Farmers response on agricultural marketing information system in Meghalaya

Lakshmi Dhar Hatai

Department of Basic Science & Humanities, College of Home Science, Central Agricultural University, Sangsangree, Tura, Meghalaya-794005, India

ABSTRACT

Reducing knowledge gaps and sharing agricultural marketing information to farmer is an essential input for increasing productivity and boosting agricultural growth in rural areas. An attempt has been made to identify the various pattern of awareness, sources, utilization and its benefits, constraint and expectations of agricultural marketing information (AMI) among different categories of farmers in the study area of two regulated markets namely, Mawiong Regulated Market in Mylliem Block of East Khasi Hills and Garobadha Regulated Market in Selsella Block of West Garo Hills district. The sample size consisted of 120 farmers from both selected regulated market areas were selected for the study based on purposive and random sampling technique. From the findings of the research study, it was revealed that that in case of large category of sample farmers, the extent of awareness on arrivals, prices in local markets and other markets, quality / grade of produce required, post harvest handling of agricultural produce was found to be higher than small and medium size farmers. The extent of utilization of agricultural market information by different categories of sample farmers were in decision making on production, selling and post harvest handling. It was observed that the sources of agricultural market information at household level were radio, newspaper and television for small farmers. At the market level, commission agents were most predominant sources of AMI for all categories of farmers. It revealed that the market information on prices prevailed in other nearby market placed high expectations among all the categories of farmers followed by future price projections and quality wise price information. Proper integration of various agencies for adequate and efficient dissemination of vital agricultural marketing information, so that it will act as an 'one stop solution' for the needs of the farming community in hilly regions of Meghalaya. There is need of proper dissemination of market intelligence and information through all possible means of communication for improving the marketing efficiency.

Keywords: Agricultural marketing information, regulated markets, marketing strategy, marketing efficiency, meghalaya

Market information is an important facilitating function in the agricultural marketing system. The main purpose of marketing information system (MIS) is to support in marketing decision making and marketing efforts of entrepreneurs and farmers. It facilitates marketing

Address for correspondence

L.D. Hatai: Department of Basic Science & Humanities College of Home Science, Central Agricultural University Sangsangree, Tura, Meghalaya- 794005, India

E-mail: lakshmidharhatai@gmail.com

decisions, regulates the competitive market process and simplifies marketing mechanisms. It is crucial to the farmers to make informed decisions about what to grow, when to harvest, to which market produce should be sent and whether or not to store it. The market price information help actors in agricultural value chain make informed decisions that promote efficient production and trade. It is especially valuable for the producers that sell in local and regional markets, helps producers to negotiate with traders, determine what markets to sell to, store their crops until price increases or even plan for future crops (Jairath and Yadav, 2012).

Indian agrarian economy is characterised by low degree of market integration and connectivity, accessibility of reliable and timely information by the farmers on prices of commodities. To fulfill the expectations of the conscious buyers, price and quality, globalisation and liberalisation and maintain the viability of small and marginal farm to retain them in the farming, application of technology in agriculture has become inevitable (Shalendra *et al.* 2011). Today, the farmers are increasingly looking for frequent interactions with various information sources not only to carry out their farming and marketing tasks efficiently, but also to ensure delivery of safe and quality agricultural products to consumers. The challenge is to improve the accessibility of farmers to information and its relevance in the agricultural development (Adiguru *et al.* 2009).

Market information is a service usually operated by the public sector, which involves the collection on a regular basis of information on prices and, in some cases quantities of widely traded agricultural products from rural assembly markets, wholesale and retail markets, as appropriate and dissemination of this information on a timely and regular basis through various media to farmers, traders, government officials, policy makers and others, including consumers. Marketing Information System (MIS) is defined as a process of gathering, processing, storing and using information to make better marketing decisions and to improve marketing exchange (Nickels, 1978 and 1986).

Farmers need information to aid them in planning their operations right from the time they plant the seeds until the produce passes the hands in the market. Agricultural

marketing information helps the farmers in comparing the prices offered by different firms in different markets and also in the selection of alternative outlets available. The Agricultural Marketing Information System (AMIS) reduces business risks of farmers, sellers and traders (Jairath, 2004). Lack of standardization, duplication of efforts inadequate network for information flow, lack of coordination and integration among various agencies are some of the limitations of Market Information System (Shreshtha, 2003). The growers received low prices because of lack of market information which resulted in wide inter-market price variation. Improvement of agricultural market information services was necessary for domestic market efficiency and to integrate domestic agricultural market with regional and international market for sustainable development of agriculture sector and to ensure country's long run food security (Rahman, 2003). Reducing knowledge gaps and sharing information of economic value for farmer is an essential input for increasing productivity and boosting growth in rural areas. Empowering farmers with relevant, accurate and timely information about prices being quoted in the market place can help the farmer to take appropriate production related decisions as well as strengthening his bargaining power.

At present, the information is disseminated through various media like radio, newspapers, blackboard display and public address system at market yards. The information provided by these methods is stale and does not help the farmers sufficiently in taking decisions in marketing their produce. The farmers are also not able to know about the prices prevailing in other markets, as the market committees are able to disseminate information in respect of their own markets only. The farmers are therefore, left with no alternatives but to dispose off their produce in the nearest market, even at uneconomic prices. There is need of proper dissemination of market intelligence and information through all possible means of communication for improving the marketing efficiency (Subrahmanyam and Mruthyunjaya, 1978). The ICT can deliver fast, reliable and accurate information in a user friendly manner for practical utilisation by the end user. The information disseminated facilitates the farmers to decide what and when to plan, how to cultivate, when and how to harvest, what post harvest management

practices to follow, when and where to market the produce etc. (USAID, 2010)

The State Agricultural Produce Marketing Act was enacted in the year 1980 and the State Agricultural Marketing Board was set up in 1983 with its headquarter at Shillong, to develop marketing infrastructural facilities and to provide marketing support to the farmers in the State. In the year 1991, with the assistance of the Centre for Agricultural Marketing, Government of India located at Jaipur, detailed survey was conducted and a master plan for development of marketing infrastructures in Meghalaya was prepared. Accordingly, it was proposed to set up secondary markets in each District in the State which are called Wholesale Regulated Markets. There are at present, two APMCs in the state of Meghalaya namely, Mawiong Regulated Market in East Khasi Hills and Garobadha Regulated Market in West Garo Hills district. Meghalaya is a state of great diversity and inequality in many aspects of life and nature. It needs special attention for development of agricultural marketing information in the state. The study would help planners, policy makers, agriculturist, researchers and government bodies by highlighting the different aspects of agricultural marketing information system of Meghalaya. The specific objectives of the study are (1) to find out the various sources of existing agricultural marketing information system among the different categories of sample farmers, (2) to study the pattern and extent of dissemination and utilization of existing agricultural marketing information by different categories of sample farmers, (3) to identify the constraints and expectations in the agricultural marketing information system faced by sample farmers and (4) to suggest appropriate policy measures to stakeholders for implementation of agricultural marketing information system in Meghalaya.

DATABASE AND METHODOLOGY

As per the set objectives of the study, the data from primary as well as secondary sources were collected. The primary data from sample farmers, traders & officials of regulated markets was collected by personal interview method by using pre-tested structured schedule prepared for the purpose. The data on area, production,

arrivals, prices, exports, etc. were elicited from secondary sources. Data pertaining to the agricultural year 2012-13 was considered with specific objectives. Out of eleven districts of Meghalaya, East Khasi Hills and West Garo Hills district was selected purposively for this study for easy accessibility of agricultural marketing information. To study the existing agricultural market information system (AMIS) and its dissemination, two regulated markets namely, Mawiong Regulated Market in Mylliem Block of East Khasi Hills and Garobadha Regulated Market in Selsella Block of West Garo Hills district were selected purposively. Interview method was developed to get complete and reliable information with the help of well structured schedule.

To study the sources of agriculture market information and their utilization among the farmers and traders, 60 farmers from each selected market area were selected for the study based on random sampling technique. Post enumeration classification of farmers into 30 small (< 1 ha.), 20 medium (1-2 ha.) and 10 large (> 2 ha.) farmers was done based on the size of land holding. To understand the market information system for agricultural commodities, both tabular and econometric models were designed to analyze the data of the study. To find out the nature, extent, sources, utilization and expectations of market information system by farmers, traders and officials, tabular analysis with simple averages, percentages, etc, were computed. The traders responses was scored giving a weight of 3 for 'always', 2 for 'sometimes' and 1 for 'rarely'. The tabular analysis was carried out to examine the status of farmers, accesses and usages of Agricultural Marketing Information (AMI) by them.

RESULTS AND DISCUSSION

The socio-economic characteristics of farmers represent a complete picture of the existing situation of the study area. The major socio economic variables of farmers are age, sex, education, caste, type of family, family size, farm size, and dependency on farms, occupation and monthly family income. The findings have been represented in table 1. It revealed that middle aged farmers have maximum attention towards farming, in comparison to other age groups. Both male (50.8 %)

and female (49.2 %) were actively involved in decision making process in the field of agriculture. Education is the process of developing the inner abilities and powers of an individual farmer. Most often, education is used to communicate information and / or build skills. It was found that 75 % farmers are literate and above. It reflects the importance of education in improving the quality of life in rural farming community. All the agrarian population belonged to the Schedule Tribe (ST) category in the study area. It was observed that 56.7 % of the farmers stay in joint family, which may be due to the fact that farmers maintain the traditional system, culture and values in our rural society. It was found that 46.7 and 43.3 % farmers belong to medium and small families respectively. It was revealed that majority of farmers i.e. 50 % were small categories of farmers. About 93.3 % of respondents were fully dependent on farming. The majority of farmers (70 %) were actively involved in agricultural profession due to it's accessibility in rural areas. It was found that majority of the farmers (58.3 %) were having medium family income (i.e. ₹ 5,000/- – 10, 000/-).

Table 1: Socio-economic characteristics of farmers in sample villages of the study

(N=120)

Sl. No	Particulars	Frequency	Percentage (%)
1	**Age group**		
	Young (upto 35 yrs)	27	22.5
	Middle (36-50 yrs)	58	48.3
	Old (more than 51 yrs)	35	29.2
2	Sex		
	Male	61	50.8
	Female	59	49.2
3	**Education**		
	Illiterate	30	25.0
	Primary	55	45.8
	High school	26	21.7
	Collegiate	9	7.5
4	**Caste**		
	ST	120	100.0
	SC	-	-
	OBC	-	-
	General	-	-
5	Type of Family		
	Joint	68	56.7
	Nuclear	52	43.3
6	**Family size**		
	≤ 4 members	52	43.3
	5-9 members	56	46.7
	≥ 10 members	12	10.0
7	**Size of Land holdings (Farm Size)**		
	Small (Less than 1 ha.)	60	50.0
	Medium (1- 2 ha)	40	33.3
	Large (More than 2 ha.)	20	16.7
8	**Depending on farming / land**		
	Fully dependent	112	93.3
	Partially dependent	08	6.7
9	Occupation		
	Agricultural labour	28	23.3
	Business	06	5.0
	Service	02	1.7
	Agriculture	84	70.0
10	**Monthly family income**		
	Low (upto Rs. 5,000/-)	32	26.7
	Medium (Rs.5,000/- to Rs.10,000/-)	70	58.3
	High (Rs. 10,000/- and above)	18	15.0

Source: Own Field Survey, (2012-13).

The various assets of information and communication system owned by the farmers are presented in table 2. All most more than 65 % of the farmers belonging to all categories owned a radio where as 74 % of large farmers owned a television. About 55.5 % of small farmers, 56.2 % of medium farmers and 66.6 % of large farmers owned mobile phones. It was observed that about 18.5 % of large farmers subscribed daily news paper in regional (Garo and Khasi) languages. None of the small and medium farmers subscribed to magazines related to agriculture. However, only 3.7 % of large farmers subscribing the agricultural related magazines in the study area.

Table 2: Status of assets on information and communication systems of sample farmers

(N=120)

Sl. No.	Assets	Small Farmer		Medium Farmer		Large Farmer	
		No.	%	No.	%	No.	%
1	Radio	12	66.6	33	68.7	38	70.3
2	Television	8	44.4	24	49.9	40	74.0
3	Mobile Phone	10	55.5	27	56.2	36	66.6
4	Land Phone	0	0.0	5	10.4	14	25.9
5	Subscriber to daily News Papers (Garo/Khasi/English)	2	11.1	8	16.6	10	18.5
6	Subscriber to Magazines on agriculture	0	0.0	0	0.0	2	3.7

Note: The total percentage across each farmer size category is not added up to 100 due to multiple or no response.

Table 3: Farmers awareness on agricultural market information

(N=120)

Sl. No.	Type of Agricultural Market Information (AMI)	Small Farmer		Medium Farmer		Large Farmer	
		No.	%	No.	%	No.	%
1	Arrivals in local markets	8	44.4	25	52.07	32	59.2
2	Prices in local markets	12	66.6	33	68.7	38	70.3
3	Prices in other markets	5	27.7	15	31.2	26	48.1
4	Area of crop sown in the state	0	0.0	2	4.16	6	11.1
5	Production	0	0.0	4	8.33	7	12.95
6	Quality and grade of produce required	10	55.5	32	66.6	37	68.4
7	Post harvest handling	6	33.3	20	41.6	24	44.4
8	Export and Import	0	0.0	0	0.0	2	3.7

Note: The total percentage across each farmer size category is not added up to 100 due to multiple or no response.

The awareness on agricultural marketing information (AMI) of the different categories of sample farmers was presented in table 3. It was observed that about 44.4 % small farmers were aware of arrivals. In case of small farmers, the awareness on prices in local markets and prices in other markets were 66.6 and 27.7 % respectively. It was found that none of the small farmers aware of the area of crop cultivated, production and export & import of the agricultural produces. However, 55.5 % of small farmers were aware about the quality and grade of the

produce required. About 33.3 % of small farmers were aware for post harvest handling of agril produce. In case of medium farmers, about 68.7, 52.07 and 31.2 % were aware of prices in local markets, arrivals and prices in other markets respectively. About 66.6 % of medium size farmers were aware about quality or grade of produce required.

However, in case of large category of sample farmers, the extent of awareness on arrivals, prices in local markets and other markets, quality / grade of produce required, post harvest handling of agricultural produce was found to be higher than small and medium size farmers. About 70.3, 59.2 and 48.1 per cents of large farmers were aware of prices in local markets, arrivals and prices in other markets respectively. It was observed that large farmers were aware of quality and grade (68.4 %) and post harvest handling (44.4 %) of agricultural produces.

It was observed from table 4, that the sources of agricultural market information at household level were radio (22.2 %), newspaper (11.1 %) and television (5.5 %) for small farmers. Radio formed the major sources of

information (20.8 %) for medium farmers at household level. However, in case of large farmers, television (31.4 %) followed by radio (29.6 %), newspaper (18.5 %), magazines (3.7 %) and internet (1.85 %) formed the sources of AMI. It was found that the major sources of AMI at village level were neighbours (66.6 %) followed by friends (44.4 %) for small farmers, While 50 per cent of medium farmers and 33.3 per cent of large farmers relied on neighbours for the AMI. About 37.0 per cent of large farmers depend on friends for market information at village level. KVKs, Cooperative Credit Societies, SHGs were also played important role for getting sources of AMI for all categories of farmers at village level (table 4). At the market level, commission agents were most predominant sources of AMI for all categories of farmers (66.6 % for small farmers, 50 per cent for medium farmers and 46.2 % for large farmers). It was observed that majority of small farmers relied on announcement by APMC (38.8 %) followed by input dealers and display boards of APMC (22.2 % each). There was lacking of marketing intelligence cell for sources of AMI among all categories of sample farmers.

Table 4: Farmers' sources of agricultural market information at household level, village level and market level

(N=120)

Sl. No.	Sources of Agricultural Market Information (AMI)	Small Farmer		Medium Farmer		Large Farmer	
		No.	%	No.	%	No.	%
	At household level						
a	Radio	4	22.2	10	20.8	16	29.6
b	News papers	2	11.1	6	12.5	10	18.5
c	Television	1	5.5	8	16.6	17	31.4
d	Magazines	0	0.0	2	4.2	2	3.7
e	Computer/Internet	0	0.0	0	0.0	1	1.85
	At village level						
a	Friends	8	44.4	15	31.2	20	37.0
b	Neighbours	12	66.6	24	50.0	18	33.3
c	Relatives	7	38.8	20	41.6	14	26.0
d	Co-operative credit society	5	27.8	6	12.5	12	22.2
e	SHGs	4	22.2	10	20.8	8	14.8
f	KVKs	3	16.6	9	18.7	16	29.6

C. At market level

a	Commission Agent	12	66.6	24	50.0	25	46.2
b	Announcement by APMC	7	38.8	12	25.0	20	37.0
c	Display boards in APMC	4	22.2	6	12.5	18	33.3
d	Bulleting by APMC	2	11.1	2	4.2	4	7.4
e	Input dealer	4	22.2	8	16.6	10	18.5
f	Marketing Intelligence Cell	0	0.0	0	0.0	0	0.0

Note: The total percentage across each farmer size category is not added up to 100 due to multiple or no response.

The extent of utilization of agricultural market information by different categories of sample farmers in decision making was presented in table 5. It was observed that small categories of farmers were not utilizing the AMI on arrivals in decision making on various aspects of production, selling and post harvest handling. About 16.7 per cent medium and 44.4 % large farmers used the AMI in deciding the crops to be sown. Similarly, about 22.2 per cent of large farmers used the information on market arrivals in selling decisions (where to sell and quantity of sell). The post harvest handling (storage) information of market arrivals was used for decision making by medium farmers (16.7 %) and large farmers (22.2 %). Small farmers were making use of market information on prices in decision making on crops to be sown (44.4 %), selling (22.2 %) and post harvest handling on storage (55.5 %). The medium category of farmers utilized the local market price information for deciding the crops to be sown (41.6 %), deciding where to sell and whom to sell (33.3 % each). It was clearly seen that about 37 per cent of large farmers were used the information on prices in local markets for deciding the crops to be sown, where to sell, when to sell and storage decision. It was observed that, about 27.8 % of small farmers were obtained higher prices (benefits) by utilizing AMI on changing place and time of sale. The benefits derived from AMI by small farmers from grading (38.8 %) and storage (50 %). However, medium farmers were benefitted by utilizing AMI in change of place of sale (25 %) and time of sale (20.8 %). The AMI was utilized for obtaining higher prices by medium farmers (31.2 %) and large farmers (22.2 %) in making storage decision.

In case of large farmers, the AMI was used in deciding change of place of sale (14.8 %), change of time of sale (12.9 %), grading (22.2 %) and value addition (3.7 %) for obtaining higher prices (table 6).

The constraints that the different categories of farmers have faced as per their opinion by utilizing AMI is presented in table 7. It was observed that about 55.5 per cent of small farmers opined that they had faced difficulty in accessing the AMI. However, 12.5 per cent of medium farmers and 7.4 per cent of large farmers faced the difficulty in accessibility of AMI. Small farmers were also opined that AMI was not available in time (44.4 %) followed by non availability of required information on prices, arrivals, area and productions (33.3 %) and non availability of AMI in require form (11.1 %). It was clearly seen that non availability of required information on prices, arrivals, area and production was a constraint as expressed by medium farmers (20.8 %) and large farmers (14.8 %). About 16.7 per cent of medium farmers faced difficulty on non-availability of AMI in required form and 9.2 % of large farmers opined that AMI was being costly.

The expectations of the sample farmers from AMI are presented in table 8. It revealed that the market information on prices prevailed in other nearby market placed high expectations among all the categories of farmers followed by future price projections and quality wise price information. It was observed that there was an expectation from post harvest handling information for better prices among the different categories of sample farmers' i.e. small farmers (33.3 %), medium farmers (37.4 %) and large farmers (40.7 %).

Table 5: Agricultural market information utilization by farmers

(N=120)

Sl. No	Nature/ Type of decision	Extent of Utilization of AMI										
		Arrivals in local market						Prices in Local markets				
		Small Farmer		Medium Farmer		Large Farmer		Small Farmer		Medium Farmer		Large Farmer	
		No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
A		**Production Decisions**											
	Crop to be sown	0	0.0	8	16.7	24	44.4	8	44.4	20	41.6	20	37.0
	Area to be sown/allocated	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	5	9.2
B		**Selling Decisions**											
	Where to sell	0	0.0	0	0.0	12	22.2	4	22.2	16	33.3	20	37.0
	When to sell	0	0.0	0	0.0	8	14.8	4	22.2	15	31.2	20	37.0
	Whom to sell	0	0.0	0	0.0	0	0.0	4	22.2	16	33.3	18	33.3
	Quantity to sell	0	0.0	0	0.0	12	22.2	4	22.2	14	29.1	16	29.6
C		**Post Harvest Handling Decisions**											
	Drying	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	Grading	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	Bagging	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	Transportation	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	Processing	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	Storage	0	0.0	8	16.7	12	22.2	10	55.5	16	33.3	20	37.0

Note: The total percentage across each farmer size category is not added up to 100 due to multiple or no response.

Table 6: Benefits derived from agricultural market information by farmers

(N=120)

Sl. No.	Types of Benefits	Small Farmer		Medium Farmer		Large Farmer	
		No.	%	No.	%	No.	%
	Obtained higher Price by						
1	Changing place of sale	5	27.8	12	25.0	8	14.8
2	Changing time of sale	5	27.8	10	20.8	7	12.9
3	Changing post harvest handling	0	0.0	0	0.0	0	0.0
4	Drying of produce	2	11.1	3	6.2	3	5.5
5	Grading	7	38.8	5	10.4	12	22.2
6	Packing	0	0.0	0	0.0	0	0.0
7	Storage	9	50.0	15	31.2	12	22.2
8	Changing quantity of sale	0	0.0	0	0.0	1	1.8
9	Changing buyer	0	0.0	0	0.0	0	0.0
10	Value addition	1	5.5	2	4.2	2	3.7

Note: The total percentage across each farmer size category is not added up to 100 due to multiple or no response.

Table 7: Constraints in availing the existing agricultural market information by farmers

(N=120)

| Sl. No.	Types of Constraints of AMI	Small Farmer		Medium Farmer		Large Farmer	
		No.	%	No.	%	No.	%
1	Accessibility	10	55.5	6	12.5	4	7.4
2	Costly	0	0.0	0	0.0	5	9.2
3	Not available in time	8	44.4	5	10.4	2	3.7
4	Non availability of required information on price / prices in other markets / arrivals / area / production	6	33.3	10	20.8	8	14.8
5	Non-availability of information in required form	2	11.1	8	16.7	1	1.8

**Note:** The total percentage across each farmer size category is not added up to 100 due to multiple or no response.

Table 8: Expectations of agricultural market information by farmers

(N=120)

Sl. No.	Types of Expectations of AMI	Small Farmer		Medium Farmer		Large Farmer	
		No.	%	No.	%	No.	%
1	Projection / future price movements	10	55.5	24	50.0	30	55.5
2	Prices in other near by markets	13	72.1	34	70.8	36	66.6
3	Quality wise prices	8	44.4	20	41.6	28	51.8
4	Post harvest handling information for better price	6	33.3	18	37.4	22	40.7
5	Area under crops	3	16.6	4	8.3	6	11.1
6	Production of the crops	3	16.6	5	10.4	12	22.2

Note: The total percentage across each farmer size category is not added up to 100 due to multiple or no response.

Agricultural market information utilization by farmers
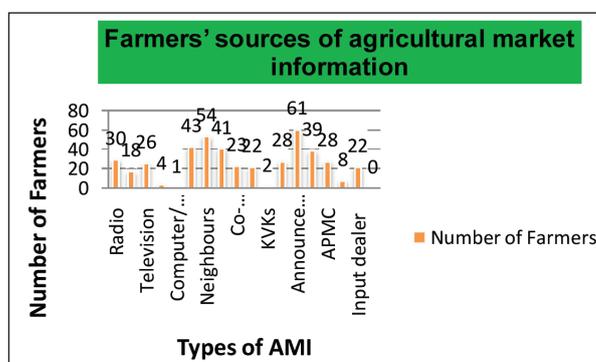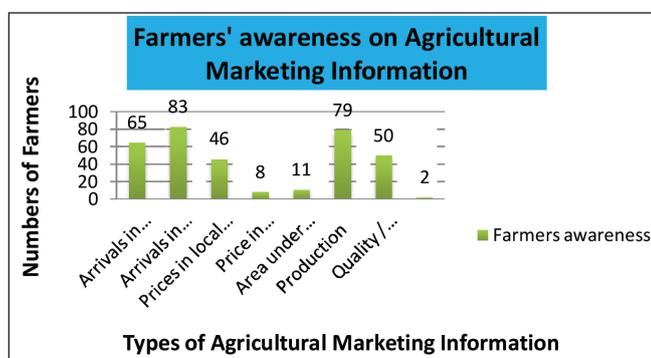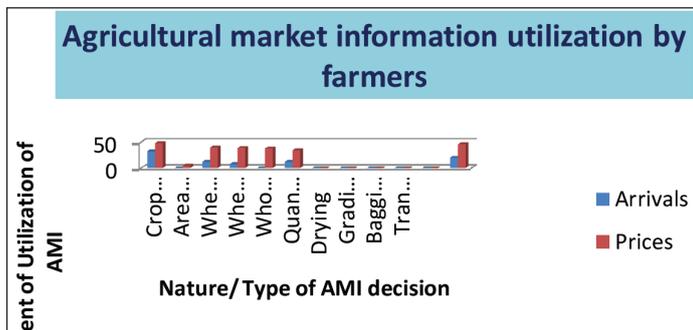
CONCLUSION

Based upon the results and findings of the study, the following conclusions and policy implications can be suggested for improving the agricultural marketing information system (AMIS) in East Khasi Hills and West Garo Hills of Meghalaya.

❖ Empowering farmers with relevant, accurate and timely information about prices being quoted in the market place can help the farmer to take appropriate production related decisions as well as strengthening his bargaining power.

❖ Of course, sparse inhabitation and geographical barriers worked as a limiting factor in creating desirable agricultural marketing information system (AMIS) infrastructure in remote hills region of East Khasi Hills and West Garo Hills of Meghalaya, but the modern Information and Communication Technology (ICT) in connection with Agricultural Marketing Information (AMI) needs to be given due consideration.

❖ It is essential to create the pre-requisite for AMIS infrastructure in Garobadha and Mawiong regulated markets of Meghalaya for effective dissemination of information.

❖ There is need to develop strategies to improve efficiency in data collection, processing, information dissemination and maintenance of databases in the selected regulated markets.

❖ Training provided to the marketing personnel was inadequate and there is a need to expose the staff to the advance technologies in data management.

❖ It is necessary to ensured flow of regular and reliable data to producers, traders and consumers to derive maximum benefit of their sales and purchases.

❖ AMIS model should be viable, location specific, user friendly and sustained for a longer period. Emphasis should be given on delivery mechanism of information, so that market information reaches timely to the end users in the hilly regions of Meghalaya.

❖ There is a need to revitalize of APMCs and develop a system of market information utilizing the modern information communication techniques, so that the farmers are provided with the required market information to make appropriate decisions with respect to production and marketing plans including post harvest management storage, processing and sale of agriculture commodities.

❖ AMIS should create a base for agricultural production planning and marketing led agricultural extension.

❖ AMIS should be given priority for agricultural marketing strategies and reducing the distress sale at the farmer level.

❖ Proper integration of various agencies for adequate and efficient dissemination of vital agricultural marketing information, so that it will act as an 'one stop solution' for the needs of the farming community in hilly regions of Meghalaya.

❖ There is a need to revitalizing the Market Intelligence System especially on dissemination aspects in public institutions like State Department of Agricultural Marketing, Agricultural Universities etc. with modern communication technology.

❖ The AMI should be deliver fast, reliable and accurate information in a user friendly manner for utilization by the farmers and other stakeholders in order to facilitate the farmers to decide what and when make crop and marketing planning, how to cultivate, when and how to harvest, what post harvest management practices to follow, when, where, how to sell etc. of the agricultural produce in the study area.

❖ Creating awareness among farmers and other intended beneficiaries on the importance of agricultural market information and its optimum utilization for overall development of agriculture in the state.

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