International Journal of Sales & Marketing Management (IJSMM)
ISSN(P): 2319-4898; ISSN(E): 2319-4901
Vol. 4, Issue 3, May 2015; 7-12

International Academy of Science, Engineering and Technology
Connecting Researchers; Nurturing Innovations

A STUDY ON POTENTIAL OPPORTUNITIES FOR STRENGTHENING THE BLACK PEPPER VALUE CHAIN IN INDIA

M. S. GANAPATHY[1], NAVEENKUMAR H. S[2], M. MAHADEVA MURTHY[3] & S. RAJSHEKARAMURTHY[4]

[1,2]Department of Agricultural Marketing, Cooperation and Business Management, University of Agricultural Sciences, Bangalore, Karnataka, India

[3,4]Department of Forestry and Environmental Science, University of Agricultural Sciences, Bangalore, Karnataka, India

ABSTRACT

India is the second largest producer of pepper in the world after Vietnam. The study entitled ''Value Chain Analysis of Black Pepper in Karnataka''. The study was conducted in Kodagu, Hassan and Chikmagalur districts of Karnataka. The statistical techniques involve value chain analysis, tabular representation and percentages. All the actors involved in black pepper value chain have been interviewed. The study is based on both primary and secondary data, primary data was collected from farmers, traders, wholesalers and the retailers. The secondary data was collected from horticulture departments of the study area. The major varieties grown are *Paniyur series (61.66 %)*, *Karimunda (20 %)* and *Panchami (18.34 %)*. No grading, value addition and certification is done by the sample farmers at the farm gate. Most of the traders (86.66 %) sell their produce to the wholesalers. Major quantity of the black pepper (60 %) the wholesalers purchase is from village level traders. Majority of black pepper (46.66 %) the retailers purchase is from the processors. There are potential opportunities for strengthening the black pepper value chain.

KEYWORDS: Black Pepper, Farmers, Procurement, Spices, Traders, Value Chain, Wholesalers

INTRODUCTION

Black pepper (*Piper nigrum*), known as the "King of Spices" is one of the oldest agricultural commodities of commerce. It is valued for its characteristic pungency and flavour, as an ingredient in food preparations and also as a spice. India is the second largest producer of pepper in the world after Vietnam. The major pepper producing States in India are Kerala, Karnataka and Tamil Nadu. Vietnam is the world's largest producer and exporter, contributing 34 per cent of the world's production. During the year 2010 - 11, black pepper was grown in the area of 3, 01,268 hectares with the production of 1,04,000 tonnes. India is the second largest producer of black pepper in the world after Vietnam. The study was carried out in Kodagu, Hassan and Chikmagalur districts of Karnataka state contribute to about 80 per cent of the state's total black pepper production. Karnataka produces about 19,000 tonnes of black pepper annually, out of that these three districts produce 15,176 tonnes of black pepper in a year. There are many opportunities, challenges and ways through which the farmers can adopt new technologies to strengthen the value chain of black pepper and get increased net returns. The study will provide practical marketing suggestions to improve the value chain in the study area.

CONCEPT OF VALUE CHAIN

A value chain is a sequence of target-oriented combinations of production factors that create a marketable product or service from its conception to the final consumption. This includes activities such as design, production, marketing, distribution and support services up to the final consumer. In simple terms, the term Value Chain refers to the fact that value is added to preliminary products through the combination with other resources (for example tools, manpower, knowledge and skills, other raw materials or preliminary products). As the product passes through several stages of the value chain, the value of the product increases.

MATERIAL AND METHODS

The study is based on both primary as well as secondary data. Primary data were obtained from the farmers, traders, wholesalers and the retailers using pre-tested schedules through personal interview for evaluating the objective of the study. The information elicited pertaining to land holdings, family size, educational level, input use, variety of black pepper grown and constraints involved were collected. The primary information regarding the necessary secondary information regarding area and production of black pepper varieties which are suitable for cultivation were collected from horticulture departments of the study area. Data was subjected to analyses through the following statistical techniques i.e. Percentage, tabular representation and Garret's ranking.

RESULTS AND DISCUSSIONS

The analysis of production practices and quality management at farm level and to assess the value chain of black pepper is not distinct from, but rather part of value chain analysis. Using structured interview guides, quality management at farm level and the value chain can be identified during interviews with value chain participants. The preliminary interview guide used in this approach, was designed to identify the quality attributes followed and value chain followed by the players. The Socio-economic profile, production practices and the black pepper varieties grown by the farmers of Hassan, Kodagu and Chikmagalur was presented in table 1. The trend of production and the use of varieties have experienced moderate fluctuations over the years.

The major varieties grown are *Paniyur series*, *Karimunda* and *Panchami* respectively. According to the sample farmers the same varieties are used for both consumption and for processing. In all the three districts of the study area, Black pepper is the main plantation and high income generating crop. Almost all the forest trees are used for growing the climber, Integrated Nutrient Management is followed to grow black pepper viz., N:P:K, Compost, sheep manure and some of the bio-fertilizers like Trichoderma and pseudomonas are used by almost all the farmers. Plant protection is the main issue to avoid the pests like Pollu beetle and diseases like wilt. On maturity, the berries turn in to red colour and they are harvested manually. Quality management is not the major problem in crop like black pepper, after the process of harvesting the berries are dried in the drying yards, so as they turn in to black colour and loose moisture. No sample farmer was going for white pepper production. The dried seeds are cleaned and are been stored by using either plastic or gunny bags. No grading was followed at the farm level.

The packed produce were either sold or stored by the farmer depending on the prices prevailing in the market. Most products change hands many times before they reach the final consumer. Input suppliers, producers, processors, wholesalers and retailers produce, transform, store, and transfer or market the product, adding to its value at each step in the process. The value chain refers to this range of activities that brings a product or a service from its conception to its end use in a particular industry. A value chain is a sequence of target-oriented combinations of production factors that create a marketable product from its conception to the final consumption. In black pepper value chain the major actors involved include input supplier, farmer, trader, wholesaler, retailer, processor and consumer.

Table 1: Socio-Economic Profile of Sample Farmers

Sl. No.	Particulars	Number	Percent (%)
I	**Age Group**		
A	Up to 30 years	10	16.67
B	31 - 40 years	10	16.67
C	41 - 50 years	21	35.00
D	Above 50 years	19	31.67
	Total	**60**	**100**
II	**Literacy Group**		
A	Illiterate	2	3.33
B	Up to SSLC	10	16.67
C	Up to pre-university	32	53.33
D	Graduate	16	26.67
	Total	**60**	**100**
III	**Income Group (Monthly)**		
A	Up to Rs. 6,000	2	3.33
B	Rs. 6,000 to 12,000	26	43.33
C	Above Rs. 12,000	32	53.34
	Total	**60**	**100**
IV	**Land Holdings (Spice Board)**		
A	Small (≤ 10ac)	12	20.00
B	Medium (10 - 15 ac)	26	43.33
C	Large (> 15 ac)	22	36.67
	Total	**60**	**100**
V	**Varieties of Black Pepper Grown**		
A	Paniyur series.	37	61.67
B	Karimunda	12	20.00
C	Panchami	11	18.33
	Total	**60**	**100**
VI	**Sale of Produce**		
A	Village level trader	51	85.00
B	Wholesaler	9	15.00
	Total	**60**	**100**

Table 2: Socio-Economic Profile of Sample Traders

Sl. No.	Particulars	Number	Percent (%)
I	**Age Group**		
A	Up to 30 years	3	20.00
B	31 - 40 years	4	26.67
C	41 - 50 years	3	20.00
D	Above 50 years	5	33.33
	Total	**15**	**100**
II	**Literacy Group**		
A	Up to SSLC	6	40.00
B	Up to pre-university	6	40.00
C	Graduate	3	20.00
	Total	**15**	**100**

III	**Income Group (Monthly)**		
A	Up to Rs. 60,000	8	53.33
B	Rs. 60,000 to 1,20,000	5	33.33
C	Above Rs. 1,20,000	2	13.33
	Total	**15**	**100**
IV	**Quantity Handled /Month**		
A	Less than 60 quintals	4	26.67
B	Between 60 – 75 quintals	8	53.33
C	More than 75 quintals	3	20.00
	Total	**15**	**100**
V	**Varieties of Black Pepper Handled**		
A	Paniyur series.	7	46.67
B	Karimunda	5	33.33
C	Panchami	3	20.00
	Total	**15**	**100**
VI	**Sale of Produce**		
A	Wholesaler	13	86.67
B	Processor	2	13.33
	Total	**15**	**100**

Table 3: Socio-Economic Profile of Sample Wholesalers

Sl. No.	Particulars	Number	Percent (%)
I	**Age Group**		
A	Up to 30 years	2	13.33
B	31 - 40 years	4	26.67
C	41 - 50 years	5	33.33
D	Above 50 years	4	26.66
	Total	**15**	**100**
II	**Literacy Group**		
A	Up to SSLC	6	40.00
B	Up to pre-university	7	46.67
C	Graduate	2	13.33
	Total	**15**	**100**
III	**Income Group (Monthly)**		
A	Up to Rs. 60,000	4	26.67
B	Rs. 60,000 to 1,20,000	5	33.33
C	Above Rs. 1,20,000	6	40.00
	Total	**15**	**100**
IV	**Source of Purchase**		
A	Village Level Traders	10	66.67
B	Farmers	5	33.33
	Total	**15**	**100**
V	**Variety Handled**		
A	Paniyur Series	9	60.00
B	Karimunda	4	26.67
C	Panchami	2	13.33
	Total	**15**	**100**
VI	**Quantity Handled /Day**		
A	Less than 2 quintals	4	26.67
B	Between 2 – 3 quintals	3	20.00
C	More than 3 quintals	8	53.33
	Total	**15**	**100**

Table 4: Socio-Economic Profile of Sample Retailers

Sl. No.	Particulars	Number	Percent (%)
I	**Age Group**		
A	Up to 30 years	4	26.67
B	30- 40 years	3	20.00
C	40- 50 years	6	40.00
D	Above 50 years	2	13.33
	Total	**15**	**100**
II	**Literacy Group**		
A	Up to SSLC	7	46.66
B	Up to pre-university	7	46.66
C	Graduate	1	6.66
	Total	**15**	**100**
III	**Income Group (Monthly)**		
A	Up to Rs. 6,000	6	40.00
B	Rs. 6,000 to 12,000	2	13.33
C	Above Rs. 12,000	7	46.66
	Total	**15**	**100**
IV	**Source of purchase**		
A	Village Level	1	6.66
B	Traders	2	13.33
C	Wholesaler	6	40.00
D	Processors	7	46.66
	Total	**15**	**100**
V	**Quantity Handled /Month**		
A	Less than 50 kg	9	60.00
B	Between 50 – 75 kg	3	20.00
C	More than 75 kg	3	20.00
	Total	**15**	**100**

SUMMARY AND CONCLUSIONS

Value chain development is a market-oriented approach. All activities of a particular chain are directed towards the market. It is therefore important to understand that all stakeholders along a particular value chain need to cooperate and coordinate their activities to satisfy the needs of the end consumer. We need to understand that not individual enterprises compete with each other, but entire value chains. The reason to do this in-depth type of analysis was to provide us with enough information regarding functions and functionaries in black pepper value chain, weaknesses and opportunities in the value chain. This chain analysis also leads to a detailed strategic analysis. This information will then lead to develop strategic actions to reduce or eliminate weaknesses or disadvantages. Focusing on taking action from the results of the value chain analysis will help the business become more profitable.

REFERENCES

1. ANIC, IVAN-DAMIR AND NUSINOVIC, MUSTAFA, 2005, The apple industry in Croatia: a value chain analysis approach. *International Journal of Entrepreneurship and Small Business,* **2** (3): 211-225.
2. ASHLEY, C. AND MITCHELL, J., 2007, assessing how tourism revenues reach the poor: Findings from the application of innovative diagnostic tools. *ODI Briefing Paper,* **(21)**: 4.
3. BONNEY, L., CLARK, R., COLLINS, R. AND FEARNE, A., 2007, From serendipity to sustainable competitive advantage: insights from Houston's Farm and their journey of co-innovation. *Supply Chain Management:*

An International Journal, **12** (6): 395-399.

4. DANIEL, J.N., JAENICKE, H., GANRY, J., ZELEDON, HOESCHLE, I. AND KAHANE, R., 2009, Value chain analysis in relation to processing and marketing of three underutilized fruits in India. *Acta-Horticulturae*, **806** (2): 505-512.
5. DEBNARAYAN SARKER AND BIKASH KUMAR GHOSH, 2010, Constraints of Milk Production: A Study on Cooperative and Non- Cooperative Dairy Farms in West Bengal. *Agricultural Economics Research Review*, **23**: 303-314.
6. GWYNNE, ROBERT N., 2008, UK Retail Concentration, Chilean Wine Producers and Value Chains. *Geographical Journal*, **174** (2): 97-108.
7. HELLIN JON AND ERENSTEIN, OLAF., 2009, Maize-Poultry Value Chains in India: Implications for Research and Development. *Journal of New Seeds*, **10** (4): 245-263.
8. JOSE, C. T. AND JAYASEKHAR, S., 2008, The growth trends in area, production and productivity of Areca nut in India. Agric. Situ. in Ind., **65** (1): 135-140.
9. NAGESH, 2006, Study on Entrepreneurial Behaviour of Pomegranate Growers in Bagalkot District of Karnataka. *M.Sc. (Agri.) Unpublished Thesis*, University of Agricultural Sciences, Dharwad.
10. RIISGAARD, L., 2009, Global value chains, labor organization and private social standards: lessons from East African cut flower industries. *World Development-Oxford*, **37** (2): 326-340.
11. SACHIN KUMAR, T. N., ARUNKUMAR, Y. S. AND VIJAYCHANDRA REDDY, S., 2012, Marketing of Jaggery in Karnataka. *Research journal of agricultural sciences*, **3** (1): 58-71.
12. SCHMITZ, HUBERT, 2006 Learning and Earning in Global Garment and Footwear Chains. *European Journal of Development Research*, **18**(4): 546-571.
13. SHARAD BHATNAGAR AND SHEKHAR BHATNAGAR., 2008, *The status of silk production in India. Agric. Situ. in Ind*., **66**(1): 15-17.
14. SHIVAJI, N. B., 2007, SWOT analysis of sugar factories in Maharashtra. Cooperative Sugar, **38**(7): 9-11.
15. SIKKA, B.K., SINGH, ASHUTOSH AND AGNIHOTRI, A.K., 2008, Export competitiveness of Indian horti-business industry: a model for capacity building under precision farming. *Proceedings of the 9th International Conference on Precision Agriculture*, Denver, Colorado, USA, 20-23 July 2008.
16. SIMONS, D., FRANCIS, M., BOURLAKIS, M. AND FEARNE, 2003, Identifying the determinants of value in the U.K. red meat industry: a value chain analysis approach. *Journal on Chain and Network Science*, **3**(2): 109-121.
17. TAYLOR, D.H., 2006, Strategic considerations in the development of lean agri-food supply chains: a case study of the UK pork sector. *Supply Chain Management: An International Journal*, **11**(3): 271-280.