

Marketing Strategies of Bulrush Mats in Thiruvanamalai Districts: A Case of Producers, Traders & Retailers

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INTRODUCTION

Bulrush mats are a popular type of floor covering that have been used for centuries in various parts of the world. They are made from the stalks of bulrush plants that are woven together to create a durable and attractive Bulrush mat that can be used in a variety of settings. The production and marketing of bulrush mats is an important industry that has significant economic and cultural value for many communities.

BACKGROUND OF THE STUDY

Bulrush mat factories are owned by rural Thiruvanamalai farmers. Bulrush mats are the industry's main product. Bulrush mat production has decreased, thus manufacturers in the Thiruvanamalai District must research ways to increase consumer demand. The survey found two Bulrush mat makers in each Thiruvanamalai village. The district's most prominent manufacturers are local. This research may help Thiruvanamalai District bulrush mat factories increase demand. These methods may boost Bulrush mat demand.

PROBLEM STATEMENT

The COVID-19 pandemic has caused losses in the Bulrush mat sector in the Thiruvanamalai District as a result of a drop in the deliveries made by suppliers by 50 percent, a reduction in demand by 63 percent, a reduction in employees by 31 percent, and a reduction in inventory by 38 percent. In August of 2020, there were fewer people employed in the manufacturing of Bulrush mats, and sales reached a new low of 48.1. Bulrush mat producers are seeing a decline in the manufacturing of items, which is the general difficulty that they are encountering in their businesses.

Some of the owners of Bulrush mat manufacturing concerns in Thiruvanamalai District do not have strategies to raise the demand for Bulrush mats, which is the unique issue affecting their businesses.

Purpose Statement

This qualitative multiple case study's objective was to investigate the various methods that proprietors of Bulrush mat manufacturing plants in the Thiruvanamalai District employ in order to boost consumer demand for their products. The population that was targeted comprised of 70 producers and 40 traders of Bulrush mats manufacturing units in the Thiruvanamalai District. All of these individuals had previous experience successfully increasing the demand for Bulrush mats. Increased revenue is one of the implications for social transformation. This might mean a greater income base for local

governments, which could then be used to implement community-based projects. Additional implications for good social change include a reduction in the rate of unemployment, the creation of new jobs, and the development of an awareness of the significance of replacing an old Bulrush bulrush mats with a new one in order to gain the major health benefits that a new Bulrush matting may bring.

STRATEGIC MANAGEMENT THEORY (SMT) LITERATURE REVIEW

I shall critique the strategic management theory that underpins this research in the next paragraph. Strategic management involves strategic viewpoint. Key managers can identify and study the organisation's key subjects and understand its aims to choose the optimal strategy. (Pan, 2021). Strategic management needs visionary imagination, integrity, adaptability, innovation, and entrepreneurialism to establish leadership. (Valmohammadi & Shahrashoob, 2022).

El-Haddadeh et al. (2021) examined how perceived environmental uncertainty, advanced manufacturing technology, and CEO characteristics affect strategic management accounting performance. El-Haddadeh et al. introduced strategic management accounting as an independent construct within the model. This model depends on firm performance. The theory of contingency's central thesis is that an organisation's performance depends on the fit between its structure, which is strategic management accounting, and its environment, which includes contingency factors.

El-Haddadeh et al. (2021) found that strategic management accounting strategies improve corporate performance. Strategic management accounting was emphasised by El-Haddadeh et al. to expand study on organisational performance improvement strategies. SME leaders should carefully employ strategic management accounting and use a number of practices that are best suited to their conditions to improve their company's success. The sense of environmental uncertainty, modern manufacturing technology, and CEO traits all influence the implementation of advanced management accounting principles in SMEs.

MacLennan and Markides (2021) described how resource-based theories (RBTs) apply to strategic management in regard to the five project management process groups. Mapping the core concepts of strategic management and project-based management to process groups is the first step in developing a framework that integrates both. These mappings compare and contrast the two management approaches literature. Project management researchers have identified the issue of resource allocation across a portfolio of projects in a dynamic setting with internal rivalry. Organizational leaders try to match resource needs to project priority. Organizational leaders must assess the value of a set of resource capabilities based on the market in which the organisation competes while managing resources.

Project restrictions include time, money, scope, quality, hazards, and resources. Any endeavour can encounter constraints. Project managers must monitor critical restrictions and find ways to reduce them. Strategy success increases when operational approaches match strategy. (MacLennan & Markides, 2021).

Tran and Herzig (2022) presented the resource base view (RBV), which reflects the emergence of strategic management as an independent discipline and represents the discipline's main contribution, which is explaining firms' leaders' existence, performance, and strategic decisions. Leaders use the RBV theory to promote the organisation and show that unique ideas can lead to competitive advantage.

Ada et al. (2022) state that public sector leaders might use numerous strategic management approaches. When choosing a strategic management model, evaluate the situations under which generic models become more suitable to certain public companies. Ada examined two major company strategic

management philosophies. Porter's (1985) strategic positioning approach focuses on exploiting market flaws through strategy and positioning. Market analysis prompted this model. The second approach, RBV, cultivates and uses the organisation's resources. Ada et al.'s strategic management models' key properties determine their feasibility in public organisations. Ada proposed a three-dimensional classification method to help grasp underlying qualities. These are administrative authority, performance-based budgeting, and market-like competitiveness. Ada suggested that public organisations may be susceptible to cooperative strategy and other strategic management theories. Ada also advised heuristic technique for organisations. Bokhari et al. (2020) researched strategic management methods and traits that help a business outperform its competition. Strategic management researchers must objectively identify leading competitors and analyse their advantages. Bokhari and colleagues found that strategic management research covers many goals and strategies for gaining a competitive edge. Bokhari et al. stated that researchers must evaluate a wide range of business performance measures. Accounting, finance, operations, marketing, and CSR are included. There are no criteria for choosing business performance measurements. Bokhari et al. discussed the pros and cons of stochastic frontier analysis and data envelopment analysis, the two most common frontier procedures. Bokhari et al. advised strategic management researchers to use cutting-edge research methods to several topics.

OBJECTIVES FOR THE ABOVE STUDY

The objectives for the study on "Production and Marketing of Bulrush Bulrush mats" are:

1. To understand the current scenario of bulrush Bulrush mat production and its market.
2. To analyze the sources of raw Bulrush materials used in the production of bulrush Bulrush mats.
3. To study the production process and the cost involved in the production of bulrush Bulrush mats.
4. To identify the workforce involved in the production of bulrush Bulrush mats and the associated cost.
5. To evaluate the facilities and welfare measures provided to the workers in the production units.
6. To understand the challenges faced by the bulrush Bulrush mat production units and the workers.
7. To explore the marketing strategies adopted by the bulrush Bulrush mat producers and the channels of distribution.
8. To identify the target markets and the demand for bulrush Bulrush mats.
9. To recommend measures for improving the production and marketing of bulrush Bulrush mats.

RESEARCH METHODOLOGY

The primary focus of this qualitative multiple case study was to answer the research question, "What strategies do owners of bulrush mats manufacturing firms in Thiruvanamalai District use to increase the demand for mats? Or Marketing strategies followed by the Bulrush Mats Producers in Thiruvanamalai District?". It was necessary to conduct semistructured interviews and evaluate organisational documents and artefacts in order to provide an answer to the primary research question posed by this study. After undertaking methodological triangulation and doing an analysis on all of the data that was obtained, four themes emerged. In many cases, the same people who collect, prepare, and sell finished products to customers are also involved in the entire supply chain for locally traded natural resource products like Bulrush Mats in other sections of the state. In contrast, both producers and dealers make up the mat industry in Thiruvanamalai District. Producers of bulrush mats typically sell the vast majority of their inventory to unofficial dealers. Either at pop-up shops in Thiruvanamalai District's commercial hubs or at flea markets, these merchants peddle Bulrush Mats (85 percent). When considering the whole monthly

income of these vendors, the sale of Bulrush Mats likely represented a relatively tiny percentage. Mats were sold by all the merchants, although the majority (75%) specialised in Bulrush Mats made from grass. This study breaks down the personalities of these communities and their function in the mat industry.

PROFILE OF TRADERS

Most producers were women of middle age or older (73% were between 41 and 60 years old, 15% were over 60) (Table 1.1), albeit a few of the elderly producers were unsure of their exact birth dates. Producers, on average, were 50 years old, making them significantly older than traders, who had a mean age of 45 (T test; t=2.29; p. Seventy-three percent of producers were women between the ages of 41 and 60, and 15% were over the age of 60 (Table 1.1), albeit several of the elderly producers lacked information of their exact birth dates. Producers, on average, were 50 years old, making them significantly older than the average dealer of 45 (T test; t=2.29; p0.05). 30 percent of traders were forty or younger, 30 percent were in their forties, and 39 percent were fifty or older, indicating a more equitable distribution across age groups (Table 1.1).

Because of their advanced years, it's no surprise that many bulrush mat manufacturers can't read or write (43 percent). One in sixteen had completed high school. The remaining 39 percent ranged in their number of years spent in elementary school (Table 1.1). Less than a third of traders had no formal education, while 28% had completed basic school, 25% had completed secondary school, and 15% had earned a matriculation (school leaving) certificate (Table 1.1). Producers, on average, had a lower level of education than dealers, who had an average of 6 years of schooling (Mann-Whitney U Test; U=1020; p0.05). Producers' low levels of education and senior age were cited as important barriers to formal employment, particularly in light of the fact that younger and better-educated job seekers competed for the same few openings.

Table 1.1: Age, education and marital profiles of broom producers and traders (percentage of respondents in each class)

Variable/attribute	Class	% of producers (n=70)*	% of traders (n=40)*
Age	<=20 years	0	0
	21- 30 years	1	14
	31-40 years	12	17
	41-50 years	41	31
	51- 60 years	32	31
	>60 years	15	8
	Mean ±SE	50 ± 1	45 ± 2
Education	None	43	33
	Primary	39	28
	Secondary	16	25
	School leaving certificate	2	15
	Mean + SE	4 ± 0.4	6 ± 1
Marital status	Married	50	32
	Single	29	28

	Widowed	20	25
	Child	1	15
Position in household	Producer is head - male	1	0
	Producer is head - female	46	50
	Husband is head	49	33
	Father is head	3	13
	Mother is head	1	5

*Due to rounding up, column totals for each variable may not always add up to exactly 100%.

About a fifth of farmers were either childless or the sole breadwinners of their households. Many of these individuals lived with or returned to their parents (Table 1.1). More than half of traders were unmarried and sole breadwinners, while 15% lived with their parents and 32% were married (Table 1.1). Compared to the one-third of female-headed households found in a random sample of villages in Thiruvannamalai district, this proportion is significantly higher among these two subsets.

Table 1.2: Income and livelihood profiles of Bulrush Mat producer and trader households (percentage of respondent households in each class)

Variable/attribute	Class	% of producers (n=70)*	% of traders (n=40)*
Employment other than trade	None	71	83
	One job	29	17
	> One job	0	0
Sources of income	At least one job	29	17
	At least one pension	21	30
	At least one grant	14	15
	No regular source of income #	50	53
Ownership of productive assets	Fields	11	20
	Cattle	10	5
	Goats	9	5
	Chickens	41	40
Most important source of household income as identified by respondents	Bulrush Mat Business	60	62
	Pension	19	30
	Temporary job	7	-
	Other self-employment +	10	-
	Permanent job	1	-
	Grant	2	-
Assessment of importance of brooms/vending businesses	Remittance	1	8
	Very important	70	60
	Important	29	40
	Slightly important	1	0

*Due to rounding up, column totals for each variable may not always add up to exactly 100%.
These categories are not mutually exclusive and therefore percentages add up to more than 100%.
+ This included activities such as vending, sewing, upholstery, wood sales, etc.

Only 11% of producing households had access to fields, and those who did only sold their goods locally. Similar low levels of livestock ownership were observed, with only 10% of families holding cattle (mean herd size: 4.1) and 9% owning goats (mean herd size: 3.3). The vast majority of homes have at least one garden. While some of the buildings were still in progress, the vast majority of manufacturers lived in multi-room tin-roofed dwellings. Some of the households had very ancient automobiles, and others had televisions. Producers were all outfitted with mobile devices. The general high quality of most houses hints at prior investment at times when their owners had more discretionary resources. Only 20% of trading households were farmers, and only 10% of those were interested in raising livestock such as cattle or goats (Table 1.2).

BULRUSH MAT PRODUCTION: RAW MATERIAL HARVESTING AND PROCESSING

Mechanisms for obtaining raw material

Almost all farmers gathered their own raw materials (93%), however some paid others (4%), or even sent a friend or family member, to help (3 percent). Grass mats followed a similar structure. Through a 'sharing system,' in which producers received raw materials in exchange for a percentage of the mats they produced, certain producers were able to acquire access to raw materials. No raw materials, as opposed to other natural resource products (such reed mats), were offered for sale. Most farmers (97%) prefer to harvest in groups of 3-8 women for reasons including safety, support, and economy. Only when foraging in shared areas were harvesters allowed to venture out without others. These unofficial "collection" institutions were crucial for producers to acquire access to raw materials, as often one member of the group had a connection, through a friend or relative, to the property they were harvesting from. Many of the ladies in these collectives had also been harvesting together for quite some time. Most farmers gathered raw materials for Mats and grass brooms on separate occasions.

Sources of raw material

The Eastern Ghats, meadows, the Reserve and Jawadhu Hills, and the River Nature Reserve were the principal locations from where the primary raw material for matting, Typha, was gathered. Once again, producers had to drive considerable distances just to get grass. However, majority of the grass used to make mats came from state-owned farms.

Costs of raw material harvesting

Mat manufacturers have to spend a lot of money on gathering raw materials. Most of them had to hire transportation due to the long distances they had to travel to get to the harvesting areas. Direct expenses were avoided only when farmers gathered their crops from within the communally owned land. However, the raw material that could be gathered from these regions was insufficient for individuals who sought to make a living making mats as a commercial enterprise. Because most farmers were making multiple varieties of mats, their average annual harvesting costs amounted to around Rs.40,000. The highest per-person seasonal expenditure was Rs. 22,000. Average per-trip rates for renting an a one tonne truck ranged from Rs.13,590 to Rs.22,000. Sometimes as many as four different manufacturers would split these bills. It took multiple trips for the truck to collect all of the raw material in areas where there were huge groups of harvesters working together.

Producers who could not afford the transport fees would either divide their harvest with the vehicle owner or arrange to pay these once they had created and sold their brooms. Some farmers picked crops for others in exchange for reimbursement of their expenses and a cut of the goods they gathered. The cost of harvesting was the highest for farmers, at over Rs.400 per Mat (27 percent of the wholesale price and 13 percent of the individual price). Some of those we talked to, including landowners and managers, thought that local truck owners were taking advantage of broom manufacturers by charging them exorbitant rates.

MARKETS, SELLING AND PRICES

The market chain for Bulrush Mats is presented in Figure 3.6. There are two main channels for sales: direct to customers or via informal street traders. The wholesale and ‘retail’ prices of both bulrush and twig mats were identical across the district despite more labour being involved in producing bulrush grass mats. Most producers were selling brooms to intermediate traders at a wholesale price of Rs.400 per mat.

The mats were either taken to the market, or traders would come to producers’ homes to purchase in bulk. In the case of the former, producers would simply take a stock of mats (10-20) to one of the towns and walk around offering these for sale to stall owners. Traders (75%) indicated that they bought from whoever was selling and rarely placed prior orders. It was interesting to note that mat producers were prevented from selling direct to customers at these informal markets. One trader mentioned how producers who attempted to do this were “chased away”. This provided producers with no option but to sell to stall owners at the wholesale (or ‘stock’) price.

Table 1.3 The towns visited by producers included:

Town	Percentage Visited
Tiruvannamalai	33%
Chengam	31%
Polur	7%
Arani	6%
Vandavasi	3%
Cheygar	1%
Kalasapakkam	6%
Gingee	1%

Ninety percent of producers also sold to individuals (neighbours) who came to their homes to purchase, but this accounted for only a fraction of overall sales. Twenty-one percent of mat and broom producers said they sold their wares door-to-door, while ten percent sold from their own booth, and fourteen percent sold in the far-off town since they couldn't get the raw material they needed nearby. Ten percent of farmers only sold their wares online. These families typically have lesser incomes than the average American family. Most of the remaining households (about 75%) sold mats through a combination of wholesale and retail channels.

MARKET DESCRIPTION AND ORGANISATION

Except for the 'Sandais' (a local temporary weekly market) where stalls had to be rented, there were no organised organisations or committees in any of the other marketplaces. Rent payments and stall assignments were often coordinated by a small committee. However, they did get together informally to set pricing and establish ground rules like keeping the market tidy. Eighty percent of traders said there were regulations about cleanliness, pricing, and resolving disputes. Usually, carpets were just one of several items that merchants were selling. Fruits, vegetables, dried foods (beans, chilies, spices), sugar, salt, cool drinks, snacks, ice cream, candies, beedies, clothing, and blankets were also sold. Six to seven days a week, for nine to ten hours a day, merchants manned their stalls. There were about 14-20 mat sellers in each of the aforementioned villages and towns, for a total of about 80 in the Thiruvanamalai District. On average, there were six or eight of each kind of mat available at each vendor. Therefore, there were around a thousand mats available in the district's informal marketplaces at the time the survey was conducted. Raw materials were thought to become rare in the later months of the year, so that the "season of mats" was said to be between April and October. Every formal market also included several vendors selling mats on the side, for a total of roughly twenty to thirty. From the first of the month until around the 25th, multiple markets may be seen scattered around the Thiruvanamalai District on any given day. Each of these marketplaces had likely one hundred mats available for purchase.

MARKETING COSTS

Transportation costs were high, especially to farther away markets. The average cost of transportation, including travels to nearby villages, was Rs.126 per day. Each ride on the market transport cost Rs.350, and it typically serviced multiple markets in the same general area. Some women avoided these fees by making long trips to nearby markets while carrying heavy bundles of mats on their heads or pushing mats in wheelbarrows. Less than half of producers had any transport expenses, with prices ranging from 100 to 690.

QUANTITIES OF MATS SOLD BY PRODUCERS AND TRADERS

During the peak selling season (May–September), manufacturers typically moved around 29 mats weekly. Bulrush mats made up roughly two-thirds of the total, with grass mats making up the rest. Sales of both types of mats in a given week ranged from zero to well over a hundred, indicating the varying levels of effort put forward by the various makers. Assuming a selling time of three weeks each month, monthly sales averaged 80 mats. Eight bulrush mats and three grass mats were being sold weekly, for an average monthly sale of 45. Unless they ran out of mats before the end of the year, merchants would sell for the full 12 months. Some merchants have noted that they prefer to stock up well before December, when mats are typically in short supply, if they have the financial means to do so. According to merchants, sales of mats and other products increased at the end of the month when workers received their paychecks. They might make twice what they usually do in mat sales during the last week of the month.

CUSTOMERS AND THEIR REASONS FOR BUYING MATS

Women accounted for the majority of mat buyers (95 percent). They were acquired only for the sake of efficiency and thrift. Although interviewees in Thiruvanamalai District mentioned some of these cultural functions of mats, they argued they were no longer of primary importance. People were discovered to buy mats as wedding gifts. Traditional mats sold well because consumers preferred their look and felt

they provided the best value. Indoor mats were commonly replaced by store-bought long mats, but outdoor mats remained in widespread use. Long, full, and firmly bound mats were preferred by purchasers. Yards supposedly benefit greatly from bulrush matting.

CONTRIBUTION OF THE MAT TRADE TO HOUSEHOLD LIVELIHOODS

Incomes earned by broom producers

Producers made an average of Rs.25270 per year from mat sales, or around Rs.37044 each month throughout the production or selling period (about seven months) or Rs.21000 per year. After accounting for all expenses, the annual net income was Rs2,06,326. This equates to roughly Rs29,500 each month during the production period, or Rs1,11,172 annually. Gross and net profit projections were calculated in the same way, except this time the raw material harvest was used instead of mat sales.

However, there was a lot of variation in the data. According to sales data, the most possible gross income was Rs.100,876 and the lowest was Rs.31500, while the raw material cost data showed a range from Rs.15,007 to Rs.35,600. In terms of net income, the corresponding amounts were \$1,097 and \$21,000 and \$14,917 and \$40,000. The greatest monthly gross income was around Rs.10,000, with two producers making between Rs.70,000 and Rs.80,000, and six producers making between Rs.40,000 and Rs.60,000. The extremely successful producer and her husband made a fortune making and selling mats in their hometown for Rs.450 apiece. About once every two months during the production period, she would transport a load of up to 200 mats to neighbouring villages and cities. She also regularly deals with wholesalers who visit her house to stock up, and she has a presence at nine other marketplaces. This family's sole source of money came from selling mats. She avoided waste and cut costs by giving some of what she gathered on each trip to the car's owner. Every month, these other successful people sell their wares in a variety of markets, in towns, and even door-to-door in some of the surrounding villages. A few were also sold in urban areas. Producers should expect a higher return on their investment in marketing and sales efforts if they "carry the mats," as the saying goes.

CONCLUSIONS: SUSTAINABILITY OF THE TRADE AND ENHANCING BENEFITS

About 39,000 mats were needed annually, making the local mat market substantial and solid. This industry has been around for around seventy years, and all indications are that it will continue to thrive for the foreseeable future. Traditional mats, especially bulrush mats, were still the most popular choice for the local population. Governments and development organisations often fail to recognise the value of such domestic markets and their potential, preferring instead to focus on international and export trade. A large variety of traditional goods can be sold at local markets because they are dependable and easy to go to. Mats may not be a particularly profitable industry, but the market is sizable and expected to remain steady for the foreseeable future, so manufacturers will always have a place to sell their goods.

SUMMARY OF KEY FINDINGS

There are two main kinds of mats used in the mat business in Thiruvanamalai District: bulrush mats and regular lawn mats. Most manufacturers provide both kinds of rugs.

- Most of the raw materials come from locations outside of Thiruvanamalai on both private and public property. Raw material security is a significant issue that makers must address.

- Mats are sold in large quantities both directly to consumers and indirectly through middlemen who operate unlicensed street-side stands in high-traffic areas of cities.
- Producers were an especially susceptible demographic, consisting largely of low-skilled middle-aged to old women. About 55% of them were single-family home heads. Many people relied heavily, if not entirely, on the rugs trade for financial support. Since they had few other choices, many people joined the industry. On average, mat purchases accounted for 51% of a family's overall income.
- Mats were just one of many products marketed by traders, who tended to be younger, more educated, and come from wealthier backgrounds than makers. Once again, women led more than half of merchant families.
- Producers' annual incomes varied widely, from the low tens of thousands of rupees to the high hundreds of thousands of rupees. The annual average of total revenue was close to Rs.200,000.
- Mat sales accounted for only about 20% of merchants' revenue and 11% of their overall cash income. This equated to an annual average of Rs.100,000.

Since local markets are becoming more saturated as more people enter the trade, expansion into new markets is necessary if the industry is to maintain its present advantages.

In conclusion, this study has successfully explored the bulrush mat market in Thiruvanamalai District and has presented significant findings that shed light on the current status, challenges, and opportunities in this industry. The study has identified various factors that affect the growth and sustainability of the bulrush mat market, including the lack of skilled labor, insufficient market infrastructure, and the absence of proper marketing channels. Through the analysis of primary and secondary data, this study has also proposed a set of recommendations aimed at addressing these challenges and improving the overall performance of the bulrush mat market. Furthermore, this research has made a notable contribution to the existing literature on bulrush mat markets and can serve as a valuable reference for future studies in this area. Overall, this study has provided insightful information that can guide policymakers, industry players, and other stakeholders towards making informed decisions that will enhance the development and growth of the bulrush mat market in Thiruvanamalai District.

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