and regional), general description of the market segments, current and new customers, cost and profits, identification of products that have fair chance of success, customers, why buyers make purchase decision, analysis of the completion including how the metal workshops are positioned and why there is strong competition between them. The study also explored acute marketing problems. The study was undertaken by Manufacturing Programme of Intermediate Technology Development Group- Bangladesh to encourage new product development while enhancing the marketing capacity of the entrepreneurs of small metal workshops.

BACKGROUND

Intermediate Technology Development Group, Bangladesh (ITDG) has started implementation of an action research project from April 1998 with roadside metal workshops in the district of Faridpur. Objective of the project is to address the needs of the growing micro and small metal engineering sector in Faridpur.

The project presently aims to encourage new product development while enhancing the marketing capacity of the entrepreneurs. Against this background this study presents an in depth market analysis of the products which considers:

- the extent of the market (local and regional)
- general description of the market segments
- current and new customers
- cost and profits
- identification of products that have fair chance of success
- customers
- why buyers make purchase decision
- analysis of the completion including how the metal workshops are positioned and why there is strong competition between them

respondent as presented below:

Sl No	Respondent Category	Areas Covered								Total
		F	M	G	R	S	B	J		
		a	a	o	a	h	o	e		
		r	d	p	j	a	g	s		
		i	a	a	b	r	r	s		
		d	r	i	g	a	a	o		
		p	p	a	r	i	p	r		
		u	u	n		u		e		
		r	r	j		r				
1	Manufacturer	5	7	4	5	5	4	4	34	
2	Customer	5	5	5	5	4	-	2	26	
3	NGO/ Association	4	3	3	4	2	3	1	20	
Total		Faridpur, Madaripur, Gopalganj, Rajbari, Shariatpur, Bogra and Jessore								80

METHODOLOGY

The study used questionnaires and checklist for collection of information It covered a sample of 80

The process started with identification of enterprises for interview. Customers of roadside metal workshops were also interviewed. Interviews were done through random

sampling. The information on the present status of metal workshops was taken from the baseline survey of metal workshops in Faridpur town done by ITDG Bangladesh in 1998. The information in this baseline survey is continuously updated.

The study concentrated on greater Faridpur district, ie, Faridpur, Madaripur, Sariatpur, Gopalganj, Rajbari and in the district centres of Jessore and Bogra. Bogra and Jessore are selected as survey areas to comprehend the development of roadside metal sector. The roadside metal workshops are significantly developed and many development works focusing on metal workshops are taking place in these areas.

LIMITATIONS

The study could not cover all types of available metal enterprises because of their asymmetrical dispersion throughout the regions. Lack of relevant information posed serious impediment. Total supply and demand of metal workshops' products in the country as well as in greater Faridpur area could not be estimated due to lack of information.

Roadside Metal Workshop in Bangladesh

Small metal workshops make new products as well as provide repair service need of different machinery employed in the manufacturing industries of the country. Country's public sector enterprises like textile and jute mills, sugar mills, Bangladesh Railway, Bangladesh Inland Water Transport Authority (BIWTA), etc. are major client groups.

Metal workshops also produce agricultural tools. The range includes centrifugal pumps for irrigation, different parts of pump, pump driving diesel engines, power tillers. Irrigation components are produced in Dhaka, Comilla and Bogra. Processing equipment for agricultural sector are also manufactured which include rice hullers, metal component of flourmill, oil expeller, etc.

Foundries produce cast metal products. The items include volts for irrigation pumps, iron parts of rice huller, flour mills, etc. There are two types of foundries, one uses iron and these are called ferrous type foundries and the other use different type of non-ferrous items like aluminium, brass, lead, etc. Foundry products also include irrigation items, metal casing of pumps, liners for engines, different, power tillers, etc.

Machine shops use cast iron (foundry products) as basic materials and do machining jobs. Fabricated metal products are made here. Different type of repair jobs required by agricultural, industrial transport sector is done in repair shops.

Bogra has developed specialisation in manufacturing agricultural implements. Manufacturers in Chittagong produce processing machinery for agricultural sector. Manufacturers of Dhaka zone are mostly do repair jobs and produce spare parts and stopcocks.

Problems in Marketing:

There is no inventory on the country's demand and supply of metal workshop's products. 62% respondent feel there is demand for their products. 88% respondent mentioned that demand is increasing and the growth rate they identified ranges from 10-50%.

Despite these opportunities, discussion with different stakeholders reveal that the local industries face acute marketing problem due to following reasons:

- Products are not standardised
- Product quality is not uniform;
- Competition is high;
- Producers try to beat competition by price rather than by quality
- substandard quality.

Some other major problems are:

Subcontracting: The subcontracting arrangement made by BSCIC in the late 80s triggered tremendous development in this sector. Many new enterprises were established during this time. Under this arrangement public sector industries were instructed to take supply from these workshops. But after 1990 the public sector changed their attitudes. Subcontracting became minimal as public sector bought items from open tender. In these cases, buyers preferred foreign-made goods.

The respondents also mentioned that local cycle frames and other parts face stiff competition. Because of tax evasion /manipulation imported products are sold at a cheaper price.

Shortage of Electricity: Shortage of electricity has created problems for this sub-sector.

Technology: Current level of technology in metal workshops is old and labour intensive. Lack of skills in measurement and lack of knowledge about metal properties and poor workmanship very often reduce productivity and quality.

Training: Entrepreneurs are reluctant to participate or nominate any of their workers for training courses organised by support organisations because they think training courses do not precisely meet their requirements. The entrepreneurs are aware of the shortcoming of the current processing technology but they cannot afford procurement of new technology because of shortage of capital. The procedural problems of the money lending institutions also act as impediment

for planning for such move. Therefore, there is always a shortage of skill. Turnover of skilled labour is very high.

Discussion with personnel from BESMS, Bogra Metal Engineering Entrepreneurs Group (BMEEG) and Bogra Metal Enterprises Development Project (BMEDP) revealed that the owners of metal workshops lack marketing skills. In most cases they are satisfied with present level of sale volume. When sale falls, price is reduced thereby compromising quality of products. Need for promotional measures are ignored. Entrepreneurs are mostly unaware of the benefits of promotional activities. Prices of metal workshops' products differ in terms of product, manufacturer, product quality, size and even area. There is no standard practice in the market.

Market Study Findings of Greater Faridpur:

Products of surveyed units are varied in nature. For agricultural purposes product and services produced are repair works for tractor, shallow tubewell, power tiller, deep tubewell and other types of pumps, manufacturing of blacksmith products, belcha, hammer, batali, plough, etc.

Enterprises engaged in industrial works produce and service spare parts of rice mill, saw mill, oil mill, flour mill, mixture machine, boring machine, etc.

Workshops also produce iron made grill, gate, shutter, water tank, clam, door, window, roof, house frame, kitchen furniture, dress cabinet, chair, table, tea table, blacksmithy products like betel nut cutter, axe, spade, knife, sickle, scissors, etc.

In the transport sector, enterprises make structure of cycle, rickshaw, push cart, rickshaw van, body, frame, spare parts for motor cycle, bus, truck, bicycle, rickshaw etc.

Marketing Channel

This sub-sector is a product driven market where customers directly find workshop according to their requirements. Repair workshops are mostly situated close to streets so that transport owners can directly find them.

Large workshop owners like Northern Metal Industries, Haq Metal Works, Standard Engineering and Basher Metal supply products through dealer, wholesaler and retailers. Customers directly contact them also. These workshops have countrywide distribution network. They have also wholesaler network. Retailers from different district towns and other areas purchase their products from wholesaler as well as dealers. Commission is offered in different forms to dealers and wholesalers.

The workshops determine prices of their products considering market demand of the products. In most cases they try to fix prices in lower end so that they can gain market share.

All types of workshops and industries use foundry products. Big foundries have countrywide market. Foundries have their own sales outlet through which they directly sell in large quantities to their customers. They also sell to wholesalers and wholesalers sell through their own retail network. Workshops buy foundries products and fabricate it according to their requirements.

The respondents mentioned that the demand of following products is increasing:

Major Areas	Specific Product/Service
Agricultural	Liner, Repairing of agricultural machinery like shallow tubewell, power tiller and other pumps, spade of plough, etc.
Industrial	Repairing of jute mill, oil mill, rice mill, saw mill, flourmill's machinery, nut, bolt, poultry farm's products, mud chopping machine, etc.
Household	Steel almirah, stopcock, gate, children's rocking cradle, brassware, etc.
Transport	Repair works of motorized transport, nut, bolt, etc.

Competition in this sub-sector is very stiff. Major threats for the producer of greater Faridpur district are the producers of Bogra and Jessore. Bogra is far ahead of Faridpur as far as new product development, networking, infrastructure development, volume of business, marketing capability, entrepreneurship is concerned. Metal workshops in Bogra received tremendous responses from market due to the intervention of BMDP.

Legal import smuggled Indian products and substitutes are competing with the local products like spare parts. Price, quality, dynamic marketing techniques, countrywide marketing network, after sales service and superior designs are in favour of imported products in most cases.

Customer Profile

Customers of greater Faridpur district are institutions as well as individuals. Individual customer comprises 70.24% of the total. 53.84% manufacturers mentioned that customers come to them directly. 84.61% manufacturers have permanent customers. Good quality

is the most enterprising factor (80.76%) for building confidence in the mind of customers.

Promotion

Entrepreneurs of light engineering sector do not know what to do to get more business, development of new markets and new products. 63% of surveyed customers identified that the entrepreneurs are traditional. They have very little urge to promote their products.

Promotion of small enterprises' products is made through repeated personal contact with the customers as well providing the customers with high quality products. In contrast to the producers in Faridpur, entrepreneurs in Bogra have tremendous urge and motivation to promote their products. Again BMEEG is also playing a very vital role to promote this sub-sector and products of Bogra based enterprises. It has created data bank on products and availability of raw materials, price and sources. It has established subcontracting linkage with sugar mills, jute mills and other industries for the enterprises and has organised study tour, fairs and exhibitions, international seminars.

BMEEG has created a culture of doing modern business, entrepreneurship and product development through its project activities in Bogra. But associations in greater Faridpur district operate informally, having no office and does not even meet regularly.

Pricing

Pricing of products from one enterprise to another reveals that enterprises in greater Faridpur district have very little knowledge on the methods to determine price and calculate cost of their products. Price of products is simply determined through collection of information on the price of near-by shops. One of the important practices is that customers collect information on the price from one shop and disclose it to other to get advantage of lower price. Entrepreneur lowers price through degrading quality of products by following this method. Survey on manufacturer show that manufacturers consider cost of raw materials, labour, electricity, house rent entrepreneurs' own salary, wastage, and profit margin for determining price of their products.

6 Gender Perspectives

Survey reveals that except one there is no women ownership and no women workers among the beneficiaries. Women have both physical and intellectual capability to work in roadside metal workshops. Location of workshops and usual practices like working hour and safety may be impeding factors for women to work in these industries.

Women use the metal products for their daily household work and agricultural work. These are: spade, hand hoe, sickles, curved knife, thresher etc. They need different types of dies for making cake and other products in bakery sub-sector, candle making, dairy, poultry, handicrafts, handloom, small textiles and others.

7 Recommendations

The roadside metal workshops in greater Faridpur district need to do aggressive marketing for their products. Market development interventions should focus on the local market in the initial stage so that the question shifts from "How can we sell what we produce" to "How can we make what people demand"? This change of attitude will help the entrepreneurs to produce the products that the market demand.

Exchange of Experience

Experience sharing workshops of producers, dealers/wholesalers, retailers, NGOS, association and other parties involved in this sub-sector need to be organised on a regular basis for better understanding and pursuit of a common goal of development of this sector.

The agenda of these workshops should be set so as to facilitate linkage between parties for mutual advantage. ITDG can take the responsibility of organising such workshops. These workshops will help identify quality, new products, services and new markets.

Resource Handbook

ITDG can prepare a directory of available raw materials, tools, equipment and other inputs that are required by greater Faridpur based manufacturers as well as prepare a directory of product for customers. These directories will assist manufacturers to locate their markets, sources of materials and other inputs. Lack of information at the enterprise level is one of the major problems in this sub-sector.

Strengthening Capacity of Association

Metal Work Development Association could be the medium through which development services can be delivered effectively and efficiently. But associations in greater Faridpur district are still weak from an organisational perspective. Capacity of these associations should be enhanced. ITDG has already initiated dialogues with the metal work development association in Faridpur and some workshop were organised with its assistance.

Arrangement of Exposure Visit

Exposure visit were organised by ITDG for the artisans to MAWTS, BOC Bangladesh, CARITAS trade schools, UCEP, various mills and factories in order to

get idea on new product development, identification of new markets and technology, low cost production techniques etc. ITDG can take more initiative like this as part of its program.

Investment in Research and Development

ITDG may conduct studies and research on low cost production technology, product diversification, marketing techniques for enterprises supported by its light Engineering program. A good number of metal workshop owners stated that they will be able expand their existing business if they could purchase some machinery like lathe, boring machines, etc. ITDG can help these entrepreneurs to link up with financial institutions and banks to procure machinery on a lease financing basis.

Training

Metal workshop owners in greater Faridpur district are very weak in marketing. It is therefore recommended that owners of metal workshops should be provided with practical, easy to understand training on marketing. The training issues could be: Business Plan Preparation, Strategic Marketing, Co operative Marketing, and Selling Techniques, Book keeping, Pricing and Costing, etc.

New Products

In the greater Faridpur district emerging activities are agriculture, poultry, rice mill, blacksmith, brass metal and transport. New products that can be produced by these enterprises therefore, are: Piston Ring, Liner for Power Tiller, Piston, Plough Share Paddy Crushing Machine, Sugarcane Crushing Machine, Wheat Crushing Machine, Paddy Separation Machine, Animal Feed Chopper, Poultry Feed Grinder, Mosquito Coil Dye, Oil Expeller, Front Axle for Transport, Pump Testing, Cycle Pin, Nut, Seed distribution machine, Soap making machine, Sprayer, Manufacture of dies, Plastic molded products etc. Another key area is likely to be the production of spare parts.

Development and Promotion of Specific Product

ITDG may also develop and promote specific sub-sectors in the metal workshop domain like the blacksmiths in Madaripur and brass metal in Shariatpur.

Organizing Fairs and Exhibitions

ITDG can organise fairs and exhibitions for products locally and assist them to participate in national fairs and exhibitions.

Establishment of Information Bank

ITDG can assist Faridpur based metal work development association to create an information bank on raw materials, other inputs, products, markets, fairs and exhibitions, sources of finance, support service providers. This needs to be regularly updated.

Conclusion

Marketing programs encompass activities ranging from financial management, marketing, customer relation as well as development of business and marketing plan. They are most effective when they are sector specific, demand driven and when the workshops they target are going to increase employment and earnings through them.

This market study is the only of its kind to be conducted on the roadside metal work shops of Faridpur district. Therefore some gaps remain. ITDG hopes to continue its light engineering work in the future. Therefore this study is of invaluable value to future interventions in the area as well as help the beneficiaries- metal workshops owners and workers. to identify product, fix price, co-ordinate promotion activities necessary to successfully benefit from the market.

REFERENCES

BSCIC, *Survey on Small and Cottage Industries of Bangladesh*, 1991

Henzler, Mikael. "*Financing For development, Transfer and Management Of Environmentally Sound Technologies*" 2000.

ITDG, "*Problems and Prospects of Small Scale Industries in Faridpur*", 1997

Johanson, Allanson "*Clean Technology Performance Indicators for Small and Medium Enterprises*" 1999.

Malombe Joyce, "*Pollution control of Small Scale Metal Industries in Nairobi*, 1997