

Research Article

Significance of Marketing Channel choice on value addition and its effectiveness- A study on Coconut Products in Kerala

Gopan G S

Research Scholar
School of Management,
CMR University, Bengaluru
Email id: gopan.gs@gmail.com

Dr. Shreevamshi.

Assistant Professor
BMS Department coordinator (HOD),
Jain (Deemed to be University), Bengaluru
Email id: nshree118@gmail.com

Dr. Manjunath S.

Associate Professor
Directorate of Research & Innovation
CMR University, Bengaluru
Email id: smanjunath123@gmail.com

Abstract:

The problems and challenges that Indian agriculture faces are numerous. These issues, ranging from low competitiveness to the costs and low-price realization, have become a major concern for all stakeholders. In terms of coconut value addition, the state was still doing poorly. According to R Chandrababu, vice-chancellor of KAU, only one-third of the coconut produced in the state is used for value addition. Farmers should be supported in lowering production costs, creating a remunerative market, and/or rising yields in order to achieve inclusive agricultural growth. Farmers' plight is no different in Kerala, where the agriculture industry is in a state of collapse. The current study is an attempt to know the Value addition used by coconut product producers and their channel choice in marketing of the products. The study is spread across 5 states in Kerala who have the highest production of coconuts. Convenient sampling technique is used and a sample of 100 farmers are taken for the study. Questionnaire is prepared using likert scale items and interviews were conducted to collect the data. Software for social sciences SPSS was used for analysis of data using the Andrew Hayes Process additional application. The findings of the study show that 84.4 percent of coconut product producers were involved in the production of Kernel-based coconut products and 66.1 percent were involved in the production of coconut convenience food products. 56.1 percent of those who answered the survey said they added value to coconut by using coconut shell-based products. The study suggest that Coconut product producers should make an informed decision about the distribution channel they will use to reap the benefits of value addition to their products. The marketing effectiveness curve is showing an increasing trend as a result of channel selection.

Significance of Marketing Channel choice on value addition and its effectiveness- A study on Coconut Products in Kerala

Keywords: Marketing channel, Value addition, Moderation effect

INTRODUCTION

Traditionally, the production of raw commodities was linked to the production of value-added agriculture (Boland, Coltrain, and Amanor, 2003). Agriculture has seen the application of "value-added features" alternatives in recent years, including localization and organic architecture, among other things (Womach, 2005). It is, in fact, a common feature of locally grown agriculture, particularly in the Midwest (Liang, 2015; Woods et al., 2013; Hardesty, 2010; Onken and Bernard, 2010).

It is essential to the success of both agribusiness and the process of rural development (Coltrain, Barton and Boland, 2000; Kilkenny and Schluter, 2001; Womach, 2005). Many federal and state agencies fund value-added agricultural initiatives, and efforts to assist farmers and cities in new and coastal zone enhancement are being funded by a variety of federal and state agencies (Amanor-Boadu, 2007; Kilkenny and Schluter, 2001). Even if economic ties can be established, the current understanding of value-added agriculture does not provide a framework for linking farm practises and consumer preferences. Consumers' willingness to invest, as well as farmers' goals and properties, will be inadequately measured if government initiatives and grants are conducted in this manner. One of the many reasons farmers use outdated technologies to keep up with fads that are mismatched to their tools and advantages is for the sake of fashion.

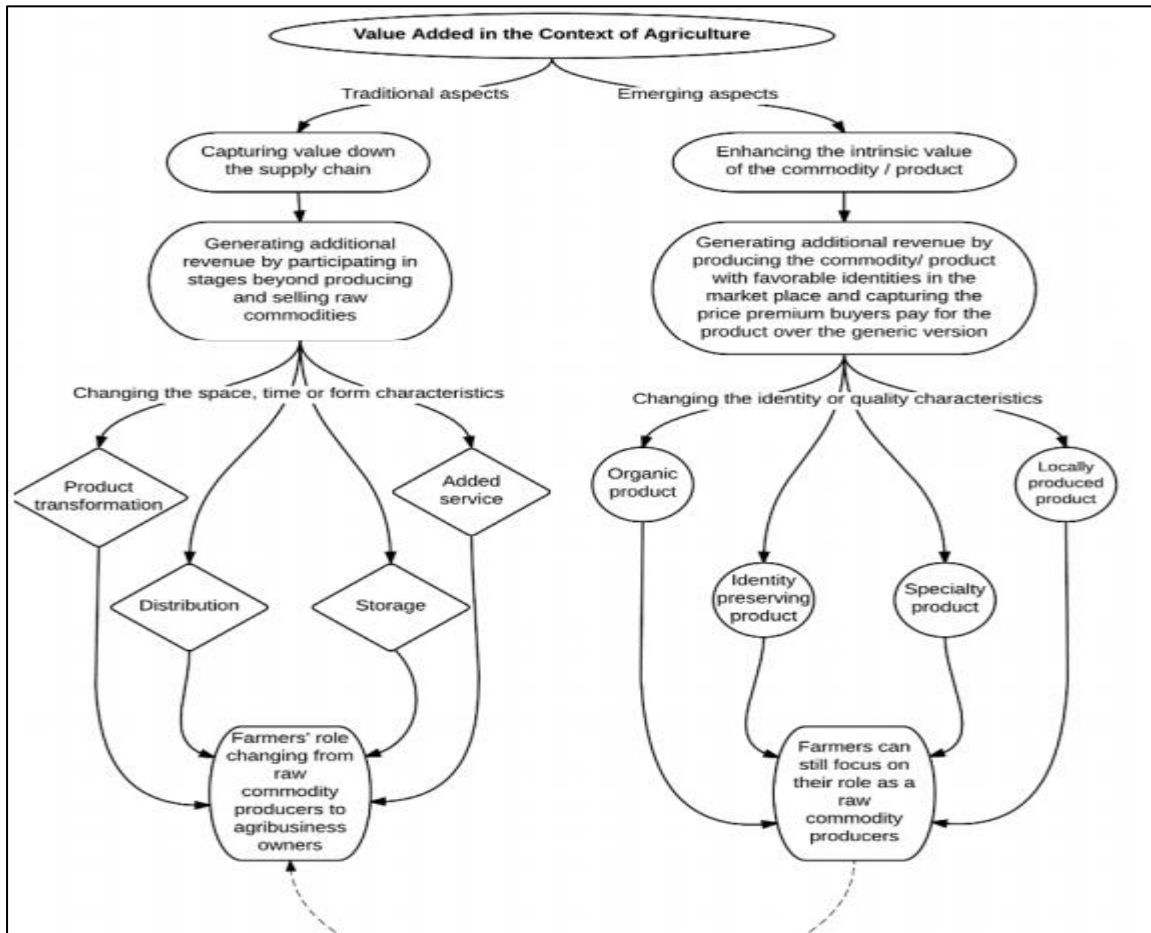
In the last decade (since the year 2000), there have been a number of research studies, publications, and grants supporting initiatives to assist and encourage value-added agriculture (and fisheries) in various parts of the world (Bborn and Bachman, 2006; Lambert, et al., 2006; Evans, 2009; Hansel, et al., 2010). Rather than describing what value-added is, many of these services and articles make the assumption that people are already familiar with the concept of value-added. Meanings from different sources, however, can become overly specific as a result of this (or insufficient). However, the meaning of value-added varies depending on who is involved (a study shows, NG, WP, and Sonka, 2009). Farmers, funders, and decision makers do not have a comprehensive understanding of value-added agriculture projects and their ability to achieve their objectives, based on the assumptions set forth by the United States Department of Agriculture.

The two types of value added in agricultural production are depicted in the diagram below: Farmers have traditionally added value in stages that go beyond just processing, such as crop capture, delivery, and storage, as well as transition and added services, which eventually leads to the formation of agribusinesses, according to the USDA.

Agriculture has benefited from recent technological advancements in the agricultural marketplace and farm practices, which have enabled farmers to command a higher price for their goods based on factors such as geographic location and purity (Womach, 2005; Ernst Woods, 2011).

In addition, there are two categories of importance that should be mentioned: operational and tactical. It is assumed that no matter which options are chosen, they will either increase or decrease the profitability of the individual farm in question. As value is created, risk is likely to be reduced, and whether or not the characteristic offered is desired by customers is used in the manufacturing process of goods, as opposed to changing the delivery of value in the production chain, is more likely to be determined (Brees and Giddens, 2010). Regardless, producers must maintain new competitive advantages, such as being the least expensive and fastest to adopt new technologies (Born, 2001).

The concept of value addition in the context of agricultural production



Ernst and Wood, 2011, as a source

Value-added refers to a collection of agricultural practises that enable farmers to meet market demands for agricultural or food products that have characteristics such as type of crop grown, geographic location, time of harvest, identification, and quality that are not found in traditionally grown raw agricultural commodities. These farmers are referred to as value-added farmers regardless of whether they change their roles and locations in the supply chain, connect themselves to the client, or process activities that have an impact on the farm or ranch in ways that change the farm or ranch's characteristics or keep some of the farm or ranch's characteristics constant.

REVIEW OF LITERATURE

The research conducted by Jagadeesh K Mannekote and Satish V Kailas (2016) was based on the possibilities and challenges of adding value to coconut-derived products. The Indian coconut economy is primarily concerned with the sale of freshly harvested coconut. Most nuts are consumed in the form of fresh or tender nuts, as well as in the form of coconut meal and coconut oil, accounting for more than 40% of total nut consumption. Copra is made from approximately 50% of the nuts that are harvested and processed. As with other coconut-based products, only a small portion of the product is consumed.

Significance of Marketing Channel choice on value addition and its effectiveness- A study on Coconut Products in Kerala

Although the study concludes that the value of coconut in India is primarily dependent on coconut oil, it does not rule out the possibility of product diversification in the future. According to the findings of the study, it is necessary to decouple this reliance and to implement creative added value.

Padma and Kothai Andal.C (2016) conducted an investigation into coconut farmers' awareness of value-added goods in the district of Coimbatore, which they published in their article. In the district, coconut farmers would either sell the coconuts directly to the market or to a local retailer who would buy them. Some of them have their own coconut drying industry in the region, which they sell to companies that make coconut oil after it has been dried. According to the findings of the study, farmers are not fully aware of the added value of coconut products. Farmers should be made aware of the importance of value-added goods, according to the findings of the study. Landowners should be aware of the reach that demand for value-added goods has across the public media landscape.

Sardhar Singh Goyal and Jyothi K Nair (2016) published a report in which they examined various aspects of the growing demand for desiccated coconut powder on the global market. Even in non-traditional coconut producing states such as Kerala, the findings of the study demonstrated that desiccated coconut powder is a suitable substitute for fresh coconut milk. As opposed to raw nuts, desiccated coconut powder is preferred by a significant portion of Kerala's middle and upper middle classes if it is readily available.

Hebbar.b.et al. (2015) investigated the effects of fresh coconut sap in maintaining the temperature at 2-3 degrees Celsius for 10-12 hours while also keeping the sap fresh and unfermented. The result is a sweet, non-alcoholic beverage that is frequently free of other insect dust and other pathogens such as ants. Kalparasa is being hailed as the next generation of hygienic and unfermented sap. It is sold for use in the preparation of health drinks and can be refined into natural value-added products such as sugar, jaggery, butter, syrup, and other such products.

Aravazhy.E conducted a study on the marketing strategy for coconut value added goods in Odisha, and the results were published (2015). The findings of the study indicate that there is a limited supply of value-added coconut products in the Odisha markets. The higher price of the goods available in Odisha's markets results in a lower level of acceptability for those goods. According to the findings of the study, intermediaries in the selling networks are interfering with farmers' ability to obtain a higher share of the price of the finished commodity.

It was discovered in a study by Nath.A (2015) that jaggery is one of the natural sweeteners that is derived from sugar cane and produced without the use of chemicals through the concentration of sugar cane juice. It is available in two forms: solid blocks and semi-liquids. Solid blocks are the most common form. It contains natural mineral sources as well as vitamins that are naturally found in sugar cane juice, and it is considered to be one of the world's healthiest and most nutritious sugars. Jaggery contains micronutrients as well as other vitamins and minerals. Even though the methods of sugar cane conversion and sugar cultivation are distinct, a great deal of importance is placed on them in the production of these consumable finished goods. The development and commercial availability of a wide range of value-added products made from jaggery.

A study conducted by Pathiraja et al. (2015) found that Sri Lanka's coconut industry is a significant source of foreign exchange and job growth, as well as a vital component of Sri Lankan and rural living standards. This paper addressed the current state of the coconut industry in terms of evaluating its actions in light of the liability of the recent past and the potential liability of the future. Although average coconut yields have remained stagnant, there has been significant variability in yields from year to year

due to certain climatic conditions. In turn, this results in intense competition for raw materials among the various manufacturing industries. The government allows replacement imports of edible oil but forbids the supply of fresh nuts. The potential supply of coconut is uncertain as a result of climate change and its unforeseeable consequences. Successful adaptation measures, on the other hand, may have the unintended consequence of restricting the supply of cocoa by affecting domestic consumers, producers, and the cocoa processing industries.

Naik and Bhatta examine the dynamics of the Arecanut market in Karnataka, as well as the distribution of its prices (2012). Sirsi was chosen as the survey market, and 50 farmers were selected through a multistage random sampling process. Furthermore, the field study included 15 commission officers and 20 'A level traders', in addition to the participants. Three networks were identified in the marketing of isca, according to the authors: channel I, which consisted of a producer-Totgars sales cooperative society-trader; channel II, which consisted of a producer-primary agricultural cooperative society-Totgars sales cooperative society-trader; and channel III, which consisted of a producer-commission agent and trader. When determining the marketing performance of the marketing channel, the cost of marketing services, the success of the channel among producers, and the net price of the producers were all taken into consideration. Channel II was found to be the most effective, while channel III was found to be the least effective. When comparing Areca growers with different holding sizes, there was no discernible difference in any of the channels. The only difference between these manufacturers was in their processing costs; the marketing costs, on the other hand, were the same across both size classes. In Channel I, the suppliers' share of the price charged by the final trader was 74.2 percent, while the producers' share of the selling expense was 1.4 percent. It has been demonstrated that the introduction of cooperative marketing has significantly increased the overall productivity of the system. Channel III was still not that far behind the other networks in terms of ratings. Besides having a distribution platform, the authors believe that cooperatives have stimulated competition in the other channel as well as the distribution channel. They propose that the paradigm embraced by the Sirsi sector be expanded to include other sectors of the cooperative marketing system in the future.

Goyal (2010) conducted a study in the central Indian state of Madhya Pradesh to examine the impact of information and direct access on the efficiency of rural markets as part of a larger research project to investigate the effect of technological advances on improving the functioning of agricultural markets in developing countries. In order to maintain control over the quality of soybeans while also lowering their transaction costs, Indian Tobacco Company Limited (ITC), a major soybean buyer, agreed at the beginning of October 2000 to exclude intermediaries from its purchasing process. Throughout the villages, Internet kiosks were installed to provide farmers with access to regular wholesale soybean prices, both in local mandis and at International Trade Center (ITC) prices. Aside from that, warehouses (known as hubs) have been established to allow for scientific quality monitoring of soybeans and to promote the sale of soybeans by farmers directly to a private corporation. Using an econometric model, the researchers examined the impact of this ground-breaking programme on the price earned by soybean farmers in mandis and the subsequent planting decisions made by the farmers themselves. Following the investigation, it was discovered that the ITC Limited operation carried out in Madhya Pradesh was significantly associated with a significant increase in the monthly price of soybeans in the regulated agricultural markets. On average, the price of mandi soy increased by 1-3 percent after the kiosks were introduced into the market. Following the intervention, the price dispersion in the affected mandis also tended to decrease in the short term. Furthermore, as a result of the intervention, there has been a significant increase in the area dedicated to soy production. The availability of knowledge, as demonstrated by the authors, is critical for increasing the productivity of rural markets in order to increase their profitability. The findings of the study also contributed to the understanding of the

Significance of Marketing Channel choice on value addition and its effectiveness- A study on Coconut Products in Kerala

potential benefits of direct contact between farmers and processors in the context of agricultural product marketing in India. As a result of the research, it was discovered that both soy farmers and ITC Limited received net welfare benefits. Future studies will be able to conduct a general balance analysis using panel data on the characteristics of farmers as a result of the findings of this study.

A study conducted by Mittal (2007) examined two active interventions designed to improve forward and backward linkages in horticultural marketing. It is the first of these, called the SAFAL Market, which is a wholesale terminal market established by the National Dairy Development Board to provide an open and effective forum for the sale and purchase of horticultural products by connecting growers through Growers' Associations with wholesale buyers in various market locations around the world. The second variety is Namdhari New, which is a component of the Namdhari Seeds. It grows fruit and vegetables through contract farming and manages more than 1,000 tonnes of fresh vegetables and fruit per day for sale on both the domestic and international markets. They are able to comply with international standards because they have adequate facilities, technical personnel, and advanced technological applications available to them at various levels of development. The author proposes that the government be involved in some of the most critical inputs in supply chain management, as well as coordination between the various stakeholders in the process.

OBJECTIVES

- To know the Value addition of coconut products and marketing channel choice of farmers in Kerala
- To analyze the significance of Marketing Channel choice on value addition and its effectiveness

RESEARCH METHODS

Table 1- Research Methods

| | |
|-----------------------------------|--|
| Research Type | Descriptive research (Describing the relationship and demonstrating the moderation effect) |
| Data collection tools | <p>Questionnaire</p> <p>Questionnaire consisting of 3 Parts</p> <p>Part One : Information on the Demographic profile of the respondent (Multiple choices)</p> <p>Part Two : Value addition of products/ Channel Choice</p> <p>Part Three : Marketing effectiveness (LIKERT Scale-5 Points)</p> |
| Data collection Techniques | Interviews (Where ever possible) |
| Sampling: Population | The study covers 5 districts of Kerala: Kozhikode, Kasargod, Mallapuram, Trissur Trivandrum. These are the Five districts with highest area under coconut production and also units of coconuts |

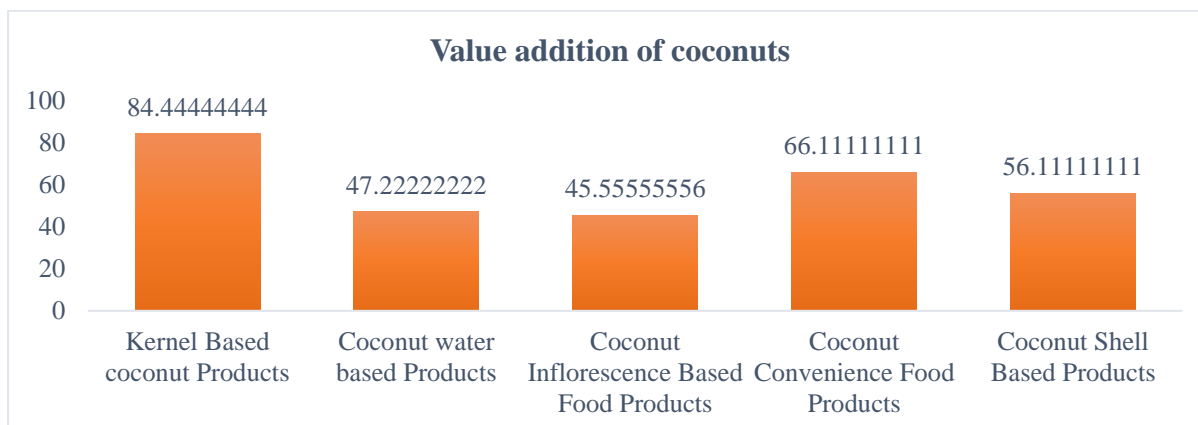
| | produced, as per 2015-16 data of the Coconut Development Board (Latest available). | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------------------------------|---|--------------------|---------------------------------------|------|--|--|-----|-----|-----|------|-----|---|-----|-----|----|-----|---|-----|-----|----|--------|-------|-----|-----|----|--------|-------|-----|-----|----|--------|-------|-----|-----|-----|--------|-------|-----|-----|-----|--------|-------|-----|-----|-----|---------|-------|-----|-----|-----|----------|-------|-----|-----|-----|
| Determination of sample size | <p>(Glen D Israel, 2013)</p> <table border="1"> <thead> <tr> <th rowspan="2">Size of Population</th> <th colspan="4">Sample Size (n) for Precision (e) of:</th> </tr> <tr> <th>±3%</th> <th>±5%</th> <th>±7%</th> <th>±10%</th> </tr> </thead> <tbody> <tr> <td>500</td> <td>a</td> <td>222</td> <td>145</td> <td>83</td> </tr> <tr> <td>600</td> <td>a</td> <td>240</td> <td>152</td> <td>86</td> </tr> <tr> <td>10,000</td> <td>1,000</td> <td>385</td> <td>200</td> <td>99</td> </tr> <tr> <td>15,000</td> <td>1,034</td> <td>390</td> <td>201</td> <td>99</td> </tr> <tr> <td>20,000</td> <td>1,053</td> <td>392</td> <td>204</td> <td>100</td> </tr> <tr> <td>25,000</td> <td>1,064</td> <td>394</td> <td>204</td> <td>100</td> </tr> <tr> <td>50,000</td> <td>1,087</td> <td>397</td> <td>204</td> <td>100</td> </tr> <tr> <td>100,000</td> <td>1,099</td> <td>398</td> <td>204</td> <td>100</td> </tr> <tr> <td>>100,000</td> <td>1,111</td> <td>400</td> <td>204</td> <td>100</td> </tr> </tbody> </table> <p>= 95% confidence level and 10% margin of error, sample size of 100 respondents</p> | Size of Population | Sample Size (n) for Precision (e) of: | | | | ±3% | ±5% | ±7% | ±10% | 500 | a | 222 | 145 | 83 | 600 | a | 240 | 152 | 86 | 10,000 | 1,000 | 385 | 200 | 99 | 15,000 | 1,034 | 390 | 201 | 99 | 20,000 | 1,053 | 392 | 204 | 100 | 25,000 | 1,064 | 394 | 204 | 100 | 50,000 | 1,087 | 397 | 204 | 100 | 100,000 | 1,099 | 398 | 204 | 100 | >100,000 | 1,111 | 400 | 204 | 100 |
| Size of Population | Sample Size (n) for Precision (e) of: | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | ±3% | ±5% | ±7% | ±10% | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 500 | a | 222 | 145 | 83 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 600 | a | 240 | 152 | 86 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 10,000 | 1,000 | 385 | 200 | 99 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 15,000 | 1,034 | 390 | 201 | 99 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 20,000 | 1,053 | 392 | 204 | 100 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 25,000 | 1,064 | 394 | 204 | 100 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 50,000 | 1,087 | 397 | 204 | 100 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 100,000 | 1,099 | 398 | 204 | 100 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| >100,000 | 1,111 | 400 | 204 | 100 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Sampling Frame | Coconut Product producers (Farmer who does value addition to his coconut products) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Sampling Technique | Convenient Random Samplin | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Sample | 120 Questionnaires were distributed and 100 valid responses were selected for the study | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Pilot Study | The questionnaire was pre tested with 25 respondents and slight changes were made to the questionnaire | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Plan of Analysis | Moderation Analysis using Andrew Hayes Model 1 Process | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

RESULTS AND DISCUSSION

Value addition of Coconuts

Chart 1- Value addition of Coconut Products

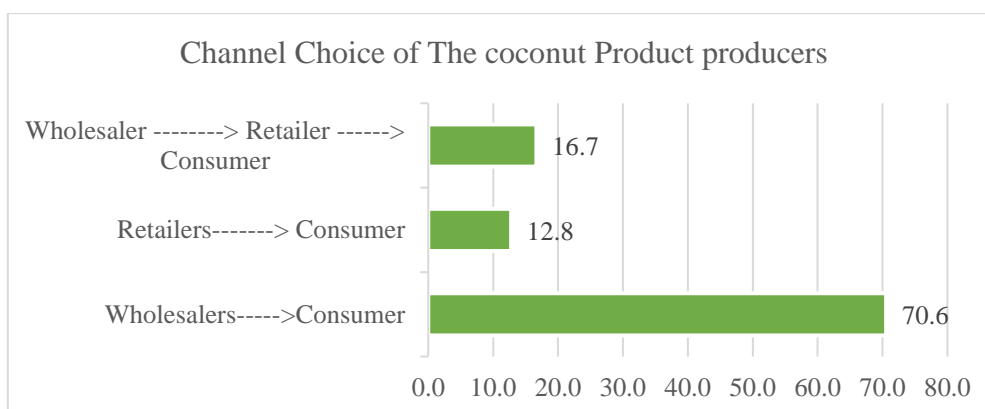
Significance of Marketing Channel choice on value addition and its effectiveness- A study on Coconut Products in Kerala



The value addition of raw coconut into type board heads, as classified by the Coconut Development Board, is depicted in Chart above. 84.4 percent of coconut product producers were involved in the production of Kernel-based coconut products (Virgin Coconut Oil, Desiccated Coconut, Coconut Milk, Coconut skimmed milk, sprayed dried coconut powder, Coconut Cream, Coconut Oil, and Coconut Chips), and 66.1 percent were involved in the production of coconut convenience food products (coconut cream, coconut oil, and coconut chips) (Coconut Biscuit, Coconut Candy, Coconut Chocolate, Coconut Barfi). 56.1 percent of those who answered the survey said they added value to coconut by using coconut shell-based products (Coconut shell Powder, Coconut Charcoal, Activated Carbon). Respondents involved in coconut water-based food products (Tender coconut, Vinegar, Coconut squash, Nata - de- coco) and inflorescence-based food products (Neera, Coconut Jaggery, Coconut Palm sugar, Flower syrup) received 47.2 percent and 45.6 percent of the total votes, respectively.

Channel Choice of Coconut Product Producers

Chart 2- Channel Choice of coconut product producers



When asked about their preferred channel, a majority of 70.6 percent of respondents said they preferred Channel I, which consisted of the flow of goods from wholesalers to retailers and then to consumers. Only 12.8 percent and 16.7 percent, respectively, chose Channel II (Retailers———> Consumer) and Channel III (Wholesaler -----> Retailer -----> Consumer) as their preferred channels. This could be due to the favorable price that they receive in the first channel, as well as the avoidance of additional packaging in the case of sales to retailers and direct consumers through the second and third channels.

Hypothesis - There is a moderating effect of Channel Choice on the relationship between Value addition of coconut products and Marketing effectiveness

Test Used: Moderation Analysis using Andrew Hayes Model 1 Process

A moderator is something that affects the course or f of an interaction between two variables. The degree, course, or existence of a relationship between variables is influenced by a moderator. It reveals who, when, and under what conditions a relationship will last.

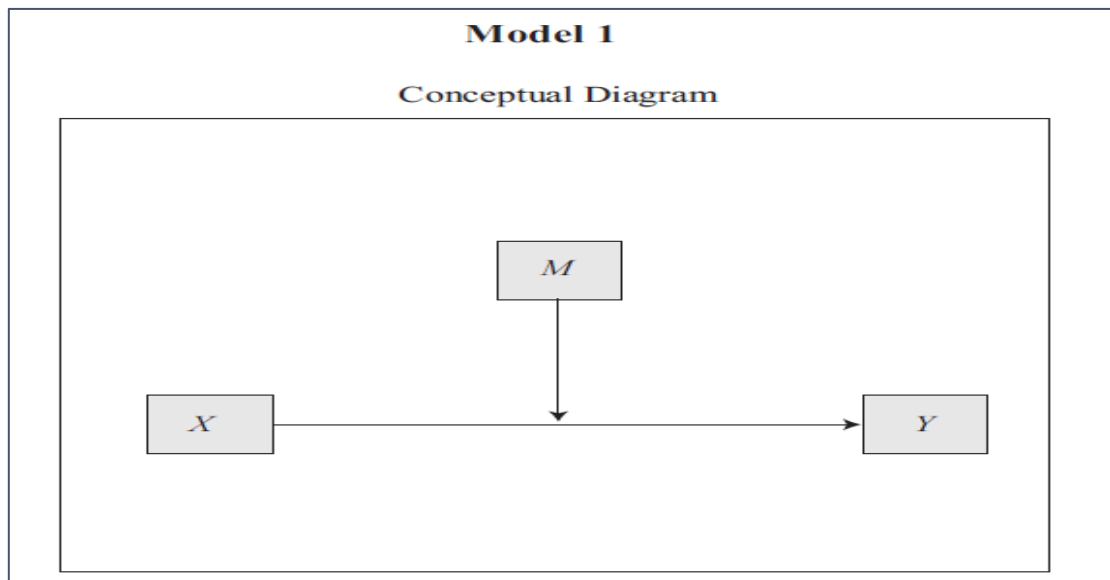
Moderators are commonly used to assess the external validity of a thesis by pointing out the shortcomings of whether a relationship between variables holds.

A researcher may use moderation analysis to see whether a third variable, M, has an effect on the relationship between variables X and Y. Rather than looking at a cause-and-effect relationship between all other factors, moderation examines when and under what circumstances an effect happens. A relationship's existence may be strengthened, weakened, or reversed by moderators.

A vector (M) is tested to see how it changes the course and/or f of the relationship between an IV (X) and a DV (Y). Moderation, in other words, looks for experiences that influence WHEN relationships between variables happen. Moderators and mediators are conceptually separate (when versus how/why), but depending on the inquiry, certain variables can be either a moderator or a mediator.

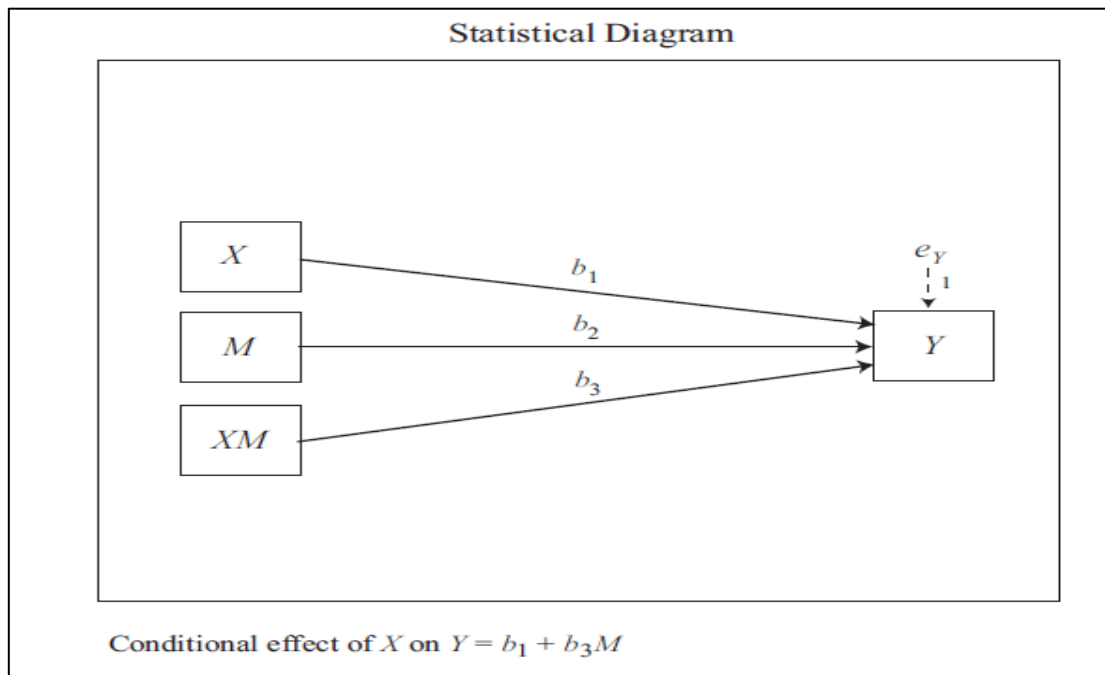
In the current study, it is proved from the previous hypothesis that value addition impacts marketing effectiveness, therefore, the researcher aims to find the role of Channel choice on the relationship between value addition and marketing effectiveness. It is performed using the Andrew Hayes Process model 1 which is shown in a pictorial representation below:

Figure 1 - Conceptual Model for moderation analysis



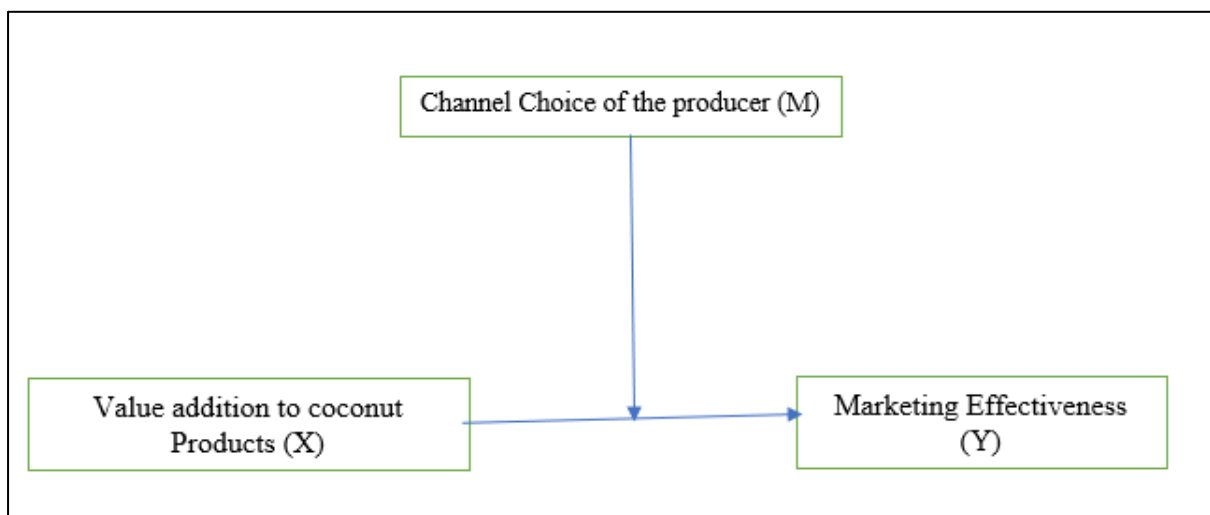
Source: Model templates for PROCESS for SPSS and SAS, 2013-2016 Andrew F. Hayes and The Guilford Press

Figure 2- Statistical Diagram of Moderation Analysis



Source: Model templates for PROCESS for SPSS and SAS, 2013-2016 Andrew F. Hayes and The Guilford Press

Figure 3- Moderation Analysis for the current study



Source: Author Written

Run MATRIX procedure:

***** PROCESS Procedure for SPSS Version 3.5.3 *****

Model : 1

Y : ME (Marketing Effectiveness)

X : VA (Value Addition)

W : CC (Channel Choice)

Sample

Size: 180

OUTCOME VARIABLE:

ME

Model Summary

| R | R-sq | MSE | F | df1 | df2 | p |
|-------|-------|-------|--------|--------|----------|-------|
| .1753 | .0907 | .8117 | 1.8595 | 3.0000 | 176.0000 | .0382 |

Model

| | coeff | se | t | p | LLCI | ULCI |
|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| constant | 3.3576 | .4252 | 7.8959 | .0000 | 2.5184 | 4.1968 |
| VA | .4937 | .3625 | 1.3620 | .0071 | 1.2091 | .2217 |
| CC | .2220 | .1956 | .1127 | .0091 | .4080 | .3639 |
| Int_1 | .1183 | .1563 | .1174 | .0067 | .2901 | .3268 |

Product terms key:

Int_1 : VA x CC

Test(s) of highest order unconditional interaction(s):

| | R2-chng | F | df1 | df2 | p |
|-----|---------|-------|--------|----------|-------|
| X*W | .0132 | .0138 | 1.0000 | 176.0000 | .0067 |

Focal predict: VA (X)

Mod var: CC (W)

DATA LIST FREE/

VA CC ME

BEGIN DATA.

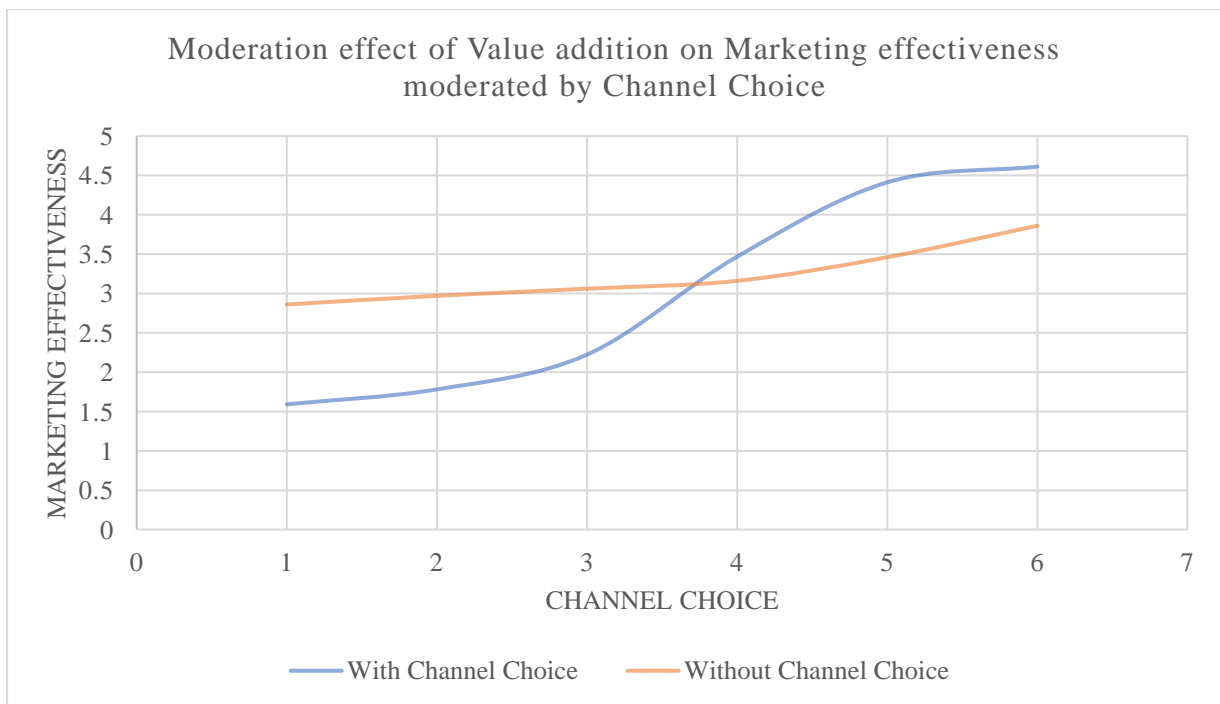
| | | |
|--------|--------|--------|
| 1.0000 | 1.5911 | 2.8601 |
| 2.0000 | 1.7812 | 2.9701 |
| 1.0000 | 2.223 | 3.0601 |
| 2.0000 | 3.468 | 3.1601 |
| 1.0000 | 4.4119 | 3.4601 |

Significance of Marketing Channel choice on value addition and its effectiveness- A study on Coconut Products in Kerala

2.0000 4.6118 3.8601

The interaction term was statistically significant ($b=0.1183$, $s.e.=0.1563$, $p=.0067$) in the current model, indicating that channel Choice is a significant moderator of the effect of Value addition on Marketing effectiveness.

Chart 3 - Moderation effect of value addition of marketing effectiveness moderated by Channel Choice



These are the effects of Value Addition to coconut products (X) and Channel Choice (W) on the dependent variable (Y) _ Marketing effectiveness, conditional on the other IV being 0 (Field, 2018).

According to Hayes (2018), the language researchers should be using when referring to the effects of X and W is not “main effects” or the “effects of these variables, controlling for the interaction”.

Rather, since the slopes represent the effect of X (or W) on Y, conditional on the other variable being 0, then it is more appropriate to think of the conditional effect as akin to a simple effect (using ANOVA terminology, Hayes, 2018) or as a simple slope (using regression terminology).

As such, we can interpret the effects of Channel Choice and Value addition as follows:

- (a) The effect of Value addition on Marketing effectiveness was Positive and significant ($b=0.4937$, $s.e.=0.3625$, $p=.0071$), conditional on Channel Choice = 0;
- (b) The conditional effect of Channel Choice on Marketing effectiveness was positive and significant ($b= 0.220$, $s.e.=0.1956$, $p<.001$), conditional on Value Addition = 0.

The above chart shows the marketing effectiveness with Channel Choice and Without Channel Choice. It is concluded that the Coconut product producers make a right choice of the channel to reap the benefits of Value addition of the products. With Channel choice the marketing effectiveness curve is having an increasing trend.

By accepting the Alternate Hypothesis – the study concludes that There is a moderating effect of Channel Choice on the relationship between Value addition of coconut products and Marketing effectiveness

CONCLUSION

The coconut industry is one of the most important agricultural operations in the world. In view of the fact that all coconut goods can be processed and transformed into coconut-derived products by industry. The goods are sold to customers outside of the state after they have been manufactured. In Maharashtra and Andhra Pradesh, imports of copra are particularly common, as are exports. Many workers rely on the coconut industry, which offers more opportunities for employees to collaborate within a single industry. Coconut is a valuable commercial commodity, and in the study region, traditional methods of cultivation, refining, and marketing are still in use for the production and marketing of the commodity. High-tech production techniques, propagation methods, and organic formation must all be used in order to achieve a higher yield and a better price. In order to obtain a higher price for coconut, it is necessary to improve coconut processing and scientific storage methods, as well as to strengthen agricultural marketing networks in the coconut industry in Kerala and the study field. Coconut farmers should consult with the horticultural department at the taluk and sub-center levels for guidance on their crop. Coconut is a sustainable source of raw material for a variety of applications, as well as a fruit, beverage, and oil seed crop, among other things. Small and marginal coconut product producers should be linked together through SCM in order to facilitate the production and marketing of coconut. Furthermore, in the study sector, it is necessary to strengthen the backward and forward linkages between the coconut industry and other industries. A greater number of manufacturing industries in the region must be developed in order to help cultivators improve their economic situation. There is a pressing need to establish regulated markets that are comparable to the existing mega markets in the study area.

Customer service is at the forefront of every retail establishment's marketing efforts, as is the goal of every retail establishment. These measures are taken to ensure that they achieve superior retail results. With the shifting demands and preferences of customers, a company's ability to provide consistently high-quality goods and services, while also remaining attentive to evolving customer needs and expectations, becomes critical to the institution's success. This is accomplished through the implementation of campaign activities that are designed to meet consumer demands more effectively than competitors do so. As a result, it can be concluded that retail stores in the coconut product sector have implemented the marketing mix in order to increase their efficiency and gain market share in the coconut product sector. Exporting coconut products in a proper manner, as well as marketing related products to the general public, should be undertaken by businesses in order to increase revenue and market share.

The marketing strategy of a retail establishment should be geared toward achieving the goal of customer loyalty. In order to be effective, marketing must be integrated into the overall firm strategy, which determines how the retailer can effectively engage buyers, prospects, and competitors in the marketplace. According to the findings of the report, Coconut product producers make an informed

Significance of Marketing Channel choice on value addition and its effectiveness- A study on Coconut Products in Kerala

decision about the distribution channel they will use to reap the benefits of value addition to their products. The marketing effectiveness curve is showing an increasing trend as a result of channel selection.

REFERENCES

- Amanor-Boadu, V. 2003. "Preparing for Agricultural Value-Adding Business Initiatives: First Things First." Agricultural Marketing Resource Center, Department of Agricultural Economics, Kansas State University, Manhattan. Available online: <http://agmanager.info/agribus/busdev/assess/Preparation%20Steps.pdf>.
- Aravazhy, E. (2015). Marketing strategies for coconut and its value added products in Odisha. *Indian Coconut Journal*, LVIII (2), 28.
- Born, H., and J. Bachmann. 2006. "Adding Value to Farm Products: An Overview." *Appropriate Technology Transfer for Rural Areas - National Center for Appropriate Technology*. Available online: <https://attra.ncat.org/attra-pub/summaries/summary.php?pub=270>
- Born, H. 2001. "Keys to Success in Value-Added Agriculture." *Appropriate Technology Transfer for Rural Areas - National Center for Appropriate Technology*. Available online: <https://attra.ncat.org/atrapub/summaries/summary.php?pub=271>
- Brees, M., J. Parcell, and N. Giddens. 2010. "Capturing vs. Creating Value." *MU Agricultural Guide*, University of Missouri Cooperative Extension. Available online: <http://extension.missouri.edu/p/G641>
- Coltrain, D., D. Barton, and M. Boland. 2000. "Value Added: Opportunities and Strategies." *Arthur Capper Cooperative Center, Department of Agricultural Economics, Kansas State University*. Available online: <http://www.agecon.ksu.edu/accc/kcdc/pdf%20Files/VALADD10%20col.pdf>.
- Ernst, M., and T. Woods. 2011. "Adding Value to Plant Production-An Overview." *Cooperative Extension Service, College of Agriculture, University of Kentucky*. Available online: <http://www.uky.edu/Ag/CCD/vaoverview.pdf>.
- Evans, E. 2009. "Value Added Agriculture: Is It Right for Me? Food and Resource Economics Department, Institute of Food and Agricultural Sciences (IFAS) Extension, University of Florida. Available online: <https://edis.ifas.ufl.edu/fe638>
- Goyal, A. (2010). Information, Direct Access to Farmers, and Rural Market Performance in Central India. *World Bank Policy Research Working Paper Series*, 1–49.
- Hardesty, S.D. 2010. "Do Government Policies Grow Local Food?" *Choices*. Quarter 1. Available online: <http://www.choicesmagazine.org/magazine/article.php?article=113>
- Jagadeesh K Mannekote., Satish V Kailas. (2016). Value addition to coconut-opportunities and challenges. *Indian Coconut Journal*, LIX (1), 18- 20.
- Kilkenny, M., and G.E. Schluter. 2001. "Value Added Agriculture Policies across the 50 States." *Rural America* 16(1):12-18.
- Lambert, D.K., S.H. Lim, and K. Tweeten. 2006. "An Overview of Agricultural Value Added." In Lambert,
- Liang, C. 2015. "What Policy Options Seem to Make the Most Sense for Local Food?" *Choices*. Quarter 1. Available online: <http://www.choicesmagazine.org/choices-magazine/theme-articles/communityeconomics-of-local-foods/what-policy-options-seem-to-make-the-most-sense-for-local-food>

- Mittal, S. (2007). Strengthening Backward and Forward Linkages in Horticulture: Some Successful Initiatives. *Agricultural Economics Research Review*, 20(Conference Issue), 457–469.
- Naik, B. K., & Bhatta, R. (2012). Market Structure and Price Spread of Arecanut in Karnataka : A Case Study of Sirsi Market. *Karnataka Journal of Agricultural Sciences*, 7(1). Retrieved from <http://14.139.155.167/test5/index.php/kjas/article/view/6049>
- Nath.ADutta D, Pawan Kumar and Singh JP 2015, Review on Recent Advances in Value Addition of Jaggery based Products, *J Food Process Technol* 6:440. doi:10.4172/2157-7110.1000440
- Womach, J. 2005. *Agriculture: A Glossary of Terms, Programs, and Laws*, 2005 Edition. Congressional Research Service, Library of Congress, Washington, DC. Available online: http://digital.library.unt.edu/ark:/67531/metacrs7246/m1/1/high_res_d/97-905_2005Jun16.pdf
- Woods, T., M. Velandia, R. Holcomb, R. Dunning, and E. Bendfeldt. 2013. “Local Food Systems Markets and Supply Chains.” *Choices*. Quarter 4. Available online: <http://www.choicesmagazine.org/choicesmagazine/theme-articles/developing-local-food-systems-in-the-south/local-food-systems-marketsand-supply-chains>