Market Dynamics of Broomstick Agri-Business: An Analytical Study on Price Instability and Its Impact in South-West Khasi Hills District, Meghalaya

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ABSTRACT

Broomstick cultivation, derived from broomgrass (*Thysanolaena maxima*), plays a vital role in sustaining the rural economy of Meghalaya, particularly in the South-west Khasi Hills District. This dissertation explores the socio-economic status of broomgrass growers, examines the market dynamics, and analyzes the impact of seasonal and spatial price instability on various stakeholders across the broomstick value chain. The study adopts a descriptive and exploratory research design, using both primary and secondary data collected through household surveys, market interviews, and stakeholder questionnaires involving farmers, middlemen, wholesalers, and consumers.

Findings reveal that the majority of growers are smallholders with low formal education and limited access to institutional credit, leading to a high dependence on middlemen. Price instability was identified as a major challenge, with 98.89% of farmers reporting frequent price fluctuations that negatively affect income. Transportation difficulties, lack of storage facilities, and weak market access further constrain profitability. Despite these challenges, broomgrass remains a primary source of livelihood, though most farmers earn minimal or no profit, particularly when cultivation costs exceed selling prices.

The study concludes that the broomstick agri-business, while economically significant, is constrained by infrastructural, financial, and institutional gaps. It emphasizes the need for market intervention through collective marketing, improved rural infrastructure, formal financial support, and the introduction of price stabilization mechanisms such as a minimum support price (MSP). Addressing these issues can enhance the sustainability and profitability of broomgrass cultivation and contribute to rural development in the region.

Keywords: Sustainable, Livelihood, Broomgrass, Agri-Business, Market Dynamics, Value Chain, Minimum Support Price.

A. Introduction

Broomgrass (*Thysanolaena maxima*) is a plant used to make brooms, while a broomstick is the cylindrical handle to which the stiff fibers of the broom are attached. It is an economically pivotal non-timber forest product (NTFP) that is of particular significance for the livelihoods of rural populations in numerous regions of South and Southeast Asia. Within the Indian context, particularly in the northeastern states, the cultivation and commerce of broomstick constitute a fundamental livelihood of the rural economy. Its relevance is especially pronounced in the state of Meghalaya, where the geographical and climatic conditions favor its proliferation. The South-West Khasi Hills District, characterized by its rural and mountainous landscape, has witnessed substantial involvement in broom-grass cultivation, with both agrarians and entrepreneurs depending on it as a principal income source.

The primary utilization of broom-grass lies in its inflorescence, which is transformed into traditional brooms utilized in households throughout India. This product, colloquially referred to as a broomstick, is extensively favored over synthetic substitutes due to its cost-effectiveness and functional efficacy. The demand for broomsticks encompasses both domestic and international markets, thereby accentuating the economic relevance of broom-grass cultivation. Nevertheless, despite the economic promise inherent in this crop, the sector grapples with numerous challenges, particularly concerning price volatility, which presents substantial risks for both farmers and entrepreneurs.

Economic Importance of Broomsticks Agri-business:

The agro-business associated with broomstick possesses considerable potential for alleviating poverty and fostering rural development. The cultivation of broom-grass necessitates comparatively low input expenditures, rendering it an appealing alternative for farmers situated in hilly, forested areas with restricted access to contemporary agricultural inputs. It flourishes in marginal and degraded lands that are typically unfit for alternative agricultural practices.

Furthermore, as a perennial species, it can be harvested annually, thereby providing a reliable income stream for farming households.

The broomstick market is characterized by an extensive supply chain that encompasses numerous stakeholders, including farmers, intermediaries, wholesalers, retailers, and exporters. With the growing demand, the sector has the capacity to evolve into a profitable agri-business, creating employment opportunities and stimulating local economies.

However, while the sector manifests evident advantages, it is concurrently beset by various challenges that impede its full realization. Among these challenges, price volatility emerges as a significant concern, adversely impacting the livelihoods of farmers and entrepreneurs while engendering uncertainty throughout the market chain.

Value chain node of broom grass:

The market chain involved four primary stakeholders (collectors, local traders/middlemen, exporters, manufacturers; *Figure 1*). The chain starts with the collection of the broom grass and its transport to the village, followed by the processing of the product (drying, bundling, and packing), the collection of dried broom grass from villages by local traders, on-selling to wholesalers at Mawiong, Shillong, and then they export and sell to broom traders in the other states of India namely, Rajasthan, Bihar, Gujarat, Maharashtra and Uttar Pradesh. While this is the typical chain of activities, there are exceptions. Most collectors usually sell green broom grass to traders, rather than dry and process the green broom. And there is some local manufacture of brooms at the village level, where farmers make cylindrical broomstick and sell them in local markets *(approx. 250-300 gm)*. Our study will end with the wholesalers, and did not explore issues relating to the export of broomgrass or the manufacture of brooms.

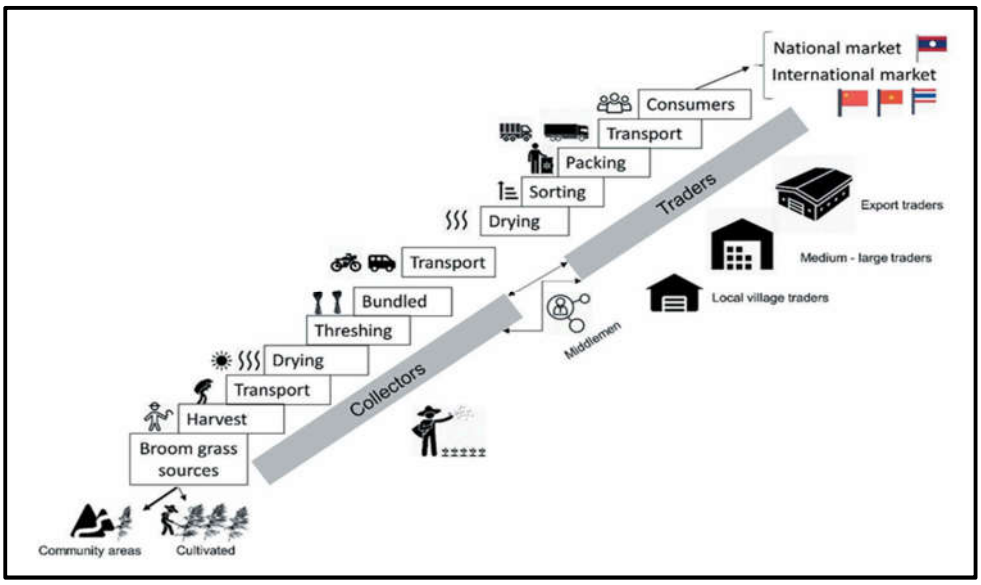

Figure 1: Conceptual diagram of the market chain of broom grass in South-West Khasi Hills District

Price Instability: A Pressing Concern

The phenomenon of price instability within the broomstick market can be ascribed to a multitude of factors, encompassing variations in demand and supply, market inefficiencies, and external shocks. The pricing of broomgrass and its derivatives exhibits a pronounced seasonality, shaped by both climatic conditions and market demand fluctuations. During periods of peak harvest, the market frequently encounters oversupply, resulting in a dramatic decline in prices. Conversely, during off-seasons, a scarcity of supply precipitates price escalations; however, these increases do not consistently translate into profits for farmers, who often lack the capacity to store products for extended durations or access markets with efficiency.

One of the foremost challenges contributing to price volatility is the absence of structured market frameworks. In numerous regions, including the South-West Khasi Hills District, the broomgrass trade operates informally, characterized by minimal regulatory oversight or support from established institutions. Farmers frequently possess little to no negotiating leverage, as they rely on intermediaries who establish prices contingent upon market dynamics in urban areas. Consequently, farmers experience significant fluctuations in their income, which subsequently affects their capacity to reinvest in their agricultural endeavors or strategize for future cultivation

For entrepreneurs, fluctuations in pricing can engender considerable risks associated with procuring raw materials at uniform costs. Stakeholders engaged in the production and distribution of broomsticks must adeptly maneuver through unpredictable market conditions, which may culminate in variable profit margins. Entrepreneurs frequently encounter obstacles in sustaining stable supply chains due to unpredictable price volatility and inconsistent production levels from agricultural producers. This absence of stability poses significant challenges for strategic long-term business planning and capital investment within the sector.

Challenges in Broomgrass Agri-business:

In addition to price volatility, the broomgrass agri-business within the South-West Khasi Hills District faces a multitude of additional challenges, each of which contributes to the overall susceptibility of the sector. These challenges encompass:

1.Insufficient Market Access and Infrastructure
2. Inadequate Awareness of Market Trends
3. Environmental and Climatic Vulnerabilities*:*
4. Absence of Institutional Support:

The socio-economic significance of broomstick cultivation extends beyond individual livelihoods to the broader rural community. Broomstick farming contributes to rural development, employment generation, and community welfare, making it a vital component of the local economy. Exploring the socio-economic impacts of broomstick cultivation can provide valuable insights into the potential for rural development through sustainable agri-business practices.

This study aims to analyze the market dynamics and challenges in the broomstick agri-business in the South-West Khasi Hills District of Meghalaya, with a particular focus on the impact of price instability on farmers and entrepreneurs. By investigating the factors contributing to price fluctuations, assessing the economic and social implications, and evaluating coping strategies and policy interventions, this research seeks to provide a comprehensive understanding of the broomstick market and offer recommendations for enhancing its stability and sustainability

OBJECTIVE OF THE STUDY:

- To assess the socio-economic profile of broomgrass growers in South-West Khasi Hills District.

- To examine the market structure and trade practices of broomstick agri-business.
- To analyze seasonal and spatial price variations of broomstick and identify key factors contributing to price instability.
- To evaluate the impact of price instability on farmers' livelihoods and identify strategies for economic sustainability.

RESEARCH QUESTIONS:

- Whether the socio-economic status of the broom growers is improving after diversification to broom cultivation and how does price instability affect their socio-economic well-being of broomgrass farmers?
- How do seasonal changes and weather conditions affect broom-grass supply and how does the quality of broom-grass impact its market value and price stability?

B. REVIEW OF LITERATURE

Ishuzika*et al.* (2022) examined the domestic and export markets for tiger grass (*Thysanolaena latifolia*) brooms in Myanmar, focusing on trade dynamics in Taunggya Village, Shan State. Based on interviews, market surveys, and export data analysis from 2020-2021, it highlights the economic significance of tiger grass collection. Prices range from 5,000 to 6,500 MMK per bundle, with exports rising since 2014. Declining swidden farming threatens natural tiger grass availability, emphasizing the need for cultivation. The study calls for further research on market chains to support sustainable trade.

Ghimire *et al.* (2021) studied the commercialization and promotion of Non-timber Forest Products (NTFPs) within the rural context of Ghana, emphasizing their roles in alleviating the poverty.

Shankar *et al.* (2021) examined the obstacles inherent in contract farming, particularly in thecontext of extreme fluctuations in market prices, by proposing an innovative framework termed the Violent Market Price (VMP) contract. This contractual arrangement incorporates an adaptive pricing mechanism designed to facilitate the commitment of both enterprises and agricultural producers, even amid turbulent market scenarios. By employing a Stackelberg game theoretical model coupled with backward induction, the authors ascertain the optimal

terms of the contract, illustrating that the VMP contract enhances profitability for both stakeholders while concurrently mitigating the likelihood of contract violations. Ultimately, the VMP contract fosters an environment of stability and collaborative engagement, thereby ensuring reciprocal advantages, notwithstanding the prevailing price volatility in the agribusiness sector.

Talukdar *et al.* (2021) examined the role of Non-Timber Forest Products (NTFPs) in the livelihoods of rural communities around the Patharia Hills Reserve Forest (PHRF) in northeast India. It assesses their economic importance and the effectiveness of conservation strategies. Surveys with 200 respondents revealed that 64% use NTFPs for food, while only 6% rely on them entirely for income. Unsustainable harvesting threatens biodiversity, emphasizing the need for stricter regulations and sustainable management. The study identifies 14 key NTFPs, with herbs being the most common. It underscores the necessity of balancing economic reliance on NTFPs with conservation efforts.

C. Methodology

The study will be conducted in the South-West Khasi Hills District, which has been purposively selected due to its significant broom-grass cultivation. The research will be descriptive and exploratory, aiming to provide an in-depth analysis of the market dynamics and price instability of broomstick agri-business. The study relies on both primary and secondary data to ensure a comprehensive understanding of the topic.Primary Data Collection has been conducted using semi-structured questionnaires to gather data on production, marketing, and management broomgrass with various stakeholders, including farmers, middlemen, wholesalers and consumers to understand the plantation process, management practices, production levels, and economic benefits. -based survey will be conducted across six villages:Mawkyrwat Block:Mariem, Umdohlun, Demnar and RanikorBlock:Nongummer, Langpa, Nongrynniang. In each village, at least 15 households will be interviewed to assess economic activities and market challenges. For Secondary Data Collection various journals, theses, books, census reports, and government records has been analyzed to support the primary findings. Market Linkages and Price Analysis will be examined to assess the role of different stakeholders (farmers, middlemen, wholesalers, and consumers) in the supply chain. A detailed study of seasonal,

annual, and cyclic price variations will be conducted to understand the factors influencing price instability and its impact on producers and traders.The total marketing cost will be assessed up to the consumer level, considering all intermediaries involved in the value chain. The study will cover the following stakeholders: 90 Farmers, 2 Middlemen, 1 wholesaler and 50 consumers.

D. Results and Discussions

Socio-economic Status and Cultivation aspects of the Farmers

This section provides a detailed understanding of the socio-economic background and cultivation practices of broomgrass farmers in the South-West Khasi Hills District. Understanding these aspects is essential to assess the livelihoods, production capacity, and economic challenges faced by the growers.

Demographic profile of the respondents:

The demographic profile of the respondents is shown in Table 1.01. It presents basic information such as gender and age, which helps in understanding the background of the participants involved in the study.

Table 1.01: Demographic Profile of the Respondent

Sl. No.	Demographic factors	Category	No. of Respondents	Percentage (%)
1.	Gender	Male Female	50 40	**55.6** **44.4**
2.	Age	20-30 31-40 41-50 Above 50	9 11 34 36	**10.0** **12.2** **37.8** **40.0**
3.	Marital Status	Married Unmarried Divorced Widowed	83 1 2 4	**92.2** **1.1** **2.2** **4.4**

The demographic profile of the respondents indicates that a majority were male (55.6%), with females comprising 44.4%, reflecting active participation from both genders in broomgrass cultivation. Most respondents were above 50 years of age (40.0%), followed by those aged 41–50 years (37.8%), showing that the activity is largely undertaken by older individuals. Younger age groups (20–40 years) had lower representation, suggesting limited youth involvement. In terms of marital status, a dominant share (92.2%) of respondents were married, while unmarried (1.1%), divorced (2.2%), and widowed (4.4%) individuals formed a small proportion, indicating that broomgrass farming is primarily pursued by settled family members.

Education Qualification & Occupation of the Farmers:

The educational qualifications of the respondents alongside their occupational engagement are shown in Table 1.02. This helps to understand the link between their level of education and the type of work they are involved in, whether in the formal or informal sector.

Table 1.02: Education Qualification & Occupation of the Farmers

Education Qualification of the Respondents	Occupation		Total
	Formal Sector	Informal Sector	
Graduate	1	2	**3**
High School	1	2	**3**
Secondary	0	9	**9**
Primary	0	75	**75**
Total	**2**	**88**	**90**
Percentage of Total (%)	**2.2**	**97.8**	**100.0**

The cross-tabulation of education qualification and occupation reveals that the vast majority of broomgrass farmers are engaged in the informal sector (97.8%), with only 2.2% working in the formal sector. Farmers with primary education form the largest group (75), all of whom are involved in informal activities. Among those with secondary education, all 9 respondents are also in the informal sector. A small number of high school and graduate-level educated farmers (3 in total) are engaged in the formal sector, while others with the same qualifications work informally.

This indicates a strong concentration of agricultural livelihood within the informal economy, regardless of educational background, though slightly more educated individuals have some access to formal employment opportunities.

Household Size & Type of Dwelling House:

The household size of the respondents along with the type of dwelling house is shown in Table 1.03. It provides an overview of the living arrangements of the participants, which reflects their socio-economic conditions and household composition.

Table 1.03: Household Size & Type of Dwelling House (Cross tabulation)

Household Size(No. of Family members)	Typeof House			Total
	Kutcha	Pucca	Semi-pucca	
1-3	8	0	0	**8**
4-6	22	0	23	**45**
7 and above	10	1	26	**37**
Total	**40**	**1**	**49**	**90**
Percentage of Total (%)	**44.4**	**1.1**	**54.4**	**100**

The cross-tabulation of household size and type of dwelling house indicates a direct relationship between family size and housing conditions. Among smaller households (1–3 members), all reside in kutcha houses (8), suggesting limited resources. For medium-sized households (4–6 members), the distribution is more balanced, with 22 kutcha and 23 semi-pucca houses, showing some improvement in housing standards as family size increases. Larger households (7 and above) are more likely to live in semi-pucca houses (26), with a small number in kutcha (10) and only 1 in a

pucca house, indicating gradual improvement in housing with increasing household size, possibly due to shared income or resource pooling. Overall, kutcha houses account for 44.4%, semi-pucca for 54.4%, and pucca houses make up just 1.1%, reflecting that most respondents live in semi-permanent structures, with very limited access to fully pucca housing.

Monthly income of the family

The monthly income distribution of the respondents' families is shown in Table 1.04

Table 1.04: Monthly income of the Family

Monthly Income (INR)	Frequency	Percentage (%)
Below 10,000	59	65.6
10,001-30,000	30	33.3
30,001-50,000	0	0.0
Above 50,000	1	1.1
Total	**90**	**100.0**

The data reveals that a majority of the respondents' families (65.6%) earn below ₹10,000 per month, indicating a low-income status. About 33.3% fall within the ₹10,001–₹30,000 income range, while only one household (1.1%) earns above ₹50,000 monthly, highlighting a significant income disparity and limited economic means among most households.

Farmer's Landholdings and Cultivation:

Table 1.05 highlights key details on landholding size, area under broomgrass cultivation, years of experience, and land ownership. This information helps to assess the scale of farming and the significance of broomgrass as a primary livelihood source.

Table 1.05: Farmer's Landholdings and Cultivation Details

Sl. No	Factors	Category	No. of Respondents	Percentage (%)
1.	Total land holding size	5-10 hectares Less than 5 hectares	4 86	**4.4** **95.6**
2.	Total land use for broomgrass cultivation	Less than 1-2 hectares 1-2 hectares More than 2 hectares	13 47 30	**14.4** **52.2** **33.3**

3.	Years of Cultivation	Less than 5 years 5-10 years More than 10 years	14 27 49	**15.5** **30.0** **54.4**
4.	Land ownership for Broom cultivation	Leased in land Owned land	16 74	**17.8** **82.2**
5.	Broom-grass is primary income	Yes No	82 8	**91.1** **8.9**

The data shows that 95.6% of farmers have less than 5 hectares of land, indicating a dominance of smallholder farming. Over half (52.2%) cultivate broomgrass on 1–2 hectares, and 33.3% on more than 2 hectares. Most farmers (54.4%) have over 10 years of experience in broomgrass cultivation, suggesting it is a well-established practice. 82.2% use owned land, reflecting land security. Notably, 91.1% of farmers consider broomgrass their primary source of income, highlighting its economic significance in the region.

Average annual income:

The average annual income distribution from broomgrass cultivation of the respondents' families is shown in table 1.06

Table 1.06: The average annual income from broomgrass cultivation

Average Income	Frequency	Percentage (%)
Less than Rs 10,000	5	**5.6**
More than Rs 50,000	26	**28.9**
Rs 10,000-30,000	36	**40.0**
Rs 30,001-50,000	23	**25.6**
Total	**90**	**100.0**

The data indicates that the majority of farmers (40%) earn an average annual income of Rs 10,000–30,000 from broomgrass cultivation. 28.9% earn above Rs 50,000, and 25.6% earn between Rs 30,001–50,000, reflecting a fair income range for many growers. Only 5.6% earn less than Rs 10,000, suggesting that broomgrass cultivation is a moderately profitable activity for most farmers in the study area.

Average Cost of Cultivation and Income from Broomstick:

Table 1.07 presents the average cost and income from broomstick cultivation across different land sizes. It provides insights into the profitability of broomgrass farming and how landholding size influences net returns.

Table 1.07: Average Cost of Cultivation and Income from Broomstick based on land Size

Cultivation under broom	Average Cost of Cultivation (₹)	Average Income (₹)
Less than 1 Hectare	7577	7346
1-2 Hectares	15489	15106
More than 2 Hectares	31733	31667

The table shows that across all land sizes, the income from broomstick cultivation is almost equal to or slightly less than the cost of cultivation. Farmers with smaller landholdings face minor losses, while those with larger areas barely break even. This indicates low profitability and highlights the impact of high labor costs and low market prices on farmers' returns.

Market Structure and Trade Participants

This section explores the overall structure of the broomstick market and the roles played by key stakeholders namely famers, middlemen, and wholesaler while also analyzing the financial and logistical barriers that shape their participation in the market.

Farmers Perception and Market Accessibility:

Table 1.08 explores farmers' perspectives on market access, pricing, government support, and sales frequency. It highlights critical challenges such as lack of fair pricing, limited awareness of schemes, poor transportation access, and price determination largely controlled by middlemen and market demand.

Table 1.08: Farmer Perceptions and Market Accessibility

Sl. No.	Factors	Category	No. of Respondents	Percentage (%)
1.	Receive Fair price	Yes No	2 88	**2.2** **97.8**
2.	Aware of Government Schemes	Yes No	19 71	**21.1** **71**
3.	Access for Transportation	Yes No	4 86	**4.4** **95.6**
4.	Determination of price	a) Wholesaler b) Middlemen c) Market Demand d) Both a & c e) Both b & c	0 70 2 5 13	**0.0** **77.8** **2.2** **5.6** **14.4**
5.	Frequency of Broomstick Sales (per year)	a) Once a year b)Twice a year c) Three to four times a year d) More than four times a year	65 20 4 1	**72.2** **22.2** **4.4** **1.1**

Most farmers (97.8%) report not receiving a fair price, and 71% are unaware of government schemes. A large majority (95.6%) lack access to transportation.

Regarding price determination, 77.8% indicate it is set by middlemen, while 14.4% cite both middlemen and market demand.

In terms of sales frequency, 72.2% sell broomsticks only once a year, highlighting limited market engagement and potential income instability.

Financial Access and Credit Sources of Broomgrass Growers:

Table 1.09 presents data on the financial access and sources of credit among broomgrass growers.

Table 1.09: Financial Access and Credit Sources of Broomgrass Growers

Sl. No.	Factors	Category	No. of Respondents	Percentage (%)
1.	Mode of Payment	a) Cash b) Credit c) Both a & b	86 0 4	**95.6** **0.0** **4.4**

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Sl. No.	Factors	Category	No. of Respondents	Percentage (%)
1.	Mode of Payment	a) Cash	86	**95.6**
		b) Credit	0	**0.0**
		c) Both a & b	4	**4.4**
2.	Loan taken	Yes	72	**80.0**
		No	18	**20.0**
3.	Source of loan	a) Middlemen	67	**74.4**
		b) Wholesalers	0	**0.0**
		c) Formal institutions	3	**3.3**
		d) Both a & c	1	**1.1**
		e) Both b & c	1	**1.1**

This data suggests that informal credit systems, particularly via middlemen, dominate the financial access landscape of broomgrass growers. The near absence of credit purchases and minimal engagement with formal financial institutions points to systemic issues like lack of awareness, documentation, or accessibility. Such dependence on middlemen may lead to exploitative lending and reduced bargaining power for growers.

4.2.3. Profile and Market Role of Middlemen:

The following table presents key information on the background and market role of middlemen in the broomstick trade, focusing on their education, years of experience, selling price per kilogram, and profit margin.

Table 1.10: Profile and Market Role of Middlemen in Broomstick Trade

Sl. No.	Factors	Category	Frequency	Percentage (%)
1.	Education Qualification	Primary	2	**100**

2.	Years as a Middlemen	10-20 years 21-30 years	1 1	**50.0** **50.0**
3.	Price of Broomstick/Kg	₹40-45	90	**100**
4.	Profit Margin(Rs/ Kg)	₹1-5	2	**100**

The data shows that middlemen involved in the broomstick trade have low formal education (primary level) but possess extensive experience (20–30 years), highlighting their strong influence in the market. The broomstick price is consistently reported at ₹40–₹45, indicating limited price variation. Although profit margins are stated as ₹1–₹5, this may be underreported. Overall, middlemen dominate market transactions, despite minimal formal education.

Challenges faced by the Farmers, Middlemen & Wholesaler:

(a) Challenges faced by the Farmers:

Table below highlights the key operational challenges encountered by the farmers in the broomstick trade.

Table 1.11: Challenges face by Farmers

	Frequency	**Percentage (%)**
Price Fluctuation	89	98.89
Transportation (man power &distance)	87	96.67
Limited storage facilities	66	73.33
Market access difficulties	20	22.22
Lack of Financial Support	10	11.11

Table 1.11 shows that the majority of farmers face challenges such as price fluctuation (98.89%), transportation issues (96.67%), and limited storage facilities (73.33%). Fewer farmers reported market access difficulties (22.22%) and lack of financial support (11.11%), indicating that price and transport are the most pressing concerns.

(b)Challenges faced by Middlemen:

Table below highlights the key operational challenges encountered by the middlemen in the broomstick trade.

Table 1.12: Challenges face by Middlemen

Discrepancy in Quality Grading
Poor Road Conditions
Price Volatility

Table 1.12 reveals that middlemen in the broomstick trade face three main challenges: discrepancy in quality grading, poor road conditions, and price volatility. These issues affect their profit margins and create inefficiencies in the marketing process.

(c)Challenges face by Wholesaler:

Table below highlights the key operational challenges encountered by the wholesaler in the broomstick trade

Table 1.13: Challenges face by Wholesaler

No Proper Storage facilities
Transportation Fee
Taxation
Rent

Wholesaler in the broomstick trade face key operational challenges, including the lack of proper storage facilities, high transportation fees, burdensome taxation, and rent expenses. These constraints increase their cost of doing business and can limit efficiency and profitability in the supply chain.

Consumer Behavior and Price Dynamics

This section explores consumer behavior in relation to broomstick purchasing patterns and associated price dynamics. It examines three key aspects: the usual place of purchase (4.3.1), the

price range and frequency of purchase (4.3.2), and the yearly trend in average broomstick price from 2020-2025 (4.3.3)

Customer Usual Place of Purchase:

Table 4.14 presents data on the common sources from which customers purchase broomstick

Table1.14: Customer Usual Place of Purchase

Place of Purchase	Frequency	Percentage (%)
Local Market	43	86.0
Street Vendors	2	4.0
Local Market &Street Vendors	5	10.0
Total	**50**	**100.0**

The majority of customers (86%) usually purchase broomsticks from local markets, while only a small portion buy from street vendors (4%) or both sources (10%). This indicates that local markets are the primary point of sale for broomstick products.

E. Conclusion

Broomstick cultivation is not merely an agricultural activity in South-West Khasi Hills District; it is a cultural and economic lifeline for many rural households. While the agri-business has considerable potential, it remains constrained by price instability, infrastructural gaps, and systemic market inefficiencies. A comprehensive and integrated approach involving institutional support, financial inclusion, cooperative marketing, and policy innovation is crucial to transform broomgrass from a subsistence crop to a profitable and sustainable agri-enterprise.

Despite the farmers' deep-rooted experience and generational knowledge in broomgrass cultivation, most remain dependent on traditional systems and intermediaries. The data shows that 72.2% of farmers sell their produce only once a year, often bound by prior financial agreements with middlemen. This dependence not only limits their bargaining power but also restricts them from accessing better market opportunities.

Further, the rising cost of cultivation primarily due to labor frequently surpasses income from sales, especially when prices dip during peak supply periods. The absence of a Minimum Support Price (MSP), organized cooperatives, and efficient transportation or storage facilities further intensifies both seasonal and spatial price volatility. Intermediaries and wholesalers involved in the market typically perform only basic functions like bundling, with limited or no value addition, indicating a fragile and underdeveloped value chain.

Despite these challenges, the sector remains vital to the rural economy and livelihoods in the region. The widespread cultivation experience and local knowledge of broomgrass farmers indicate a strong foundation upon which presents the opportunity for strategic intervention.With the right institutional support, improved market access, financial inclusion, and cooperative development, broomgrass cultivation can evolve from a subsistence-level activity into an inclusive, profitable and sustainable rural enterprise.

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