

MARKETING - THE KEY TO SUCCESS HORTICULTURE INDUSTRY IN NEPAL

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1. The Issue and Approach

Agricultural marketing can be defined as the performance of all business activities involved in the flow of goods and services from the point of initial production until they are in the hands of the ultimate consumers. Historically, the government and farmers of developing countries have been more concerned with the production problems. It was thought that if these countries only apply the known improved production techniques, progress would be forthcoming. No consideration was given for increased outputs and farm incomes. Further, the concept of supply creates its own demand prevailed. Gradually, the interrelationship between the increasing productivity of the agricultural output and the development of agricultural marketing system was understood. It is now realized that agricultural production and marketing must develop hand in hand. They are partners in a progressive system, not antagonist.

Recently, the terms "demand driven approach", "market oriented products", high value commodities" used in plans and programmes are the self explanations of the importance of marketing, because marketing is considered as a key to success agriculture sector in general and horticultural crops in particular. The question then automatically arises how the marketing could be the key to success in the horticulture industry? How the marketing information and marketing extension services help enhance horticultural industry is the central question and this paper is an attempt in this direction. Also, this paper will serve as a guide for extension workers.

The components of marketing development programme include research, legislation, management, extension services, technology and information services. These along with other factors combine influence the horticultural industry for the success. However, this paper limit on two components namely marketing information services (MIS) and marketing extension services, (MES) which closely link production and marketing as shown in the model.

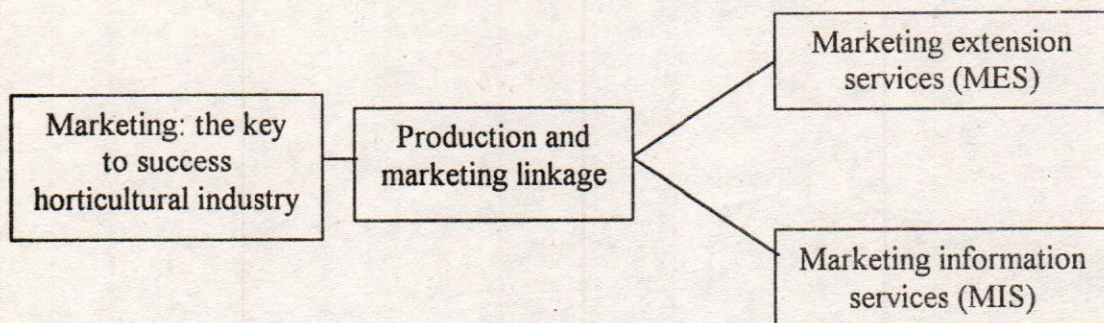


Figure 1: General model showing the role of MIS and MES to enhance the horticultural industry.

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This model shows that marketing is the key to success horticultural industry only if production and marketing can be linked. This linkage can be established through marketing information and marketing extension services.

2. Production and Marketing Linkage

The main objective of such linkage is to promote agricultural production, rural employment and income. The specific objectives are:

- to match the marketable production and demand for target consumers.
- to specialize the products in size, color, taste and other preferences
- to promote agricultural production as a business unit.
- to diversify agricultural production by developing/improving location specific technology.

Thus, in overall, marketing system is a medium by which consumers' preferences are transmitted to producers as a guide for farm planning.

3. Marketing Extension Services (MES)

The basic objective of MES is to promote production level by type and variety according to consumers' need, taste and preferences. The marketing system is also the medium by which consumers' demand is transmitted to producers as a guide to what they should grow. More specifically, producer-farmer expects guidance on her/his decision making in the process of production planning such as what crop to grow/market, when to grow/market, how to grow/market and where to grow/market. What to grow/market involves a joint consideration of the production and marketing plan?

For better production and marketing plan, there are several factors influencing the farmers and extension workers. Some of them are:

Technical factors - soil condition, growing season, input availability, technical know how, etc.

Financial factors - cost of material inputs, labor cost, transportation services and cost, cost of production, etc.

Institutional factors - formal and informal institutions of credit, support services and marketing, etc.

Socio-economic factors - level of land holding, educational status, income and employment level, customs, other norms and values, etc.

At present, extension worker concerns more with the production factors, not with the marketing extension activities.

4. Agricultural Markets versus Agricultural Marketing Information Services (AMIS)

Generally, agricultural market information and agricultural marketing information are used by many as one and having the same meaning. However, these are considered as two separate concepts in this paper. Agricultural market information mainly refers to prices, volume arrival and traded in markets. On the other hand, agricultural marketing information is a wider concept which includes, in addition to market information, developments of markets, demand and supply situation, marketing costs and margins, transfer and storage costs, potential alternative market outlets and channels, etc. In this respect, FAO has developed a working definition of a market information service, which is given below:

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 the 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, governmental officials, policy makers including consumers. The objective of AMIS is to create market transparencies among the stakeholders so that producers, traders and consumers will be equally benefited from healthy competition. More specifically:

- Producers will be encouraged in market responsive production.
- Producers will improve their bargaining power with the local traders.
- Producers and local assemblers can minimize the risks through market guarantee.
- Traders will be benefited from healthy competition and assured supply.
- Government, producers and traders can make rational decision on their planning.

7. Linkage between MES and MIS

The target group is a semi-commercial farmers and/or new production areas having small farms and are unable to obtain information as required and in time, to whom local extension worker (JT/JTA/Extension officer) should provide both information and extension services. So, the extension worker has the key role on information collection and dissemination and extension services. The following section describes type of services to render the services for needy area in time.

What to produce/market?

Type of marketing information required.

- Demand and supply situation of commodities.
- Per capita consumption and varieties preferred.
- Existing sources of supply.
- Inputs availability.
- Other technical and risk factors (if new crop is to be introduced)

- Crop budget/cost of production and farm gate price etc. (if a new crop is to be introduced).
- Such type of information can be obtained from the studies and concerned Directorates/Agencies.
- For example:

Table 1: Food Balance in Kathmandu Valley in 1998/1999

Item	Demand (kg/capita)	Local production (kg/capita)	Balance (kg/capita)
Fruits	11.8	3.33	-8.47
Vegetable	67.2	14.56	-52.64

Source: TCP/Nep/8921

Table 2: Projected average consumption pattern by commodities (kg/capita)

Commodity type	1996	2016
Fruits		
Bananas	2.8	4.6
Citrus	1.3	2.4
Mangoes	1.5	2.7
Others	4.6	9.0
Total	11.3	20.4
Vegetables		
Potato	19.5	30.0
Onions	4.6	6.4
Cauliflower	3.8	6.6
Tomato	3.2	5.6
Other vegetables	35.1	50.6
Total	66.2	99.2

Source: TCP/Nep/8921

If we compare per capita consumption of fruits and vegetables between Nepal and Japan, still it is too low even in 2016 (Table 3).

Table 3: Per capita consumption of fruits and vegetables in Thailand and Japan

Country	Fruits (kg)	Vegetable (kg)
Thailand	90.2	33.9
Japan	36.1	109.5

Source: AFMA Newsletter, Vol. 44, No. 51, Quarter 2-3, 2000, Association of Food and Agricultural Marketing Agencies in Asia and the Pacific, Bangkok 10200, Thailand.

Type of marketing extension to be provided

- Guide to farmers in-group basis while selecting crop/variety. Be sure that technical suitability, inputs availability in time, sources of fund and marketability are the prime consideration.
- Prepare crop budget(s) and compare on the basis of risk-return preferences.
- Be confident on the subject matters you are rendering extension services.

When to produce/market?

This aspect is very critical to enhance horticultural industry, because commercial producers often take risks in pursue of profits. They have already established linkages with local traders and/or with wholesalers of the terminal markets. They know the best season/month/week, even the day for their produces. However, for the new ones, they are in dark with marketing events. So they seek information on the best season/month/week for plantation and harvesting of fruits and vegetables to obtain highest prices of their produces. For them, information on seasonal prices will be very useful.

Type of marketing information

For example, wholesale prices of tomato and cabbage prevailed in Kalimati wholesale market over the four years period is illustrated below:

Table 5: Wholesale price of tomato (small) in the Kalimati Market by month

Year	Baisakh	Jestha	Asar	Shrawan	Bhadra	Aswin	Kartik	Mangsir	Poush	Magh	Falgun	Chaitra
2054	5.83	4.5	14.5	18.0	14.68	26.5	15.5	15.5	13.0	17.81	19.72	18.0
2055	15.29	14.6	12.83	31.31	22.0	23.0	27.78	20.0	20.0	15.5	11.5	10.83
2056	8.08	13.67	13.93	21.65	15.0	27.58	23.0	25.43	14.66	11.26	12.09	13.96
2057	8.81	5.39	14.82	14.61	25.21	25.93	25.17	16.38	11.01	11.39	9.09	13.96
Avg.	9.5	9.54	14.02	21.39	19.22	25.75	22.86	19.33	14.67	13.99	13.1	14.0

Table 6: Wholesale price of cabbage in the Kalimati Market by month

Year	Baisakh	Jestha	Asar	Shrawan	Bhadra	Aswin	Kartik	Mangsir	Poush	Magh	Falgun	Chaitra
2054	2.03	2.5	4.75	5.0	8.05	9.0	10.0	10.0	6.5	9.64	7.96	6.59
2055	4.35	14.53	12.89	7.94	11.0	11.0	16.0	17.0	11.0	5.0	3.75	2.6
2056	2.84	2.94	4.04	5.66	10.17	9.63	9.48	8.4	5.29	4.06	5.0	5.17
2057	6.27	6.5	11.14	9.46	7.41	10.26	12.02	10.75	8.6	5.28	3.44	2.83
Avg.	3.87	6.62	8.2	7.01	9.16	9.97	11.87	11.54	7.85	6.0	5.03	2.3

Type of Marketing Extension Services

For Tomato, the best months for markets are Shrawan to Kartik,
the moderate months are Mangsir to Chaitra, and
the worst months are Baisakh and Jestha

For Cabbage, the best months are Bhadra to Kartik,
the moderate months are Asar, Shrawan and Mangsir, and
the worst months are Falgun to Baisakh

The best and worst months stated have based on scarcity and higher price per kg (Table 5 and Table 6)

How to produce/market?

The extension workers are much more involved in production technology. However, the key problem on how to market has remained very weak. As a result, semi-commercial producer-farmers face various problems.

Type of marketing information required

- Target consumers/market
- Marketing channels
- Procedures to enter in the market
- Transportation facilities
- Marketing cost and margins
- Prices of commodities at different markets

The target market is that in which products of a certain area can be disposed. For example, the target market for small producer-farmers of Panthar district would be either local market or Birtamod. However, all small producer-farmers of a certain production area can take their produce in-group towards distant markets. In such cases, they require information on marketing costs and margins if they are interested in-group marketing. Further, extension workers and farmers need to understand marketing cost and margins. Generally, marketing cost consists of

- preparation and packaging (cleaning and grading if done),
- handling (loading and unloading),
- transport,
- losses (moisture and physical damage),
- storage (rent),
- processing (if done),
- finance (imputed cost of capital),
- fees, commission and unofficial payments, and
- also normal profit

Similarly, a marketing margin is simply the difference between farm gate and consumer price. It comprises total marketing costs and profit margins taken by each stage of the marketing chain. These two concepts are explained numerically as follows.

Purchase of tomato at Malangawa, Sarlahi (100 kg * Rs. 1.5)	Rs 150	
Packaging cost (2 baskets * Rs. 20 in rental form)	Rs 40	
Load/unload cost	Rs 10	
Transportation charge on bus to Kalimati market	Rs 100	
Physical losses @ 10 percent	Rs 30	
Others	Rs 20	
Total costs	Rs 350	
Quantity sold by wholesaler to retailers @ Rs. 5 * 90 kg	Rs 450	

Trader's gross profit	Rs 100	
Retailer's buying price	Rs 450	
Transportation cost and rent	Rs 50	
Total costs for retailer	Rs 500	
Revenue from sale of 88 kg @ Rs 7	Rs 616	
Retailer's gross profit	Rs 116	

Calculating market margins based on the above example is as follows.

Share to the producer-farmer Rs 150/Rs 616

Wholesale margin (Rs 450-150)/Rs 616

Retail margin (Rs 616-450)/Rs 616

This concept of marketing costs and marketing margins clarifies the misunderstanding of producer-farmer and consumer. The extension worker is responsible to communicate and disseminate information properly.

Similarly, extension worker can obtain price information prevailed at different locations and suggests farmers and/or local traders to diversify their business. The price information and marketing costs normally gives ideas on where to sell. Also, marketing procedures, rules and regulations of the markets, institutional aspects (co-operatives, commission agents, monopoly) are equally considerable aspects.

Tools of agricultural marketing extension

The common tolls are:

- Talk programme and seminars: This includes market potentialities, success case studies, post harvest technologies, etc.
- Interaction programmes between farmers and traders.
- Demonstration: this comprised picking, handling, grading, packaging techniques along with comparison.
- Observation tours for marketing linkages, experience sharing.
- Marketing information services.

Interrelationship between production and marketing

They are both important parts of a total business system aiming to fulfill the consumers satisfaction. So they are complementary to each other. The specific reason requiring linkages are:

- to match the marketable production and demand for target consumption area,
- to promote agricultural production as a business unit, and
- to diversify agricultural production by developing/improving.

7. Recommendations

- Develop a curriculum in both B.Sc. and M.Sc. course on Agricultural Economics, Horticulture and Extension Departments of the Institute of Agriculture and Animal Sciences (IAAS). Ministry of Agriculture and Co-operatives should take the lead role to arrange course design and its implementation based on existing phenomenon in co-operation of NARC and Tribhuvan University.
- A multi disciplinary team should be formed to develop the Training Course to initiate marketing extension services. In this regard, Department of Agriculture should take the main responsibilities including private sector and freelancer horticulturists.
- Marketing extension service should be provided phasewise in the areas where diversification and semi-commercialisation is taking place. In case of highly commercialised areas, type of services should be assessed. Marketing Development and Agricultural Extension Directorate should work jointly along with Fruits and Vegetable Development Directorates and Department of Food Research and Quality Control. In response of present needs, these Directorates should be strengthened first.
- Need reassessment of existing marketing information collection and transmission arrangements systems based on the target group. In this regard, a general survey on horticultural production pockets should be taken by MDD, VDD, and FDD.
- Introduction of auction system in the Market yard developed by government, this enables market transparency among the stakeholders.

REFERENCES

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