CHAPTER V

MARKET STRUCTURE
MARKET STRUCTURE

The chapter begins with discussion on market structure. The elements of structure are described subsystemwise. Further, product differentiation, vertical integration, barriers to entry and the process of conglomerate are also discussed.

5.01 MARKET STRUCTURE

Market structure could be defined as compositional and organisational characteristics of the elements such as (a) number and size distribution of sellers and buyers, (b) barriers to entry and exit, (c) cost structures, (d) intra and inter group relationships among buyers and sellers, (e) vertical and horizontal integration of selling and buying and (f) conglomerativeness. The above definition would be incomplete if the environmental aspects are not considered. In other words, trading practices, returns to producers, location of the market, method of sale and management of the market are vital in this regard. i.e., market structure encompasses not only compositional and organisational characteristics of the elements but also the marketing environmental aspects which would influence conduct and performance. The aim is to examine in detail the structural characteristics of the AMS. The analysis begins with each of the subsystems identified with Mangalore, Shimoga and Sirsi as market centres.
Diagram – 8

IMPORTANT MARKETING CHANNELS – MANGALORE SUBSYSTEM.

1. P → 45%
   CA → PWT → SPWT → R → PW → C

2. P → 28%
   COOP (FCs) → COOP (SC) → COOP (BC)
   R → PW → C

3. P → 25%
   I
   CA, PWT, SPWT
   COOP (FCs), COOP (SC)
   R → PW → C

4. P → 1%
   COOP (SC) → COOP (BC)
   R → PW → C

5. P → 1%
   COOP (EC)
   R → PW → C
MANGALORE MARKET

The Diagram 8 indicates the marketing channels of arecanut - unboiled type in the Mangalore area. The diagram indicates that private traders are still dominant as compared to cooperatives. What is interesting is the fact that one-third of the marketed surplus has passed through Facilitating Cooperatives (FCs). The producers and itinerants use the cooperative channel. The itinerants, besides using this FC channel, sell through commission agents (CAs) either at Puttur or at Mangalore. The selling cooperative (SKACMS) has made credit arrangements to buying cooperative (CAMPCO) to facilitate buying in the tender sale. The BC bought one fourth of the total marketed surplus from SC and about one percent from producers directly at their depots located in various centres.

The BC, after vertical differentiation of arecanuts, sells at its various retail outlets in the upcountry markets. The Commission Agents (CAs) despatch the arecanut to the Private Wholesale Traders (PWTs) at the upcountry markets who in turn, after further differentiation sell it to Semi Private Wholesale Trader (SPWT). The commodity reaches panwalas and retailers either through SPWT or the retail outlet of the BC.

SHIMOGA MARKET

Shimoga producers prepare arecanut of boiled coloured split type. The channels of marketing are practically at variance with that evolved in Mangalore. The FCs network is
IMPORTANT MARKETING CHANNELS - SHIMOGA SUB SYSTEM.
almost absent here with only two PACS for the entire District serving as agents of the SC (MAMCOS). They are (a) Trinive GSSSN, Trinive and (b) Konandur GSSSN, Konandur for the entire Shimoga and Chickmagalur Districts. In this area there is predominance of itinerants (who are also producers), who have collected about 30 percent of the produce marketed. It is noted during the field visit that these itinerants garble the produce after collection/purchase, and sell it to the CAs and the SC in accordance with their financial requirement. The SC pays the commission to itinerants at the rate of Rs 2 (per quintal) on adquantum basis. The SC and the CAs perform the same functions in the market. The SC is an agent of the BC (CAMPCO). The private traders buy from the CAs and the SC and sell to SPWT, BC and to the retailers. The retailers in turn sell it to the panwalas and consumers for final consumption. It is noted that about 73 percent of the produce marketed is through CAs. The SC interacts with CAs as also with the Private Wholesale Traders (PWTs) and also with the upcountry markets. [Diagram 9]. It is noted that itinerants dominate the marketing channel in Shimoga. These itinerants are elements involved in contractual marketing of arecanut (Addendum 2).

SIRSI MARKET

The producers of arecanut at Sirsi, as already discussed, are shrewd enough to prepare boiled and unboiled varieties depending upon the market situation. The proportion of
Diagram - 10

IMPORTANT MARKETING CHANNELS - SIRSI SUB SYSTEM.

1. P \(69\%\) → SC (TSS & TAPCMS) → BC → R → PW → C
   → PWT → SPWT → R → PW → C

2. P \(12\%\) → COOP (FCs) → COOP (TSS) → PWT → SPWT → R → PW → C
   → COOP (TAPCMS) → PWT → SPWT → R → PW → C

3. P \(11\%\) → COOP (SCs) → BC → R → PW → C
   → PWT → SPWT → R → PW → C

4. P \(5\%\) → I → COOP (FCS) → TSS → TAPCMS → BC → R → PW → C
   → CA → PWT → SPWT → R → PW → C

5. P \(3\%\) → CA → PWT → SPWT → R → PW → C
Diagram 11

IMPORTANT MARKETING CHANNELS - ENTIRE SYSTEM.

1. P 40% → COOP (BC) → R → C
   ↓  PWT  → SPWT  → PW  → C

2. P 25% → CA → PWT → SPWT → R → PW → C

3. P 10% → COOP (SC) → COOP (BC) → R → PW → C
   ↓  PWT → SPWT  → PW  → C

4. P 15% → CA → PWT → SPWT → R → PW → C
   ↓  COOP (SC)  →  COOP (BC)  →  R  →  PW  →  C
   ↓  PWT  →  SPWT  →  PW  →  C

5. P Negligible → COOP (BC) → R → PW → C
preparation of boiled wholenuts - tender, semiripe and unboiled nuts - is a function of the current price, the trend of which would be closely monitored by the producers. It is assessed during the survey that 69 percent of the produce marketed is through the selling cooperative (TSS) directly by the producers. The FCs contribute 12 percent of which 7 percent is handled by another SC, the Taluka Agricultural Produce Cooperative Marketing Society Ltd (TAPCMS) established in 1985. The Totagars Sale Society Ltd (TSS), has handled about 6 percent of the produce of the FCs. In all, the TSS has highest stake in attracting the produce (75%) while the CAs are not effective, (7%). The selling cooperatives have handled about 93 percent of the total arecanut marketed in 1988-89.

On the buyers front, the BC has purchased about 6 percent of the produce marketed through the TSS. The PWT has bought about 94 percent which is sold to Semi Private Wholesale Trader (SPWT) at the upcountry markets from whom retailers purchase and sell it to panwalas and consumers. Thus, the feature of the Sirsi market is the presence of two SCs - the TSS and the TAPCMS which have handled almost (97%) the entire marketed surplus in 1988-89 (Diagrams 10 & 11).

5.02 MARKET CONCENTRATION

The market concentration of sellers, buyers and their degree of concentration in each subsystem are presented in the
Tables 5.01, 5.02, 5.03 and 5.04. The Areca nut Market Reports during the first week of January 1991 for eight consecutive days of Mangalore and Shimoga markets form the basis of the study. The arecanut market reports were not available for the Sirsi market and hence no analysis is performed. It is culled out from the reports of the data on number of sellers and buyers, quantity offered by sellers and bought by buyers and their relative sizes in the whole gamut of transactions on each day.

MANGALORE MARKET

The Table 5.01 indicates the number of sellers, buyers and S-B Ratio in Mangalore market during eight days.

<table>
<thead>
<tr>
<th>DAY</th>
<th>No. of Sellers</th>
<th>No. of Buyers</th>
<th>S-B Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>130</td>
<td>26</td>
<td>5.00</td>
</tr>
<tr>
<td>II</td>
<td>53</td>
<td>11</td>
<td>4.82</td>
</tr>
<tr>
<td>III</td>
<td>326</td>
<td>47</td>
<td>6.94</td>
</tr>
<tr>
<td>IV</td>
<td>143</td>
<td>23</td>
<td>4.93</td>
</tr>
<tr>
<td>V</td>
<td>218</td>
<td>34</td>
<td>6.41</td>
</tr>
<tr>
<td>VI</td>
<td>200</td>
<td>28</td>
<td>7.11</td>
</tr>
<tr>
<td>VII</td>
<td>146</td>
<td>35</td>
<td>4.17</td>
</tr>
<tr>
<td>VIII</td>
<td>78</td>
<td>12</td>
<td>6.50</td>
</tr>
<tr>
<td>Average</td>
<td>162</td>
<td>27</td>
<td>6.00</td>
</tr>
</tbody>
</table>

Source: Mangalore Pete Dharanegalu (Mangalore Market Reports).
It is observed that 53 sellers are found on the second day and 326 sellers on the third day. More is the number of sellers, more the buyers are. On an average, six sellers are found for every buyer. The range of sellers for every buyer is from four to seven.

Table - 5.02

<table>
<thead>
<tr>
<th>DAY</th>
<th>C.V. of size for sellers</th>
<th>C.V. of size for buyers</th>
<th>H-Index for sellers</th>
<th>H-Index for buyers</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>78.15</td>
<td>112.14</td>
<td>0.1720</td>
<td>0.0850</td>
</tr>
<tr>
<td>II</td>
<td>65.97</td>
<td>136.19</td>
<td>0.2124</td>
<td>0.2441</td>
</tr>
<tr>
<td>III</td>
<td>87.17</td>
<td>146.45</td>
<td>0.1352</td>
<td>0.0659</td>
</tr>
<tr>
<td>IV</td>
<td>75.00</td>
<td>98.64</td>
<td>0.2502</td>
<td>0.0839</td>
</tr>
<tr>
<td>V</td>
<td>78.35</td>
<td>159.52</td>
<td>0.1881</td>
<td>0.1027</td>
</tr>
<tr>
<td>VI</td>
<td>67.23</td>
<td>106.15</td>
<td>0.1665</td>
<td>0.0745</td>
</tr>
<tr>
<td>VII</td>
<td>112.54</td>
<td>147.83</td>
<td>0.0903</td>
<td>0.0892</td>
</tr>
<tr>
<td>VIII</td>
<td>63.41</td>
<td>185.57</td>
<td>0.2706</td>
<td>0.5085</td>
</tr>
<tr>
<td>Average</td>
<td>78.48</td>
<td>136.56</td>
<td>0.1857</td>
<td>0.1567</td>
</tr>
</tbody>
</table>

There is low concentration of sellers as indicated by the H Index. The H index is the most comprehensive measure of concentration and degree of competition. It is defined as

\[ H = \frac{(X_1/T)}{2} \]

where \( X_1 \) is quantities sold/bought by the 1-th firm and \( T \), the total quantity sold/bought. Alternatively, \( H \) can also be defined as \( H = 1 + \frac{(CV)}{n} \) where \( CV \) is the coefficient of variation of sizes (in terms of quantities sold/bought) and \( n \) is the number of firms. If \( H \) equals zero, it implies perfect
competition and if $H=1$ it means monopoly. The sellers are found to be relatively highly concentrated as $H=0.1857$, while buyers are not so as indicated by $H=0.1567$ for overall period of eight days. In general, the low concentration of both sellers and buyers suggests that there is a good measure of oligopoly and oligopsonistic powers in selling and buying respectively. This clearly pictures a fairly competitive situation in the exchange function.

SHIMOGA MARKET

The following Table 5.03 presents the number of sellers, buyers and S-B ratio in Shimoga Market.

Table - 5.03

<table>
<thead>
<tr>
<th>DAY</th>
<th>No. of Sellers</th>
<th>No. of Buyers</th>
<th>S-B Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>648</td>
<td>46</td>
<td>14.09</td>
</tr>
<tr>
<td>II</td>
<td>738</td>
<td>48</td>
<td>15.38</td>
</tr>
<tr>
<td>III</td>
<td>1364</td>
<td>46</td>
<td>29.65</td>
</tr>
<tr>
<td>IV</td>
<td>1211</td>
<td>49</td>
<td>24.71</td>
</tr>
<tr>
<td>V</td>
<td>1760</td>
<td>18</td>
<td>36.67</td>
</tr>
<tr>
<td>VI</td>
<td>660</td>
<td>34</td>
<td>19.41</td>
</tr>
<tr>
<td>VII</td>
<td>362</td>
<td>40</td>
<td>9.05</td>
</tr>
<tr>
<td>VIII</td>
<td>338</td>
<td>43</td>
<td>7.86</td>
</tr>
<tr>
<td>Average</td>
<td>885</td>
<td>44</td>
<td>20.11</td>
</tr>
</tbody>
</table>

Source: Shimoga Pete Dharanegalu (Shimoga Market Reports).
It is clear from the Table 5.03 that the average S-B ratio is 20.11. The numbers of sellers, buyers and the S-B ratio are high as compared to Mangalore market. The relative spread and H-Indices of sellers and buyers are presented in Table 5.04.

Table - 5.04

<table>
<thead>
<tr>
<th>DAY</th>
<th>C.V. of size for Sellers</th>
<th>C.V. of size for Buyers</th>
<th>H-Index for Sellers</th>
<th>H-Index for Buyers</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>93.43</td>
<td>166.01</td>
<td>0.1506</td>
<td>0.0804</td>
</tr>
<tr>
<td>II</td>
<td>100.46</td>
<td>181.00</td>
<td>0.1508</td>
<td>0.0876</td>
</tr>
<tr>
<td>III</td>
<td>87.91</td>
<td>113.86</td>
<td>0.2005</td>
<td>0.0493</td>
</tr>
<tr>
<td>IV</td>
<td>99.43</td>
<td>205.39</td>
<td>0.2169</td>
<td>0.1048</td>
</tr>
<tr>
<td>V</td>
<td>80.87</td>
<td>150.53</td>
<td>0.2026</td>
<td>0.0671</td>
</tr>
<tr>
<td>VI</td>
<td>94.22</td>
<td>176.20</td>
<td>0.2207</td>
<td>0.1180</td>
</tr>
<tr>
<td>VII</td>
<td>101.19</td>
<td>145.46</td>
<td>0.2374</td>
<td>0.0766</td>
</tr>
<tr>
<td>VIII</td>
<td>102.78</td>
<td>149.79</td>
<td>0.2041</td>
<td>0.0743</td>
</tr>
<tr>
<td></td>
<td>Average</td>
<td></td>
<td>0.1980</td>
<td>0.0823</td>
</tr>
</tbody>
</table>

It is observed that the relative spread of sellers is less than that of buyers. From the above table, it is clear that the H-indices are high for sellers and low for buyers. This suggests that sellers are relatively better concentrated than buyers. The role of the SC is a factor to reckon with, while this has led to competition of a high order amongst buyers leading to their low concentration.
5.03 PRODUCT DIFFERENTIATION

Product differentiation is of two types. (a) vertical and (b) horizontal. Vertical product differentiation entails differentiation by quality, while horizontal differentiation is by consumers despite homogenous quality of the product. In agricultural marketing systems the product differentiation process takes place at two levels - i.e., at the producers' level and at the wholesale traders' level. The nature of the commodity and the structure of the demand pattern of consumers determine the vertical differentiation process. The consciousness of producers regarding quality-price relationships and consequential benefits to be accrued hasten the process of differentiation.

It is amazing that in the AMS the vertical differentiation takes place as many times required for homogenisation which is absent in other commodity marketing systems. The unboiled type is classified into six varieties by quality in Mangalore area as (1) Chaali, (ii) Fator, (iii) Ullagaddi, (iv) koka, (v) Karikoka and (vi) Jibbi (and Chaali becomes Choll later). There are five varieties of unboiled type in Sirsi area. (1) Chaali, (ii) Bilegotu, (iii) Kempu, (iv) Karigotu, and (v) koka. The boiled coloured split type arecanut is classified broadly into: (1) Saraku (Hasa) (ii) Bette and (iii) Gorabolu varieties in Shimoga and Chickmagalur areas. In Sirsi and in parts of Sagar area where boiled coloured whole nuts are classified into three varieties. (1) Rasi, (ii) Tatti Bette and (iii) Muri.
At the market level, after sale, the traders homogenise further by sorting arecanut by size and by garbling. It is noticed that the buyers further differentiate arecanut into 72, 120 and 71 varieties in Mangalore, Shimoga and Sirsi markets respectively. It is identified that over 2687 varieties of nuts are prepared of which 2247 are unboiled 424 are boiled coloured and 16 are raw types in India. In Karnataka alone 1179 varieties have been identified, of which 867, 310, and 2 are unboiled, boiled and raw types respectively. Thus, vertical product differentiation is a feature of economic importance in the AMS which is not ubiquitous in other commodity marketing systems.

As regards horizontal differentiation, it is totally absent in the AMS as consumers, irrespective of the classes, prefer arecanut of a particular place, and no such differentiation is considered necessary and/or essential.

5.04 VERTICAL INTEGRATION

The vertical integration refers to the degree within which the functions of transportation, processing, grading, credit, exchange and storage are performed so as to derive utilities of high order by the market users. In industrial marketing situations these functions are structurally and organisationally well integrated. In the AMS what is of significance is that of vertical functional integration and vertical institutional coordination. It is found that cooperatives are functioning in the AMS at three tiers. First
is the FCs which are PACS. The FCs effectively link marketing and short term credit with that of marketing of arecanut and other commodities. The FCs perform the functions of collection, storage and transportation on the one side and credit and banking and provide necessary inputs and consumer goods on the other.

Secondly, the SCs arrange for collection, storage, and facilitate sale of arecanut for producers. The SC is vigilant about marketing functions and practices. The functions of banking and that of a commission agent are being performed by the SCs with coordination of the FCs at the grass root level. It is noticed that with increasing importance among sellers, the BC is slowly expanding its network in important arecanut markets in Karnataka, Kerala and Assam States. The BC, has established a backward linkage with the SCs and the areca growers to facilitate purchase of arecanut in the open market and/or direct purchase at its depots from the sellers. Thus, there exists vertically backward and forward linkages between the producers and the FCs, between FCs and the SCs and SCs and the BC. The BC has further established link with the demand centres [i.e., up country markets] by participating in selling at the wholesale markets and distribution at the retail level. The cooperative marketing system has been evolved over time against the private marketing system to achieve the twin goals of growth with stability and equity and development with justice. Now, for discussion of the role, importance, and performance of
cooperatives at three tiers as also the working of the private marketing system. The marketing functions — physical, exchange and facilitating — are being performed at various levels in an orderly manner in private and cooperative systems without affecting the role of the producers and buyers [traders and/or consumers] and not losing sight of the welfare of conflicting interests — producers and consumers and allowing for the growth of the institutions and hence the entire sector. The vertical integration /coordination part will be unfolded in the subsequent section.

5.05 BARRIERS TO ENTRY

The impediments for entry into the AMS come from two angles. First, it is from the producers (or sellers). There is no barrier for any producer to enter into the production system. Given the conditions of soil and assured irrigation, the commodity can be grown in all altitudes. If the decision of a producer to form an areca garden is put into action, his contribution to the market supply will take at least six to eight years and normally ten years for consistent higher rate of supply. Thus, area shifts vis-a-vis production schedule shifts would have a definite time lag of six to eight years. No exogenous control is resorted to, except the prices which are signals for suggesting future pattern of production growth. The production schedule and hence market supply received an upward shift mainly by import control measures of the Government of India (GOI) during early 1950's when prices of arecanut registered a consistent decline. This exogenous
adjustment of environmental setting has led to changes in area, productivity and hence production in the principal areca growing states.

Further, it is noticed that the efforts of the Government of India is on improvisation of the existing gardens by introducing new cultural practices and maintaining supply by higher productivity. New varieties of areca seedlings have been invented, but commercialisation has not been attempted.

On the buyers side, the barrier results from two dimensions (i) from the existing firms and (ii) finance. The first barrier is a form of firm hedging wherein the entry of new firms is restricted. The paucity of the finance influences the entry of new firms thereby creating oligopsonistic market situation. Another dimension which is unique in the AMS is the cooperative intervention not only at the exchange stage but in the collection, physical movement as well in building effective facilitative infrastructure. There is no government intervention, unlike in wheat, paddy, cotton, groundnut, tobacco, and in coffee, in the AMS. There is, as already mentioned, a vertically coordinated cooperative market structure integrated functionally in parallel to the private marketing system. With the active participation of producers in FCs, SCs and the BC at all levels and with the built in environmental support, structural changes in the AMS have been brought about. The Arecanut Cooperative Marketing System (ACMS) has assimilated itself into the AMS with the BC.
actively participating in the exchange function in the principal arecanut markets.

5.06 CONGLOMERATION

The institution which is playing pivotal role of conglomeration of private traders and institutions - cooperatives in particular, is the Agricultural Produce Market Committee (APMC). The post 1970 feature is that of organisation and functioning of trade under open supervision by the APMCs with the improvement of transport and storage infrastructure thereby insignifying the distance.

The conglomeration process was reorganised by hastening the process of establishment of arecanut markets in as many as twenty nine market centres by the 1990's which were only fourteen prior to 1960's. With this, the conglomeration of the APMCs has enhanced wherein it can be observed that at least one SC and the BC are functioning for the producers at the wholesale market level. The existence of joint stock companies in the AMS has opened up new vistas for the producers. One interesting feature is that these joint stock companies are entrepreneurial efforts of the producers. The producers are encouraged to become shareholders and are assured minimum price for a standard variety of arecanut. The process of conglomeration has been hastened up with the establishment of these companies. We can cite the JSCs such as KVV Sangha limited at Mangalore (Puttur), Malanad Arecanut Syndicate Limited (MASL) at Shimoga, and FAMA company limited at Sirsi.
It is now to redefine the market structure to encompass organisational and behavioural characteristics along with compositional elements. It is necessary as the elements of market structure behave in accordance with the characteristics of socio-political and economic environments. Given the definition of market structure, any change in compositional, organisational and behavioural characteristics will bring about changes in the market structure. The changes in market structure could be evaluated by measuring changes in three dimensions: "form", "base" and "state". i.e., what is the form of competition? Is it monopolistic or has there been any change from one "form" to another? Such questions would be answered to assess "form" change.

Another characteristic of structural change could be change in "base" from a narrow one to a broader one. The narrow base means creation of an institution which monopolises marketing. The broader base is one wherein there is scope for multiple institutions which involve themselves in the marketing process to hasten competition. These institutions may also perform physical and facilitative functions. As an example, the coffee marketing system has a narrow base and it is structured as such. A marketing system could shift from a narrow base to a broader base by accommodating more firms/institutions of diversified nature.
The third characteristic of structural change could be change in the "state" of environment, i.e., it could be from a exploitative state to an egalitarian one or vice versa or some where in between the two. It is now to analyse here, in this section, the structural changes in the AMS.

HYPOTHESIS

It is hypothesised that structural changes have taken place in the AMS.

The above hypothesis is subdivided into three subhypotheses which are not necessarily either mutually exclusive or independent. The three subhypotheses are:

(i) There is a significant change in the "form" of competition in the AMS,
(ii) There is a major change in the "base" from Itinerant sellers to SCs and from private firms to cooperatives and
(iii) There is a change in the "state" of marketing in the AMS.

METHOD

The way in which the test is carried out is to depend on the evidences available over time and on the rigorous data collected during the field work. It is intended to test the sub-hypotheses for each subsystem (i.e., three subsystems with Mangalore, Shimoga and Sirsi as market centres). A three-dimensional analysis is followed, viz., "form", "base" and
"state" at the subsystem level. After testing hypothesis for each subsystem it is endeavoured to generalise the results of analysis.

i) **FORM**

As has been noted earlier, "form" refers to the form of competition as existed in the market structure. The economic theory identifies several forms - monopsony, duopsony, triopsony, oligopsony, atomopsony or near perfectness and perfect in the buying function and monopoly, duopoly, triopoly, oligopoly, atomistic, or near perfectness and perfect in the selling function.

One can get an idea about the form of competition in those days - as far back as 1909 in arecanut marketing from the extract of the report of "Malnad Arecaanut Trade Deputation". With the approval of the then state Government, the Malnad Land Holder's Association went around arecanut marketing areas to have a first hand account of the marketing situation. The conditions that existed in Shimoga and Birur are quoted thus: "The merchants of these two places, viz, Shimoga and Birur, pose themselves as the brokers of the Malnad areca growers and profess to hold the stuff in trust for them until it fetches a higher price. For this they receive a payment of commission of *sixteen annas* per maund. But actually being done is this. When

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*Sixteen annas equals one Rupee.*

@ one maund is approx. equal to 21 pounds.
there is a fall in the price with prospects of rapid rise shortly, these brokers write to their senders of areca that they have sold the article at a certain rate and enter as sold in account, while as a matter of fact, the article is not disposed of but kept on hand until it fetches a higher price. Even while the price is steady, the practice is to pay at least a rupee less on every maund sold. This is deliberate cheating in as much as they are the only brokers and as such they are bound to render a correct account of sales to their customers and reserve for themselves only the stipulated amount of annas two per maund.

An examination of the other side of "brokers"' transaction reveals that, "This is not a random allegation we are making against the merchants. We are convinced of the truth of our assertions. Side by side with the accounts of those who supply to them they maintain an account of their purchasers. If an examination of these two parallel accounts is made, it will be found that on the dates on which they have entered a certain supplied article as sold at so much per maund, there is no corresponding entry, as in the natural and right course of things there should be, (in buyer's account) in the rate at which the stuff has been sold. This kind of procedure in the sale of areca supplied from malnad has been in practice, both the brokers of Shimoga and Birur and the Madras merchants giving the secret of trade between them. There are in vogue innumerable other practices, by which the growers and exporters
of areca in the malnad are defrauded of a large portion of their lawful gains. Foremost of them is the deduction claimed by these brokers of Shimoga and small pieces generally known as 'Dugulu Churu' collecting at the bottom of every heap exposed for sale".

"The bags sent by the exporters are opened by these brokers and the 'hansa' or the best variety is freely adulterated by the admixture of a maund or some times more of 'bette' and the exporter is told that his stuff is of inferior variety and cannot fetch a good price".

The above quotation indicates the nature of competition, among other things, that existed in the intensely arecanut producing area in Karnataka. There was no competition as such for buying as it was done through brokers. Then buyers passed on their risk to the producers through brokers. Thus the form of competition was no competition but exchange. As a consequence, there was total absence of marketing conditions.

The marketing conditions and the forms of competition were not dissimilar at Mangalore and at Srsi to that which existed in Shimoga area. The enactment of Cooperative Societies Act in 1904, consequent to political awareness contributed to the establishment of three cooperative institutions to unify, conserve and forge producers' (sellers') power to introduce the spirit (form) of competition. It may be mentioned here that the SKACMS was established in Mangalore as early as in
1919, the TSS in 1923 at Sirsi and the MAMCOS in 1939 at Shimoga.

During 1950-60's a change was noticed in the markets selected for the study. There were, by then, regulated markets in each of these centres i.e., Mangalore, Shimoga and Sirsi in which open auction was ensured and conducted. It was conducted by the commission agents in their shops under cover in Mangalore (under cover of cloth), in the CAs shops under the supervision of the APMC officials in Shimoga and by the TSS in Sirsi respectively. Open auction system had ensured competition but with a difference. This was the change noticed in "form" during 1960's.

The era of 1970's gives us a picture of a significant change in the "form" of competition in all three markets. The state of monopsonistic form continued with only few traders and CAs controlling the market. However, the role of cooperatives as a trader at Sirsi and as CAs in Shimoga and Mangalore had varying effects on the arecanut marketing system.

In the 1990's a different scenario has been observed. Producers sell their produce through multiple channels with the cooperatives playing a seminal role in regulating supply. It is found that there is a good degree of concentration in selling while there is competition of high degree in buying in all the three markets under a common system of tender sale. This has been supported by relatively higher H-indices in.
selling than in buying in all the three markets suggesting monitoring of supply and high competition for buying. The interaction of sellers and buyers in 1990's is of such high magnitude as indicated by low H - indices. This suggests a state of near perfectness in the exchange function.

ii) BASE

It is intended here to discuss the pattern of shift that has taken place in the base of the market structure. It is noted in the previous section that during 1909 not only that there was no competition, but the trading base also belonged to private agencies. The years 1919, 1923 and 1939 manifested the broadening of the base as well as its character by the establishment of three producers' (sellers') cooperatives in Mangalore, Sirsi and Shimoga respectively.

The share of agencies i.e., itinerant merchants and cooperatives in marketed surplus during 1950's is given in the following Table 5.05.
Table 5.05
Share of Different Agencies in Marketed Surplus of Arecanut
During 1950s, 1960s, 1970s and 1990s in the Study Area

<table>
<thead>
<tr>
<th>Market</th>
<th>Share of Different Agencies in</th>
<th>1990s</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1950s I</td>
<td>II</td>
</tr>
<tr>
<td></td>
<td>Selling</td>
<td>Buying</td>
</tr>
<tr>
<td>Mangalore</td>
<td>73</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shimoga</td>
<td>60</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sirsi</td>
<td>70</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: I: Itinerant and Village Merchants
II: Selling Cooperative
II(a): Buying Cooperative

Source:
1. Annual Reports and Publications of the SKACMS, MAMCOS, TSS, TAPCMS and CAMPCO
3. Government of India · Report on the Marketing of Arecanuts (Tamul) and Betelnuts (Supari) in India; Marketing Series No. 125, DMI, GOI, 1962.

It is observed from the Table 5.05 that there is a sea change in the role of the itinerant merchants whose share of transactions has diminished over decades. The SCs in all the three markets have attracted high shares of marketed surplus. The introduction of the BC in to the AMS has resulted in a vertical shift in the AMS. The BC has hastened competition by its business strategies and is able to purchase through open competition about 35 percent of the total marketed surplus of arecanut in 1990s. Thus, it is clear that there is broadening of the "base" in the AMS wherein vertical shift by
establishing the BC is followed by increasing shares of selling cooperatives over the years. The "base" of the AMS has shifted from "narrow" to a "broader" one. This proves the hypothesis that there is a major change in the "base" from itinerant sellers to SCs and from private firms to cooperatives.

iii) STATE

The "state" of marketing environment since 1909 is discussed here. The extract of the report of the "Malnad Arecanut Trade Deputation" would help us to look in retrospect the state of the environment. It is clear, without an iota of doubt that the marketing environment was defective, full of attendant malpractices and was exploitative. The forms of exploitation were reduction in weight, sale of only that part of the produce as is desired by the consigner, wrong/less quotation of prices by the brokers, and the like. On the consumers' side, prices were naturally high and there was adulteration. The situation was thus exploitative. The exploitative trend continued up to 1950's although concerted efforts were on from the producer - sellers' side in the three areas - Mangalore (1919), Sirsi (1923) and Shimoga (1939). The producers were exploited by brokers. The cases of marketing costs and margins indicated 10 percent - 15 percent net margins over costs from one wholesale level to another while at the retail level the profit varied between 17 percent to 26 percent.
In 1960's there was a significant change in the field of marketing regulation. Marketing charges were fixed in accordance with the byelaws by the regulated markets. The regulated markets conglomerated cooperative institutions, Joint Stock Companies and institutions/agencies which facilitated marketing functions. The markets were centralized, organised under legislative environments and sellers began to articulate their demands and translate it into action through their cooperatives. The market environment had drifted away from the exploitative state towards a more competitive state for a better future.

The decade of 1970's had a homogeneous legislative environment with the enactment of the Karnataka Agricultural Produce Marketing (Regulation) Act, 1966 and Rules, 1968. Earlier to this, the three subsystems had evolved three different market cultures under three different legislations. As a result of this, the arecanut markets performed better in fetching a better price for farmers despite high concentration in trade.

The current market situation, i.e., in 1990's, is vivid in outlook but is certainly a further drift from a merely favourable state towards egalitarian trends. The establishment of SCs in each subsystem changed the situation in a decade and half towards changing market structure in improvising the physical, facilitating and exchange functions. Voluntary regulation of supply by producers through SCs and
participation of the BC in buying and distribution has had its impact on the changing market scenario in each subsystem. Organised and mercurial participation of producers in the marketing process, establishment of effective backward and forward linkages, standardisation of marketing practices, oligopolistic and oligopsonistic nature of selling and buying, effective market intelligence, good performance of credit institutions - private and public - have resulted in a high degree of change in the "state" of market structure in the AMS. The impact of structural changes on market conduct and on the performance of the AMS are discussed in the subsequent chapters.

5.08 CONCLUSIONS

1. The salient feature of the AMS is the cooperativisation of producers/sellers at three tiers. The FCs, SCs, and the BC perform basic functions of physical movement, facilitating and in the exchange at the market level. The market structure of the AMS is characterised by, apart from producers'/sellers' and buyers' institutions - cooperatives FCs, SCs the BC, the APMCs performing and/or facilitating marketing functions. The existence of cooperatives at different tiers is a seminal feature of the AMS signifying the clairvoyance of the producers. The FCs are dominant in Mangalore and Sirsi subsystems, through which one fifth of the arecanut passes out. Itinerant merchants have handled about one-sixth of the
produce and are present in all the three subsystems. The itinerants are predominant in Shimoga subsystem. All the three subsystems have SCs with SKACMS, MAMCOS and TSS and TAPCMS at Mangalore, Shimoga and Sirsi subsystems respectively. In addition, SCs have established backward linkages with the FCs in providing them credit and inputs in two subsystems—Mangalore and Sirsi. While in Shimoga only two FCs have established links with the SC in Shimoga District. On the other side, the SCs in all three subsystems have established forward linkages with the BC in terms of provision of credit and facilitation of purchase. The BC is the only cooperative engaged in the MIO and has backward linkages with the SCs and FCs in credit, input on the one side and is engaged in the distribution at various consumption bases on the other. The SCs have handled about 40 percent of the total production together. The BC has handled about 36 percent of the total supply. The presence of joint stock companies one in each subsystem is another dimension.

2. The CAs have handled about one fourth of the total produce sold and are predominant in Mangalore and Shimoga subsystems. In Sirsi the two SCs—TSS and TAPCMS—have attracted 97 percent of the total produce thereby nullifying the role of CAs. Itinerant merchants (I) collect and transact about 15 percent of the produce in the study area. They are more in number in the
Shimoga subsystem.

3. There is oligopolistic and oligopsonistic tendency in the selling and buying function as indicated by the H-indices.

4. The product differentiation is at two levels in the AMS. The producers in the three subsystems prepare seven, three and eight varieties for the market in Mangalore, Shimoga and Sirsi subsystems respectively. At the market level, the traders further differentiate arecanut by sorting and garbling into 72, 120 and 71 varieties in the three markets respectively. This process continues at the distribution level also.

5. The AMS is vertically, functionally integrated and institutionally coordinated. The APMCs are the institutions hastening up the process of conglomeration and are evolving norms of trading practices. There is structural change in "form", "base" and "state" in the AMS. There is a shift in the "form" from buyers' monopsony to oligopsonistic tendencies. The "base" has widened through the vertical shift in the cooperative structure and through the increased shares of cooperative agencies in the marketed surplus. The "state" of marketing has drifted from exploitation towards egalitarianism. This is manifested in the evolution of trading practices.
5.09 REFERENCES


5. Government of India: Report on the Marketing of Arecanuts (Tamul) and Betelnuts (Supari) in India; Marketing Series No.125, DMI, GOI, 1962, pp 1 to 226.

6. Satyapriya, V.S: Marketing of Arecanut in Mysore State; op.cit.,

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