# Meghalaya State Agricultural Produce Market Committee Act: Trend Analysis of Arrivals and Price of Major Commodities

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#### **ABSTRACT**

The study was based on the secondary data collected from the State Agricultural Marketing Board that was set up in 1983. The Regulated Market is managed by the Mawiong Market Committee which is constituted by the government of Meghalaya as per the provision of the Meghalaya. Secondary data were collected from marketing board of Meghalaya for the commodities that are notified by the state government. Compound annual growth and seasonal index were applied for the study. the study reveal that the compound annual growth for quantity arrival of broom stick and tezpatta were positive but for potato it was found to be negative during the year 1996-97 to 2015-16. During December the price of broom stick was found to be highest as the quantity arrival was found to be lowest in this month. But for potato, price was found to be highest in the month of November when the quantity arrival was low. The peak season for broom stick, potato and tezpatta was found during the month of March, November and January, respectively.

**Key words:** Meghalaya; Trend; Arrivals, Price; Commodities; Regulated market;

The Meghalaya State Agricultural Produce Marketing Act (MSAPMA) was enacted in the year 1980 and the State Agricultural Marketing Board was set up in 1983, to develop marketing infra structural facilities and to provide marketing support to the farmers in the State. In the year 1991, with the assistance of the Chaudhary Charan Singh National Institute of Agricultural Marketing, Government of India located at Jaipur, detailed survey was conducted and a project profile for development of marketing infrastructure in Meghalaya was prepared. Two APMCS i.e., Garobadha wholesale regulated markets in West Garo Hills District and Mawiong wholesale regulated market in East Khasi Hills District were notified in the state. But only Mawiong regulated market is functioning in the state. The Regulated Market is managed by the Mawiong Market Committee which is constituted by the government of Meghalaya as per the provision of the Meghalaya. The Commodities that are notified by the government whose trading is to be regulated are Broomstick (Broom grass), Bay Leaf (Tezpatta), Potato and Resin Wood (Dhuplakri). On 12<sup>th</sup> August 1996, the first actual transaction could be started in the regulated market, where the trading of potato was initially taken up for buying and selling.

The response of the farmers and the traders was very enthusiastic and has stood in good stead to bring the market to this present form. With the commissioning of the Mawiong Wholesale Market, the wholesale trade of Potato, Tezpatta, Broomstick, Torch wood and CP Bark was taken up by the regulated market in right earnest. The notified Market Area of the Mawiong Regulated Market consists of three districts *viz*, East Khasi Hills, West Khasi Hills and Ri Bhoi District. The main source of revenue of the regulated market is market cess which is collected from the traders @ 1 per cent of the total value of goods bought or sold in the market and also store rent from the trader. The average revenue of the Market committee is approximately ₹25 lakh per annum.

#### **METHODOLOGY**

The study was carried for Meghalaya in commodity and price arrival in regulated market through secondary data collection to meet the objective of the study. The data were collected from Agricultural Marketing Board, Government of Meghalaya. The year wise data for quantity arrival were used from 1996-97 to 2015-16. The year wise data for price of commodities were available only for potato from 2002-03 to 2015-16 so trend in price was worked out for potato only. Monthly quantity arrival of major commodities and price were used from 2011 to 2015 as data were available from this year onwards. Five year averages of commodity arrivals, two year average for price of potato, coefficient of variation, compound annual growth rate (CAGR) and seasonal index were calculated.

CAGR was calculated by using log linear model.

$$Log Y = a + bt$$

Where, Y= dependent variable (*e.g.* Price arrival, quantity of commodity arrival)

t = time a = intercept and

b = slope coefficient CAGR= {EXP (b)-1}  $\times$  100

Seasonal variation index (*Gupta*, S. P., 1969) was calculated by using

$$SI = \frac{Month wise average of five years}{Averages of month wise average}$$

### RESULTS AND DISCUSSION

Trends in arrival of major commodities: The arrival of major commodities in the regulated market of Meghalaya during 1996-97 to 2015-16 is presented in Table 1. The compound annual growth rate of quantity arrivals of broom stick and tezpatta was found to be positive (13.19% and 4.14%, respectively) during 1996-97 to 2015-16 but for the arrivals of potato was found to be negative (-8.36%) which may be due to development of new markets nearby the farmers locality in the state. There was no stability over the years, for all the commodities of quantity arrivals in the regulated market which is reflected by higher value of coefficient of variation which was observed to be 64.37, 51.00 and 64.52 for broom stick, potato and tezpatta, respectively. Trend in price of potato: The price of potato arrival in regulated market of Meghalaya during 2002-03 to 2015-16 is shown in the Table 2. The compound annual growth rate of price of potato arrival in Mawiong market is

Table 1: Five year average of major commodity arrival in Mawiong market in MT

Year	Broom Stick	Potato	Tezpatta
1996-97 to2000-01	5987.00	21149.40	5987.00
2001-02 to 2005-06	13412.42	20837.40	13412.42
2006-07 to 2010-11	17618.98	12884.22	18276.32
2011-12 to 2015-16	32914.54	5708.22	7389.02
CAGR	13.19	-8.36	4.14
CV	64.37	51.00	64.52

Source: GoM, 2016.

Table 2: Two year average of price of potato in Mawiong market (Rs/qtl)

Year	Price (Rs/qt)		
2002-03 to 2003-04	450.00		
2004-05 to 2005-06	539.50		
2006-07 to 2007-08	641.00		
2008-09 to 2009-10	864.29		
2010-11 to 2011-12	770.09		
2012-12 to 2013-14	1070.18		
2014-15 to 2015-16	1240.37		
CAGR	8.08		
CV	46.55		

Source: GoM, 2016

found to be positive but there was high fluctuation as the co efficient of variation was very high i.e., 46.55 per cent which may be due to declining in potato arrival in the regulated market moreover many new markets (local rural markets) nearby farmers localities are developed in the state.

### Seasonal index

Seasonal index of arrival of major commodities: Seasonal index of arrival of major commodities in regulated market of Meghalaya during 2011 to 2015 is presented in Table 3. The peak season for broom stick was observed to be during the month of March which is clearly evident from the value of seasonal index (332.36 %). Whereas, in the month November was the peak season for potato arrival as seasonal index was found to be highest (157.64 %). And for tezpatta, January was found to be the peak season as the value of seasonal index was found to be highest (250.95 %). Seasonal n index of price of major commodities in regulated market: Seasonal index of price of major commodities in regulated market of Meghalaya during 2011 to 2015 is presented in Table 4. During December the price of broom stick was found to be highest which

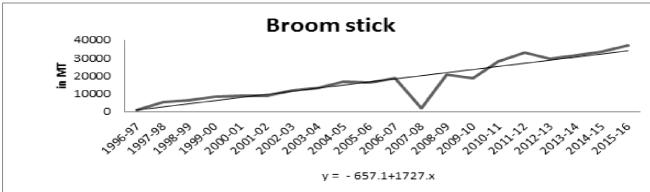


Fig. 1. Linear trend of arrivals of broom stick during 1996-97 to 2015-16

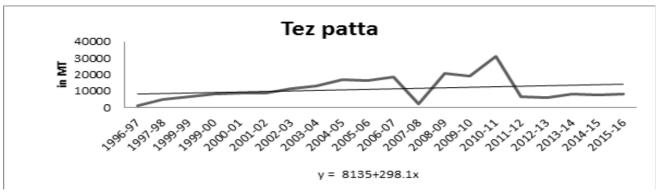


Fig. 2. Linear trend of arrivals of tezpatta during 1996-97 to 2015-16

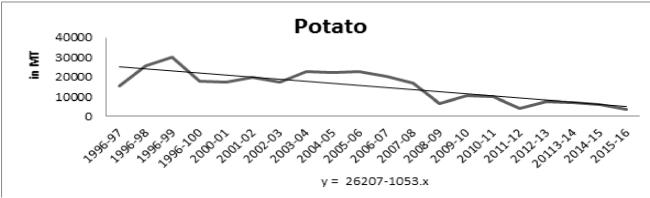


Fig. 3. Linear trend of arrivals of potato during 1996-97 to 2015-16

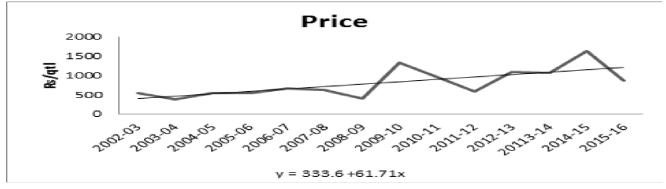


Fig. 4. Linear trend of price of potato during 1996-97 to 2015-16

Table 3 Seasonal index of price of major commodity in regulated market of Meghalaya

2011-15	Broom stick		Potato		Tezpatta	
	Arrival	Price	Arrival	Price	Arrival	Price
Jan	31.04	90.69	-	-	250.95	96.08
Feb	267.47	86.56	-	-	162.93	95.66
Mar	332.36	82.54	-	-	114.04	94.83
Apr	144.63	88.97	-	-	113.33	95.77
May	100.38	91.89	-	-	103.76	99.25
June	68.77	94.30	34.88	88.24	75.88	103.36
July	96.45	102.16	139.43	91.95	55.35	103.26
Aug	62.60	112.84	134.24	102.32	53.65	109.47
Sept	50.13	112.27	92.33	104.52	47.33	103.60
Oct	27.44	113.55	92.77	103.53	49.37	100.88
Nov	14.33	106.38	157.64	119.56	24.41	94.34
Dec	4.39	117.86	48.70	89.86	149.0	103.50
Total	100.0	100.0	100.0	100.0	100.0	100.0
Av.	1200.0	1200.0	700.0	700.0	1200.0	1200.0

is clearly evident from the value of seasonal index that (117.86%). It shows that December month is the best month to harvest the broom stick. For potato, November price was found to be highest as the value of seasonal index was found to be highest (117.86%). For tezpatta, January month was found to be the highest during August as the value of seasonal index was found to be highest (109.47%).

The seasonal index analysis depicts that trends of price of broom stick was found to be increase from April month onwards to December month. During this period the seasonal index was found to be more than 100 from July to December and highest in the month of December (117.86%)

Similarly, the price trends of tezpatta were found to be increase from April month onwards to December month. Although, the seasonal index starts increase to more than hundred from June onwards and it was peak in the month of August (109.47%)

Source: GoM, 2016

#### CONCLUSION

Compound annual growth rate for quantity arrival of broom stick and tezpatta were found to be positive but for potato it was found to be negative during the year 1996-97 to 2015-16. There was high fluctuation over the years for all the commodities in quantity arrival. Compound annual growth rate of price of potato in the regulated market was found to be positive but the quantity arrival has decline which may be due to development of many new markets near by the farmers in the state. During December the price of broom stick was found to be highest as the quantity arrival was found to be lowest in this month. But for potato, price was found to be highest in the month of November when the quantity arrival was also highest. During August the price of tezpatta was found to be highest where quantity arrival was low. Growth rate of arrival of broom stick and tezpatta were found to be positive as the commodities have surplus in the state but for potato was found to be negative as the commodities is not self sufficient in the state.

#### REFERENCE

GoM. (2016). Marketing board 2015-16, Meghalaya. Government of Meghalaya.

Gupta, S. P. (1969). Statistical Methods. Thirty Ninth revised edition, Sultan, New Delhi, pp. 628-672.

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