CHAPTER-II
PROFILE OF THE STUDY AREA AND REVIEW OF LITERATURE

PROFILE OF THE STUDY AREA

2.1 INTRODUCTION

Pudukkottai district was carved out of Tiruchirappalli and Thanjavur districts in January 1974. The district has an area of 4663 Sq. Km. with a coast line of 39 Kms. The district lies between 78.25’ of the eastern Longitude and between 9.50’ and 10.40’ of the Northern latitude. It is bounded by Tiruchirappalli district in the North and West, Sivagangai district in the South, Bay of Bengal in the East and Thanjavur district in the North East.

The population of the district is 16,18,725 (as per census 2011). It is 17.02% urbanized. The district depends a great deal on the monsoon for its water supply. The district has a literacy of 77.96%.

2.2 HISTORICAL SKETCH OF PUDUKKOTTAI

Pudhukottai was organized as a separate district, on 14th January 1974, comprising the former Pudukkottai Division of Tiruchirappalli district with some additions from Thanjavur district. At present, this district is composed of two Revenue Divisions, namely Pudukkottai and Aranthangi and nine Taluks, namely, Kulathur, Illupur, Alangudi, Pudukkottai, Gandarvakottai, Thirumayam, Aranthangi, Avudaiyarkoil and Manamelkudi. There are 765 Revenue Villages. The area of the district is 4663 Sq.Kms. The population of the district is 16,18,725 (as per census 2011). The district depends a great deal on monsoon for its water supply.
Many of the villages are of ancient foundation. The district was one of the homes for pre-historic man. A very large number of burial sites found in the northern and western parts of the district attest this fact.

A very brief sketch of political history is given here in order to appreciate and understand the mixed legacy of antiquities, monuments, epigraphs and the like. The history of Pudukkottai is an epitome of the history of South India. In and around Pudukkottai, there are many vestiges of the oldest habitations of man and some of the lithic records known in the South. The Pandyas, Cholas, Pallavas, Hoyasalas, Vijayanagar and Madurai nayaks ruled over this part of the country and fostered its communal organization, trade and industries and embellished it with temples and monuments of outstanding merit.

Sangam Tamil literature mentions some place names of the district. Oliyamangalam (Thirumayam Taluk) is called as Ollayur in Purananuru. It was the birth place of poet Olliur Kilan Makan Perumchattan and Ollaiyur Thantha Budha Pandyan. Agananuru also mentions Ollaiur. It seems to have been an important city of the Pandyas. Four other places also find place in the Sangam classics.

They are Ambukkovil, the ancient Alumbil, reffered to in Agananuru; Avur the home of the poets Avurikilar, Avur Mulamkilar; Erichi the ancient Erichalur which had been identified whih Erichi Village in Pudukkottai – Aranthangi road (but according to recent researches a village near Illupur). It was probably the home of the poet Madalan Madurai Kumaranar. Avayapatti is traditionally associated with Avvaiyar, who is believed to have lived here for some time.
This district was under the pandiyas of the first empire during Sangam period, but some part of its Northern boundary had been under the influence of the Cholas of Uraiyur, since a few villages here bear the prefix like “killi” and “valavan” both of which are the titles of the Cholas.

The district shares the large prosperity of the maritime trade of the Tamils. Karukkakurichi, a place of find of a treasure trove of more than 500 Imperial Roman Gold and silver Coins, the largest ever recorded from a single hoard deserves notice in the context of the early history of the district. This place lies in Alangudi Taluk, within a short distance north of Aranthangi and the adjoining old ports of Mimisal and Saliyur in the same area and Tondi further south.

The site of find would mark an important Indo-Roman trading centre, through which the inland trade route ran between the western and eastern ports during that time. This is indicated by a chain of such Roman coin hoard site such as Korkai, Kilakkarai and Alangulam all on the eastern sea coast. While Karukkakurichi is a bit inland but not far away from a port like Mimisal. There are also a few other sites of such finds in the east coast. These, while pointing out the exchanges of the exportable products for Roman gold and silver Currency would also indicate the places mentioned to have been active trade centres.
The Karukkakurichi hoard contained the issues of the Roman emperors and their queens, successively from Augustus (BC 29 – AD 14) up to Vaspasianus (69-79 AD) from about the end of fourth Century about the last quarter of sixth. Pudukkottai district, like many other parts of Tamil Nadu was under the rate of Kalabhras. It must have come under the King Kurran, inscription of whom has been found in Pulankurichi near Ponnamaravathi in the district.

The next phase in the history of the district follows the overthrow of Kalabhras by Kadungon in Pandiya country about 590 AD. The first Pandiya empire inaugurated by Kadungon spread into the district. This is shown by the presence of inscription of the rulers of this dynasty in Kudumiyanmalai, Thirugokarnam and Sittannavasal. The poem Pandimandala Sathakam states that Pandiya land’s northern frontier was river Vellar.

The vellar that flows north of pudukkottai down has been from the ancient times was the trational boundary separating the terrains of the Cholas and Pandyas. This dividing line formed the Konadu and Kanadu, on the north and south respectively. Thus the district became a kind of marcher land between the Pandyas and Pallavas. The Pandyas and Pllavas carried on the wars by proxy through their subordinate chiefs, the Mutharayars and Velirs. Among the Velirs the most well known are the Irukkuvels of Kodumbalur. The Kodumbalur Velirs located in the political buffer zone between the kingdoms of the Cholas and Pandyas and formed the family of nobility from which kings and other chiefs made matrimonial alliance.
The period of three centuries between C 600 and C 900 AD relates to the reign of the Pallavas of Kanchi and Pandyas of Madurai who ruled over the entire Tamil Nadu with their boundary in between their empires oscillating on either side of river Kaveri, the bone of contention being Cholamandalam the home of Cholas and the fertile Kaveri delta that was the granary of the south and as such always been the cynosure of all powers contending for supremacy during the entire historical period.

The Cholas themselves were in eclipse and hibernating only to revive again in the ninth century, when the Pallava power came to an end, the Pandyas were holding on for some more time to yield place ultimately to the waxing Chola power. Though Mahendra Varma Pallava (604-630 AD) inherited the Pallava Empire from his victorious father Simhavishnu that reached up to the bank of the Cauvery, Cholamandalam could not be retained by his immediate successor, as it was over-run by the Pandyas of the further south.

The tract north and south of river Vellar were in the hands of the Mutharaiyar chieftains who till their annihilation by the resurgent Chola line of Vijayalaya, were owing alternate allegiance to the super powers. The Irukuvelirs, at the end became the firm allies of the Cholas.
Thus, one cannot expect to find early Pallava monuments, antiquities and inscription in Pudukkottai region but only those of the contemporary Pandyas along with those of Mutharaiyars and Irukkuvelirs. Later, Pallavas wrested the tract from the hands of the Pandyas. The tract come under the Pallavas from the time of Nandivarman-II (730-796 AD) when the Pallavas power reasserted itself in Cholamandalam and the tract south of Kaveri, reaching a little south beyond Vellar, comprising the northern half of the Pudukkottai district. This period is thus marked by the presence of rock cut cave temples of the Pandyas and Mutharaiyars.

The available historical evidence under the first Pandya Empire is rather scanty. The best known is the inscription at Sittannavasal in the reign of Srimara Srivallaba (851-862 AD) and at Kudumiyanmalai in the reign of Kochadayar Ranadheeran or Sadayan Maran (C 700-730 AD). In the reign of Maravarman Rajasimha-I (C 730-760 AD) a number of battles were fought against the Pallavas, one of the sites was Kodumbalur. The inscription of the reign of Nedunchadayan (C 768-816 AD) the greatest king of the dynasty is found in Thirugokarnam and Nirpalani. Of the reign of three successors of Srimara Srivallaba ending with Rajasimha-II (C 920 AD) who lost his kingdom to the resurgent Cholas, There is no reference about the Pandya rulers in the district.

The Pallava references to places and incidents in the district or equally scanty. The earliest reference of the historical events in the districts find place in the Pandya records of Velvikudi and Sinnamanur plates which say that Maravarman Rajasimha defeated Nadhivarman Pallava Malla at Kodumbalur.
The inscriptions of his successors are found in Kannandarkoil, Malayadipatti and Rasalipatti. The age of Pallavas and Pandyas of the first empire, the Mutharaiyars and Irukuvelirs was the age of Tamil bhakthi movement. The Thevaram mentions several temples in the district. The three Nayamars from this district were, Idangalinayanar of Kodumbalur, Perumilai Kurmbayanar associated with Devarmalai and Kulachirainayanar of Manamelgudi.

Under Vijayalaya Chola, this district formed part of his domination but perhaps fitfully. The notion that some temples of ninth century in the district, belong to early Chola period, is erroneous. The pandyas still held power in the region. It was not until the reign of Parantaka-I (907-955 AD). Vijayalaya’s second successor, that the Chola conquered the entire Pandya land. The rule of Rajaraja-I shows a brilliant part in the history of the district in common with that of Tamil Nadu. The full benefaction of the Chola rule is revealed in their inscriptions in the district. The entire district formed part of Chola kingdom until the last year of Kulothunga-III (1178-1218 AD). At the death of Rajaraja-II and the succession of Rajathiraja-II, the Chola power began to decline.

The pandyas began to assert their independence from the time of Kulothunga-I. Towards the end of the reign of Rajaraja-II, Kulasekara one of the two contenders for Pandya throne pealed to the Chola for help. His rival Parakrama turned towards Srilanka. Pudukottai also became seat of this civil war.
Under the Vijayanagar Sangama dynasty (1336-1485 AD) the inscriptions in the district refer many local chiefs such as Suraikudi, Perambur, Sendavanmangalam, Vanadaraiyar, Gangayaraiyar and Thondaimans of Aranthagi. A great personality of the Tuluva dynasty (1505-1570 AD) was Krishnathevaraya (1509-1529 AD). He had visited Brahadamba Gokarnesa temple at Thirugokarnam on his way to Rameswaram and gifted many valuable presents to the temple.

Vijaya Ragunatharaya Thondaiman (1730-1769 AD) was the second in the line of Thondaimans. During his period the whole of India came under the umbrella of Mughals. The Thondaiman was firmly on the side of the English at his time while the rulers like Thanjavur Marathas wavered. The next ruler Raja Vijaya Ragunatha Thondaiman (1807-1825 AD) was crowned when he was a minor and the British Government appointed Major John Black Burn, to undertake the management of the province of Pudukkottai. Ragunatha Thondaiman (1825-1839 AD) was conferred with the title his Excellency by the British Government.

Marthanda Bhairava Thondaiman (1886-1929 AD) became the ruler of the state at the age of 11. The administration was looked after by a council with approval of the British Government. Raja Rajagopala Thondaiman (1928-1948 AD) the last and ninth in the line of Thondaiman rulers, was selected by the British Government and was crowned when he was six years old. The administration was looked after by English administrator, among them Alexander Tottenham was noteworthy.
The important architectural contribution of this period is the New Palace-which was built in 1930 in Indo-Sarasenic Dravidian architecture. This beautiful granite structure now houses the District Collector Office.

2.3 GEOGRAPHICAL LOCATION

Pudukkottai is the southern District of Tamil Nadu. The district lies between 78°49’ and 78°82’ of the eastern longitudes and 10°23’ and 10°38’ of the northern Latitudes.

The District is bounded by Tiruchirappalli in the North and the West. Sivagangai District in the South, Bay of Bengal in the East and Thanjavur District in the North East.

The district has two revenue divisions viz., Pudukkottai, Aranthangi. Pudukkottai Revenue Division has 8 Taluks namely Alangudi, Gandarvakottai, Pudukkottai, Thirumayam, Karambakudi, Ponnamaravathi, Kulathur, Illuppur and Aranthangi Revenue Division comprises 3 Taluks namely Aranthangi, Avudaiyarkoil, and Manamelgudi. This district has 13 blocks namely Annavasal, Arimalam, Kunnandarkoil, Pudukkottai, Thirumayam, Aranthangi, Avudaiyarkoil, Ponnamaravathi, Gandarvakottai, Manamelmudi, Thiruvarankulam, Viralimalai, Karambakudi.

2.4 HUMAN RESOURCES

This district with an area of 4,664 square kilometers. The number of females’ for over 1015 males’ workout to 1000.
2.5 PEOPLE AND CULTURE

The people are the human resource of the District. Their culture, religion, aptitude, habits, talents etc., have a bearing on how the district presents itself to others. Tamil is the main language of this district. Hindus and Christians form a sizeable percentage of the population of the district and there are a number of Muslims-dominated belts in the district.

The caste system in the Society has weakened to a great extent especially after independence because of growth of education and improvements in transport and communication. Some of the communities in the district are Nadars, Kallars, Kandarvakottaikallars, Chettiys, Ambalakarars, Thondaiman, Vellalars, Agamudiyars etc. Rice is the staple food of the rich and poor alike in the district. Beverage like tea and coffee are widely spread even in to the rural areas of the district.

**TABLE 2.5.01**

**PUDUKKOTTAI DISTRICT’S POPULATION**

<table>
<thead>
<tr>
<th>S.No</th>
<th>Particulars</th>
<th>As per 2011 census</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Actual Population</td>
<td>16,18,345</td>
</tr>
<tr>
<td>2</td>
<td>Male</td>
<td>803188</td>
</tr>
<tr>
<td>3</td>
<td>Female</td>
<td>815157</td>
</tr>
<tr>
<td>4</td>
<td>Population Growth</td>
<td>10.88%</td>
</tr>
<tr>
<td>5</td>
<td>Area sq.km</td>
<td>4,644</td>
</tr>
<tr>
<td>6</td>
<td>Density / km²</td>
<td>348</td>
</tr>
</tbody>
</table>

Source: Secondary data
2.6 PUDUKKOTTAI DISTRICT-DENSITY OF POPULATION

The initial provisional data released by Census India 2011, shows that the density of Pudukkottai District for 2011 is 348 people per sq.km, Pudukkottai District administers 4,644, Kilometers of areas.

2.7 PUDUKKOTTAI DISTRICT’S LITERACY RATE

The average literacy rate of Pudukkottai District in 2011 was 77.19 compared to 71.12 of 2001. If things are looked out at gender wise, male and female literacy was 85.56 and 69.00 respectively. The total literates in Pudukkottai District were 11,10,545 of which male and female were 6,08,776 and 5,01,769 respectively.

2.8 PUDUKKOTTAI DISTRICT’S SEX RATIO

With regards to sex ratio in Pudukkottai, it stood at 1015 per 1000 male compared to 2001 census figure of 1015. The average national sex ratio in India is 940 as per latest reports of census 2011 Directorate. In 2011 census, child sex ratio is 960 girls per 1000 boys.

**TABLE 2.8.01**

**MUNICIPAL PROFILE WITHIN PUDUKKOTTAI DISTRICT**

<table>
<thead>
<tr>
<th>S.No</th>
<th>Municipalities</th>
<th>No of Wards</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Pudukkottai</td>
<td>39</td>
</tr>
<tr>
<td>2</td>
<td>Aranthangi</td>
<td>27</td>
</tr>
</tbody>
</table>

Source: District statistical Hand Book 2011-2012
TABLE 2.8.02

BLOCK PROFILE WITHIN PUDUKKOTTAI DISTRICT

<table>
<thead>
<tr>
<th>S.No</th>
<th>Block</th>
<th>No of Panchayats</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Annavasal</td>
<td>42</td>
</tr>
<tr>
<td>2</td>
<td>Arimalam</td>
<td>32</td>
</tr>
<tr>
<td>3</td>
<td>Kunnandar Koil</td>
<td>37</td>
</tr>
<tr>
<td>4</td>
<td>Poonnamaravathi</td>
<td>43</td>
</tr>
<tr>
<td>5</td>
<td>Pudukkottai</td>
<td>28</td>
</tr>
<tr>
<td>6</td>
<td>Thirumayam</td>
<td>33</td>
</tr>
<tr>
<td>7</td>
<td>Viralimalai</td>
<td>45</td>
</tr>
<tr>
<td>8</td>
<td>Aranthangi</td>
<td>52</td>
</tr>
<tr>
<td>9</td>
<td>Avudaiyar Koil</td>
<td>35</td>
</tr>
</tbody>
</table>

Source: District statistical Hand Book 2011-2012

2.9 FORESTS

The total area of forests is 214 sq.kms. It is 38 percent of geographical area of the District where as the state average is 15 percent. The important species are Timber and Teak, Rosewood and Araspathi. Minor forest products available are cashew, pepper, Lemon and a lot of medicinal plants.

2.10 RAINFALL

Pudukkottai District is predominantly an agricultural oriented district. Generally a dry and hot climate prevails in this district and this district’s agricultural Production depends mainly on the rainfall.
The normal annual rainfall of Pudukkotai District is 919.4 mm out of which 50.6 mm is received in winter, 119.2 mm is received in weather period, 346.4 mm is received during south west monsoon and 403.2 mm is received in North East Monsoon.

2.11 TEMPERATURE

The temperature which ranges normally between 67.3°F degree to 101.7°F degree offers hot and dry weather throughout the year. It is quite favorable for groundnut cultivation.

2.12 CLIMATE

The district has a favourable agro climatic condition which is suitable for growing a number of crops. The proximity of equator, its topography and other climate factors favour the growth of various crops. Paddy, groundnut and sugarcane are the major crops in the region. Like the rest of the State, April to June are the hottest months and December to January are the coldest.

2.13 SOIL

Pudukkottai District has the soil of Red loam and Red sandy are the types of soil found in the town.
2.14 RIVERS

The rivers of the district are Vellaru, Vettaru, Kunadaru, Akniyaru, Paamparu. There are no notable mineral resources available in and around the city. Pudukkottai has a plain terrain with a few rocky hills interspersed in the outskirts.

2.15 IRRIGATION

The district has a red loam soil. Rivers and wells are the important source of irrigation. Vellaru, Vettaru, Kunadaru, Akniyaru, Paamparu are the major rivers in the district. The proportion of net irrigated area to net cropped area is 35.6 percent.

**TABLE 2.15.01**

IRRIGATION WITHIN PUDUKKOTTAI DISTRICT
DURING 2010-2011

<table>
<thead>
<tr>
<th>S.No</th>
<th>Types of irrigation</th>
<th>Area (Hectares)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Net irrigated area</td>
<td>103910</td>
</tr>
<tr>
<td>2</td>
<td>By govt.canals</td>
<td>9661</td>
</tr>
<tr>
<td>3</td>
<td>By well</td>
<td>19609</td>
</tr>
<tr>
<td>4</td>
<td>By other sources</td>
<td>62645</td>
</tr>
<tr>
<td></td>
<td>(a) Tanks</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(b) Others</td>
<td></td>
</tr>
</tbody>
</table>

Source: Secondary date
2.16 AGRICULTURE

The total area of land under cultivation has been estimated to 1,58,724 hectares in the district. Thus agriculture is the main occupation of the people of this district. The important food crops are paddy, pulses, and banana whereas groundnut, coconut, sugarcane, pulse, cotton, gingerly, millet commercial crops in the district.

2.17 TOURIST PLACES IN PUDUKKOTTAI

1. The Rock-Cut cave temple at Sittanavasal.
3. Thirumayan Fort at Thirumayam.
4. Sikhagiriswarar Temple at Kudumiyanmalai.
5. The Lord subramaniya Temple at Viralimalai.
7. Sri Gokarneshwara Temple at Thirugokarnam.
9. Athmanatha Temple at Avudaiyarkoil

2.18 COMMUNICATION

Telephone, telegraph and postal network with all their services are available even in village and hamlets of the district. Pudukkottai, Aranthangi and Alangudi have been included in the STD map of telephone department. Rapid improvement has been witnessed in this sector in the last few years.
There are 10 post offices to one sq.km. At present, there are more than 80,000 telephone connections in the District. Cellular phone and internet facilities are also available in this district.

2.19 TRANSPORT AND COMMUNICATION

The district has a total area of 4.67 lakhs hectare and a total road length of 2025 km, which includes National High way of 77.06 km municipal / panchayat roads of 122.84 km. Private small road transport operators provide passengers well and good transport services. All the villages are well connected by roads and transport system. The head Quarters of the district Pudukkottai is well connected with other major cities of the state by express bus routes and rails.

2.20 BANKING NETWORK

Banking industry is the nucleus of a district’s economy. There were only few scheduled and non- scheduled banks during early in 1960s in the district. After the nationalization of banks, Pudukkottai District is one of the well-banked districts of Tamil Nadu.

The district has 136 branches of public sector banks (PSBs) 24 branches of private banks (PBs) and 37 branches of co-operative banks. There is one branch for a population of 6179. The banking network is adequate for the district.
2.21 OCCUPATIONAL PATTERN

Agriculture is the main occupation of the people. Most of the people work in agriculture sector in the district. Next to it, the industrial sector is able to provide employment opportunities. The percentage of health department and white color are low. The rest of the working population is engaged in their own occupation.

**TABLE 2.21.01**

**OCCUPATIONAL PATTERN OF THE DISTRICT**

<table>
<thead>
<tr>
<th>S.No</th>
<th>Occupation</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Agriculture</td>
<td>50.2</td>
</tr>
<tr>
<td>2</td>
<td>Industrialist</td>
<td>16.9</td>
</tr>
<tr>
<td>3</td>
<td>Health</td>
<td>10.0</td>
</tr>
<tr>
<td>4</td>
<td>Govt.Jobs</td>
<td>08.4</td>
</tr>
<tr>
<td>5</td>
<td>Others</td>
<td>14.5</td>
</tr>
</tbody>
</table>

Source: District Statistical Hand Book of Pudukkottai District 2010-2011

2.22 EDUCATION AND LITERACY

As far as education is concerned, Pudukkottai District is much backward. There are so many educational institutions functioning in the district to cater the educational value of the people. As per 2011 census report, the literacy rate in the district is 77.19 percent.
2.23 REVIEW OF LITERATURE

In any study, the review of previous studies are considered as important for getting a better understanding of the problem, objectives, the methodology followed and to identify the unexplored part of the field of study under consideration. In this regard, a review of some of the studies relating to the present study has been undertaken and presented in the following section.

Calkins and Weston (1980) used Economic efficiency index (E) to evaluate marketing efficiency of two varieties of cotton1.

G.R.Batia, Royal Commission on Agricultural (1980) reviewed the agricultural situations in India in 1920, and it noticed the apparent absence of information on many vital aspects of marketing lead to exploitative circumstances unfavour of producing community in particular2.

Gordon Foxall (1981) depicts that the United Kingdom differs from most of its partners in the European community in that its farmers generally prefer non co-operative channels of distribution for their produce. The proportion of farm produce distributed through co-operatives is considerably smaller than is generally the case in Europe.

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This paper is concerned with the contribution of co-operative organisational structure and behaviour to the variations in co-operative market shares found in Europe’s agriculture. It is argued that there is a clear relationship between organizational factors and the market position of the encouragement of co-operative organisation, which is an aim of UK public policy³.

Quiaoqiao Zhang (1982) explains in this survey that provision of document delivery services should be an integral part of the supply of bibliographic database. After the implementation of a national agricultural information project funded by the Asian development bank, which provided Chinese agricultural CD-ROM workstations and database, CAB international and its Chinese counterpart began to look into the feasibility of establishing a document delivery service in China. The paper presents the results of a survey conducted as a part of the feasibility study and gives a critical overview of China’s document delivery services provided in the agricultural sector⁴.

Brian E. Hill (1983) examines some of the peculiarities of agricultural markets and prices in a pre-EEC context. He argues that, although long-term price trends can lead to remarkable changes in prices and consumption without market disruption, short-term price instability demands concerted action⁵.

**Brain W. Libery (1984)** outlines the UK Hops Marketing Board’s marketing arrangements prior entry into the European Economic Community (EEC) as a case study of changing marketing techniques in the agricultural sector. He examines the views and attitudes of hop growers in the West Midlands towards the changing structures. He concludes that the UK hop grower is unhappy over his future role with a considerable resentment of both the EEC and new marketing practices.

**Safak Aksoy, Erdner Kaynak (1985)** The paper further probes the export behaviour of fresh fruit-and-vegetable-marketing firms in an international context. The case study investigations comprise examination of Belgium, Chile, Canada (The Government of Ontario), New Zealand (The New Zealand Apple and Pear Marketing Board), Turkey, and South Africa (The Outspan Organization and Unifruco Ltd), identifies selected firms’ export behaviour, export objectives, export stimuli, and export inhibitors, explains the concept of export success and delineates profiles of successful exporters. The author concludes that fresh fruit and vegetables provide scope for future contributions with reference to general theory of export marketing.
Adel I.E.I. Ansary (1986) in his article argued that despite the noticeable gains in agricultural productivity in the last decade, people are still dying from starvation and malnutrition. While part of the problem is inadequate food supplies at the national level, nutrition problems relate to physical and economic access to food for the rural and urban poor consumers in developing countries lies in reforming the food distribution or marketing system parameters, delineate the imperatives of marketing system reform, and recommend actionable managerial strategies for their reforms.8

J.K. Kirk (1986) in his article shows how the marketing of agricultural products differ from the marketing of consumer goods, dealing chiefly with marketing in the home-produced sector. He presents a general survey of the main structural features of leading UK marketing boards and private enterprise system of distribution. Also suggests some future trends in agricultural marketing, which will take place on entry in to the European Economic Community, effecting sources of supply and absolute and relative prices of most food commodities.9

Sandra M. Huszagh, Fredrick W. Huszagh (1987) The agricultural sector is a critical component of the world’s economy and society. Its long-term health depends heavily upon international transfers driven by comparative advantages.

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This article’s basic theorem is that effective export programmes must be simultaneously founded on grassroots political support, economic comparative advantage, and domestic vertical development. The mechanics for establishing broad-based political support are addressed first, followed by criteria for targeting to international markets with the most favourable demand and government incentives. Finally, the evolutionary aspects of comparative advantage are discussed in the context of long-term economics and political support from producers, and related technology suppliers involved in targeted export strategies\textsuperscript{10}.

**Aloysius M. Offiongodon** examines in his study that the marketing of cocoa in Nigeria as a pilot study to formulating new strategies for the marketing of agricultural commodities. Three interrelated and interdependent approaches have been developed. Namely, institutional, functional and marketing strategies. These reveal how exchange, physical, and facilitating functions can be effectively utilized to expedite the distribution of cocoa through the marketing system. However, methods in use by the cocoa farmers are not efficient due to problems of shortages and the policies of the Marketing Boards and the commodity boards. Improved methods in cocoa cultivation and the removal of impediment on granting credit facilities are recommended\textsuperscript{11}.

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In January 1988, the Institute of Trading Standards Administration published a report on Imitation Dairy Products – The identify problem, highlighting problems facing the dairy industry and consumers alike, given the profusion of alternative foodstuffs, which “mimic” their dairy counterpart. Based on the report the principal causes or concerns are reviewed in some details12.

George Philip, A. MacNabb, WLJ. Martin in their paper depicted that the second of a two-part report on a British Library Research and Development funded project, which surveyed the information needs and provision for industry, commerce and agriculture in Northern Ireland. This article examines information provision for the agricultural sector while part one was concerned with the industrial and commercial sectors. The main information providers to the agricultural sector were identified as the Department of Agriculture for Northern Ireland, The Ulster Farmers Union, The Livestock Marketing Commission and the agricultural education and research establishments. Each of these providers was interviewed as a 2% sample of farmers throughout Northern Ireland. The survey of farmers showed that for the most part, farmers were satisfied with the present level of provision. It was noticeable that their information needs were not as acute as those of the industrial and commercial sectors. This could be attributed to the fact that most arms in Northern Ireland are small and there is a heavy reliance on tradition. Most farmers surveyed were of the impression that the information was available if needed.

It was entirely coincidental that this survey was conducted at a time when active consideration was being given to the possible imposition of charges for the Department of Agriculture Advisory Services. Farmers rated the present advisory services quite highly, although few were aware of the full range of services available to them. This survey should be a useful pointer to existing trends in the use of services and should also indicate gaps in provision.\textsuperscript{13}

**Sharma and Others (1989)** studied pattern of marketable surplus on tribal farm of Himachal Pradesh and concluded that the Horticulture remains to be the main occupation. The marketable surplus in case of horticultural crops is as high as 80 to 90 percent in the case of apples.\textsuperscript{14}

**Bhatia et al. (1990)** critically discussed some important issues in agricultural marketing in India. He also suggested that rural markets with wholesale and terminal market for regulations management and development thereof.\textsuperscript{15}


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He obtained this secondary data from the Directorate of Horticulture, Himachal Pradesh. He concluded that though government has taken many steps, still the apple growers face many problems in marketing their produce due to increase in marketing costs and other expenses\(^\text{16}\).

\textbf{J.T.J.Lamont} reports on a comparative study of the types and degrees of horizontal and vertical integration within the seed potato industries of The Netherlands and Northern Ireland. Using an integration analysis grid presents descriptive models of the integrative functions in both industries\(^\text{17}\).

\textbf{Sue Evan-Wong (1996)} presents a methodology for marketing an information service effectively, focuses on the market intelligence system being developed by the organization of Eastern Caribbean States’ agricultural diversification co-ordinating unit (OECS-ADCU). The methodology developed is based on a strategic approach to marketing, which involves: analysis of the system’s environment; segmentation and needs assessment of its client groups; an information audit of the existing system; analysis of market and product opportunities; and the development of recommendations for a tactical marketing programme and its evaluation so that the system continues to reflect the priorities of its clients. The marketing strategy developed emphasizes client input and may be adopted by libraries, information centers, and systems wishing to develop and market their services\(^\text{18}\).


The agriculture and fisheries sectors of Spain and Portugal, the new member states of the European Community, are relatively more important than those in the rest of the common market, making a greater contribution to production, but needing more in the way of funds from the common Agricultural policy. The marketing, trade and policy implication of the Iberian peninsula’s accession to the EC are examined, and it is seen that the importance of “Mediterranean” products will increase, and this enlargement is likely to increase the urgency of the common Agricultural policy 19

Gopal Rao (2000) in his study reveals the experience in agricultural marketing in India. “It is only now that the developing countries have increasingly recognized that the agricultural marketing system plays a crucial role in economic development, not only by physically distributing but increased production through. As a result, the government have tried many approaches to develop the marketing system, with varying degrees of success”. Economic development depends not only on production but also in marketing. Marketing should receive the same priority as production for attaining prosperity20.

20 H.S. Gopal Rao ‘Experience in agricultural marketing in India;A case of regulated markets’ Southern Economist, August 01,2000,p.15.
**Rajput and Verma (2000)** estimated the marketing costs and margins in groundnut and worked out the price-spread in marketing of groundnut. Multi-stage random sampling technique has been used by them to collect the required data. They found that the cost of cultivation of groundnut as Rs.9,837.20 per hectare\(^{21}\).

**Velavan and Balakrishnan (2000)** found that there are four channels for groundnut marketing viz., (i) Farmers – Consumers, (ii) Farmers – Co – operative Marketing Society – Miller’s agents – Oil millers – Brokers – Wholesalers – Retailers – Consumers, (iii) Farmers – Co-operative Marketing Society –Co- operative oil mills – Wholesalers – Retailers – Consumers and (iv) Farmers – Primary Processors – Miller’s agents – Oil millers – Brokers – Wholesalers Retailers – Consumers. Further, they found that channel (i) as most efficient channel\(^{22}\).

**Shakuntla Gupta (2000)** used multiple Linear Regression function to calculate the co-efficient of acreage response functions. It is found that relative yield relative price and irrigation are the major factors which affecting the acreage allocation\(^{23}\).

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Perumal (2000) in his study found that most of the cultivators have not directly sold their kernels to the consumers. Only a negligible portion of output is sold to the fellow farmer cum-local merchant. A considerable portion of output is directly sold by the farmers to the wholesaler who is running oil mills. Further, he identified that groundnut growers are getting more profit through irrigated groundnut cultivation than rain-fed cultivation\(^{24}\).

Mark P. Leach, Luiz Mesquita, W. David Downey (2001) In their case study observed that large agricultural producers often demand seed with high yielding genetics along with specialty traits specific to their particular needs. Dairyland Seed Company prides itself on its superior genetics and a research program that adds specialty traits while retaining the qualities of the original variety.

The implications for access to future technologies and long-term survival are profound, and leave Dairyland and other smaller seed companies with strategic decisions to make. This paper examines a channel of distribution for agricultural biotechnologies and the decisions faced by a small, reputable seed company when dealing with its large multinational biotechnology suppliers\(^{25}\).


This paper analyses the policies related to the development of the agricultural and industrial sectors in Malaysia. The objective of the paper is to determine whether there exist biases in government policies pertaining to these two sectors. The paper begins by providing a brief overview of Malaysian economic development. This section analyses the policies introduced in developing the two sectors. The next section contains an analysis of the policies, government expenditure and employment in the agricultural and industrial sectors to test the presence of policy biases. The paper concludes that there are no significant policy biases between these two sectors.\(^{26}\)

With the collapse of the Soviet Union, the formation of the European Union, and current economic crises and cost considerations in various countries around the world, interest has been developing in cross-national and cross-cultural marketing opportunities in the sector of food. Today in the United States the food industry is of paramount importance, a trend that is evident in other nations. Opportunity exists for commercial growth on an international level by companies large and small. An understanding of the food marketing systems of different nations and cultures is necessary for growth and development by these companies. Different organizations and scholars have been studying various aspects of the field of cross-national and cross-cultural food marketing on a micro level. Analyzing these different studies evidences a need to conduct further study and to develop more theory-specifically on cross-national and cross-cultural food marketing at a macro level.\(^{27}\)

\(^{26}\) Noor Zakiah ahmad, Mariani Abdul Majid, Mohd Azlan Shah Zaidi, Agricultural and Industrial Development in Malaysia: Policy Bias, Vol. 17, Issue 1, 2001, pp. 61-76.

Singh (2001) has authored a book on ‘Cooperative Marketing in India and Abroad’ in which cooperative marketing scenario is the central theme of the book. This book covers in analysis of different problems faced by these cooperative marketing movements for teachers, partners, and also professional managers\textsuperscript{28}.

Sujit Sikdar and Dababrata (2001) has articulated the need for attaining welfare of the people as the final and economic growth\textsuperscript{29}.

Rao J.K., (2001) in his study revealed that the total food grain production has reached all time high of 202.54 million tonnes during 1998-99, thanks to the green revolution\textsuperscript{30}.

Sivanappan (2001) has made an attempt to study agri-business development in India. He concluded that India is the third largest producer of vegetables (27.83 MT) and second largest producer of groundnut. (54 MT)\textsuperscript{31}.

\textsuperscript{28} The Hindu Nov 20, 2001.
\textsuperscript{29} Sujit Sikdar and Dababrata Dass Dlobalisation. Poverty and Globalisation, Third Concept, October 2001, p.71
\textsuperscript{31} RK Sivanappan : Agri-Business Development in India” Kissan World 27 (50, 55-57).
Balaji et al. (2001) made a study to identify the marketing efficiency for groundnut marketing. They have collected data from both growers and intermediaries (commission agents, license traders, wholesalers, oil retailers and millers) by using simple random sampling technique. They have analyzed the collected data with Composite efficiency index and Shepherd index, they found that the price-spread was lowest in the Shepherd index, they found that the price-spread was lowest in the channel Producers – Decortications units – Oil millers Wholesalers (oil) – Retailers (oil) – Consumers. Even as per Composite index method, they found that the same channel as the most efficient.  

Basavaraja et al. (2001) examined the relationship between price and grade of the produce by using Linear Regression Analysis. They found that more than 50% of the variation in price is due to variation in grade.  

Ranjit Kumar and Chhotan Singh et al. (2001) mad a study to identify the influencing the acreage under edible oilseeds in Rajasthan. They found that the yield as one of the most important factors which effected acreage under the edible oilseeds. It is suggested that technological improvement would not only increase the yield of oilseeds but also lower the instability in the yield, resulting into increase in returns to the farmers.


Martin Hingley and Adam Lindgreen (2002) in their article focuses on the relationship between marketing approach and marketing of agricultural products. The article provides specific insights into and comparisons between suppliers of two particulars agricultural Productsectors: in Britain, fresh produce (fruits and vegetables) sector and in New Zealand the wine sector. The article examines the nature of relationships from the perspective of the suppliers in these sectors and their relationships, networks, and interactions with importers and retail buyers in the food and beverage industry.

The research methodology is qualitative and inductive in nature and utilizes multiple cases. Investigated marketing issues include the following: nature of relationship marketing, implementation of relationship marketing, and monitoring and measurement of relationship marketing\(^3\).\(^5\)

Davinder Kumar Madaan (2002) carried on his studies on “World Trade Organization (WTO) and Indian Agricultural Development”. The positive finding of his study was that WTO ensures level playing field to Punjab Agriculture in the international market by reducing subsidies and thereby reducing artificial lower prices of some rich countries. However the negative impact of WTO on Punjab agriculture according to the study was that high domestic support, export subsidy and denial of market, export subsidy and denial of market access through various tariff and non-tariff barriers in the developed countries have resulted in a fall in global agricultural commodity prices in the post WTO period\(^3\).\(^6\)

Gagik Sardaryan (2002) depicts that the major uncertainties about the eventual success of macroeconomic stabilization measures, the eventual ownership and control of privatized enterprises, the viability of certain enterprises and sectors can have significant influence on the market economy of Armenia during the transition period. In the face of these uncertainties, inadequate transport and access to markets remain major obstacles to economic development and employment. After liberalization in 1991, consumer subsidies were eliminated and consequently food prices rose. Local price increases combined with the decline in real income and out migration led to a fall in domestic demand for food products as well as significant changes in food consumption patterns. Possibly the chief obstacle to increasing farm income and the most difficult problem for food processing companies to overcome are the marketing constraints. There is no appropriate scale marketing and transport infrastructure for small farmers. The break-up of collective agriculture in Armenia resulted in over 300,000 small diversified farms, which grow five or more crops and have two or more animal species. With limited export markets, the country lacks adequate markets for much of its agricultural production, as well as the economics of scale for the investments in agri-processing and manufacturing industry, which are necessary to stimulate employment and farm income. Armenia is in a prime position to take advantage of the organic market opportunities. If the developed world is going to subsidize organic food production, Armenia may have competitive advantage with low cost production and very little use of fertilizers, pesticides and other restricted materials for the last ten years.\(^{37}\)

Joshi Ashok Gulati (2002) carried out a study on “Agricultural Diversification in South Asia”. To carry out the study, data were obtained from Food and Agricultural Organization (FAO) statistical data base and data covering a period 1980-81 to 1999-2000, were divided into 1980-81, 1989-90 and 1990-91, 99-2000.

The State Department of Agriculture and the Karnataka State Agricultural Marketing Board has roped in the Canada based Toronto consulting Group (TCG) to conduct workshop on management of wholesale agriculture markets. Further, Bikram Lamba, the CEO of TCG said that it was not enough to be good but also had to be competitive.\textsuperscript{38}

K.R. Sundara Varadarajan and K.R. Jahanmohan (2002) in their study probed into the Marketing Channel of Cashew in Tamil Nadu and conclude that transportation cost was found to be the major cost followed by loading and unloading charges\textsuperscript{39}.

Nazir (2002) in his study discusses causes and effects of distress sale in Tamil Nadu. Distress sale denotes the situation, which a farmer is forced to sell his produce for a price lower than even cost of production. The hypothesis “small farmers go for distressed sale than other farmers” is tested and proved\textsuperscript{40}.

\textsuperscript{38} Business Line, Feb 13, 2002.
Jayarathnam (2002) made a SWOT analysis on farmers market in Tamil Nadu and concluded that fair price is fixed by the officers of the agricultural marketing committee and representative of farmers for the vegetable and fruits every day. Generally the price fixed is 20% higher than the whole sale prices and 15% less than the retailer’s price[^41].

Senam Raju (2002) in his case study, has probed, the apprehension of farmers on working on regulated agricultural market. It was revealed that farmers do not have good facility of hoarding their stock in the vicinity of sample market[^42].

Ajay Verma (2002) in his paper discussed the importance of market, marketing, and export performance of vegetables in the world market. He concluded that Indian vegetables have more export potential than other crops. In 2000-01 the country exported other fresh vegetables to the tune of Rs.190.84crores over Rs.144.14 Crores in the preceding year, representing a growth of 32.89 per cent[^43].

[^42]: M.S Senam Raju, Apprehension of farmers working of Regulated Agricultural Market – A Case.
Gaddi et al. (2002) made a study on resource use efficiency in groundnut production. Multi – stage random sampling technique has been used by them to collect the data. Cobb-Douglas type of production function is used and it is found that co-efficient of multiple determinations for all the sets of production function are significant44.

Sunil kumar et al. (2002) found that channel of Producer – Wholesaler (oil processor) – Oil wholesaler – Retailer – Consumer as an important marketing channel. They found that producer’s share in consumer’s rupee is higher (78.78%) in this channel whereas the channel Producer – Village trader-Wholesaler oil processor) – Oil wholesaler – Retailer – Consumer45.

Singh (2002) examined variation in area. Production and productivity of oilseed crops from 1970-71 to 1981-82 by using Linear Growth Rate. He found that area. Production and productivity have registered Linear Growth of -0.71% 0.96% and 1.93% per annum respectively during the first period (1970-71 to 1975-76) During the second period (1976-77 to 1981-82). Area, production and productivity registered. Positive Linear Growth of 0.40% 3.28% and 2.55% per annum respectively46.

Sunil Kumar Babu (2003) in his study made an attempt to find out the producers share to consumer rupee of chillies in Andhra Pradesh. He concluded that the net share of producers in the consumer rupee was very low (41.48 per cent). It was due to the presence of large number of intermediaries in between producers and consumers. So, the farmers were not getting good remunerative for their produces.

Food and Agriculture Organization and Association of Food and Agricultural Marketing Agencies in Asia and Pacific organized an international seminar from 3rd to 8th February 2003. The seminar observed that timely dissemination of relevant market information Systems. Small farmers, in particular would have to depend on the broadcast media for many years to come. Further the seminar felt that knowledge recorded and stored on paper or other media needs to be transformed into information for the benefits of farmers and other stake holders. Agencies involved in organizing Marketing Information Systems should translate price time series and other marketing information into a usable form for farmers and ensure its dissemination.

Andrew Shepherd (2003) in his paper discussed marketing information services. He said that accuracy, Availability and Analysis are the three A’s of market information.

48 Andrew W.Shepherd, “Making marketing information services relevant to farmers”, Agricultural Marketing, Vol, XLV, No.4, Jan – March 2003 pp. 4-6.
Dhankar (2003) in his work discussed internet based Market information system in India AMARKNET-the applications software facilities for all commodities being transacted in wholesale market or their use and analysis. Seeing up marketing information network covering 810 nodes during 2000-2001 and 2002 under IX five-year plan involved an expenditure of Rs.99.74 million\(^{49}\).

Gadre etal. (2002) in their study used shepherd’s equation to calculate marketing efficiency. The shepherd’s equation is,

\[ ME = \frac{V}{I-1} \]

Where

\begin{align*}
ME &= \text{Index of Marketing Efficiency} \\
V &= \text{Value of Goods Sold (customer’s price)} \\
I &= \text{Total Marketing Cost}^{50}.
\end{align*}

Wadhwani (20003) in his study concluded that the marketing constraints of vegetables as being the high perishability, cost of the harvest due to decay, over ripening, mechanical injury, weight loss, trimming and sporting. The spillage also results from the grower’s lack of knowledge in proper post-harvest handling, improper grading and packaging, lack of storage and proper transportation facilities, contributed to low quality\(^{51}\).

\[\text{------------------------}\]

\(^{49}\) Ibid p.4.


Banafar (2003) in his study used multistage stratified random sampling to select the block, cluster of villages and respondents of soyabean growers\(^{52}\).

Lalitha Sudha (2003) in her study made a conclusion that marketing efficiency was more in channel-1, where no middleman existed than in channel-II\(^{53}\).

Mohammed Jaffer (2003) made a study on efficiency of banana in Theni district of Tamil Nadu. He recommended that cooperate marketing society exclusively for banana trade will replace the domination of middle men like pre-harvest contractors in this trade, and introduction of cold storage and transportation facility will solve the problem of distress sale of banana\(^{54}\).

Selvaraj and Gandhimathy (2003) in their study made an attempt to study the constraints of coffee growers; they analyzed the production problems and marketing problems. They concluded that the major defect in agricultural marketing was the inability of the majority of the farmers to meet their commitment to pay for their debt, the growers were forced to sell his producers at any price offered to him and they concluded that transport, under weighment and lack of financial facilities etc., were the major areas of concern\(^{55}\).

Jean Joshep Cadilihon, Andrew (2003) The article presents a conceptual framework for the analysis of vegetable supply chains in a South East Asian context and the role wholesale markets play in these chains. Following a review of the literature on food marketing systems in developing countries and preliminary fieldwork in South East Asia, a holistic framework is proposed, including what are perceived to be the critical factors in the development of improved fresh food marketing system: domestic legal and policy actors, international trade policies and food markets, history, geography, and cultural and social norms. The particular role of trust and collaboration among stakeholders in the Ho Chi Minh City vegetable marketing system is highlighted56.

Mishra (2003) in this article “marketing co-operative in agricultural-gearing up for emerging challenges” has described the features of Indian agricultural marketing system. As per his observation, the establishing of regulated markets all over the country has brought in changes in marketing practices in terms of sale of the produce in regulated markets instead of villagers selling directly or selling to the itinerant traders. The rates payable for various services have been standardized.

The price support programme for 24 major agricultural crops had reduced the price risk to the farmers. Co-operative marketing societies have been organized by small and marginal farmers and they enabled the farmers to get reasonable prices or their products as obtained by large farmers.

Provision of rest house, quicker means of transportation and information about prices are the major attractions to the small and marginal farmers to whom the above are either not available or very costly prior to the organization of regulated markets. The elimination of unauthorized deductions, reduction of market charges and discontinuance of undercover and hidden marketing practices had helped farmers to have a clear understanding of the marketing practices and to actively involve in the marketing activities.

P.K. Mishra (2003) is of the view that the farmers’ practice of rushing for sales immediately after harvest has not been given up for they have to face the risk of holding stocks where the storage and pledge-loan facilities were totally absent.

Agriculture, a major sector of Indian economy has several problems. Of all the problems marketing is the most critical one. Only in agricultural marketing the scope for exploitation and defrauding the farmers’ producers are more.

As the producer-farmers are scattered and unorganized, the problem takes different dimensions. Grading, preserving, processing and pricing are facilitating activities for better marketing of agricultural produce. In India, agriculture markets and facilities are either missing or inadequate. Therefore, farmers’ markets were organized to improve the conditions of Indian agriculture marketing.

Shiyani and Maurvi N. Pandya (2003) examined the Total Factor Productivity growth for the four major oilseed crops in Gujarat. They have collected time series data on area, production and yield per hectare from the Directorate of Agriculture, Gujarat. They found that the acreage under oilseed crop, and yield per hectare of all these crops improved substantially during the last 40 years which in turn resulted in increase in total oilseeds production. Positive growth rate of Total Factor Productivity Index is found only in castor while other oilseeds showed negative growth rate of Total Factor Productivity Index due to relatively higher growth of input use compared to that of output index.58

Balaji et al. (2003) have adopted Gartett’s Ranking Technique to identify the problems associated with production and marketing of groundnut. They found that pest and disease as an important problem in groundnut cultivation and in marketing, lack of storage facility as an important problem.59

Ravi Kumar et al. (2003) made a study to identify the growth of commission agents and wholesalers in the selected markets. They found that increase in number of commission agents firms is more in Warangal market (69%). Followed by Ankapalle (52%) and Adoni (27%) markets respectively. The increase in number of wholesalers firms is more in Adoni markets by (101%) followed by Warangal (75%) and Anakapalle (46%) markets respectively. Performance of commission agents have been analyzed with Gini ratio it is found that market as a good performance market\textsuperscript{60}.

Baljit Singh et. al.(2004) made a study to measure the magnitude of authority in the yield and price changes in major oilseed crops. Required data have been collected from the Statistical Abstract of Haryana and some other unpublished sources. They found that area of rapeseed – mustard and groundnut has positive and significant impact on current year area in Haryana as a whole year. Further this study highlighted that the price variability has decreased due to improved market facilities and improved price of oilseed crops\textsuperscript{61}.

Sharad Bhatnagar (2004) examined the growth in area, production and yield of sunflower. He found that the area of sunflower was reduced with a significant Compound Growth Rate of 14.36%, production of sunflower was reduced with a significant Compound Growth Rate of 2.94%. He suggested that there is a demand for wide adaptability of sunflower in Haryana that may also be helpful in increasing production of oilseeds.\footnote{Sharad Bhatnagar, (2004), “Sunflower as well as oilseed scenario in Haryana”, Agricultural Situation in India, Vol. LXI, No.4, February, pp. 191-193.}


Kumar (2004) in his contribution analyzed market prospect for upland crops in India. He observed that among the horticultural commodities, processed fruits and vegetables accounted for the largest share of export followed by mesh fruits and vegetable. Among fresh vegetable, groundnut, tomato, and mushroom are reported to have export competition.\footnote{Kumar “Market Prospects for Upland Crops in India CGPRT Centre, Working Paper Series No.20.}

The center for monitoring Indian economy (CMIE) is of the opinion that the growth in farm output would be three per cent against the earlier projection of 0.7 per cent fall (for 2005-06) indicating the dependence of Indian economy on farm sector for its development.\footnote{Deccan Chronicle, Business Column Dated 15\textsuperscript{th} July 2004.}
PK Joshi Ashok Gulati (2004) Hypotheses was framed as “slowing down the green revolution and gradual opening up of the economy will lead to greater diversification of agriculture in favour of high value commodities”. The major findings of the study was the share of crop sectors in the agricultural gross domestic produces marginally declined from 76.25 per cent during 1980 to 73.65 in 199066.

According to marketing survey in Facts For You (2005), That the Indian Council of Medical Research has recommended that the vegetable requirement per person in India Should be 280 gms per day. But the per capital availability, of vegetables in the country is much lower, which is just about 120 gms per day per person67.

Ravi Kumar et al. (2005) examined various constraints in export of oilseeds by using Garret Ranking Method. He suggested that Government of India should take all possible steps to increase the export of oilseeds68.

The problem of marketing is multi-dimensional. Unlike the industrial producers, the agricultural producers are either at the mercy of the traders or at the mercy of the government to fix the price for their products. The cost of production is ever increasing and the farmers have only a limited say upon them. Such a pathetic condition of the Indian farmers fetch them only poor income.

The Indian agricultural marketing scenario is witnessing many changes and requires still more changes to look better. Though, the agricultural have very little control over majority of the marketing operations, under the present set-up their role may be made significant by fine-tuning the marketing structure and practices. Regular markets, farmers’ markets, the Ryothu Bazaar in Andrapredesh, apnamandis in Punjab and Haryana and uzhavarsandhai (farmers’ markets) in Tamil Nadu are some of the structural changes brought in the field of agricultural marketing to benefit farmers and promote them as prestigious producers to have reasonable control over the market.

**Deccan chronicle (2005)** Tamil Nadu is basically an agricultural state and the problems of farmers elsewhere in India is equally applicable to farmers in Tamil Nadu. The state government has to make steps to promote agricultural marketing and protect the interests of the farmers. Though Tamil Nadu is predominantly an agricultural state, the GDP contribution of agricultural sector to the state is not significant. As per the ministry of planning only 14.5 per cent was the contribution from agricultural for the year 2001-02 to 2003-04.

**Suri (2005)** in his study discussed the need for net based marketing information system for agricultural products. He quoted that in order to improve the present marketing information systems. Ministry of Agriculture has to formulate a central sector scheme for linking all regulated market spread all over the country.

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Mathur (2005) in his speech threw light on the export potential of groundnut in India. He highlighted that groundnut is one of the important vegetable crops in India. In terms of area India ranks first in the world with over 480 thousand hectares accounting for around 21 percent of the world area allotted to groundnut. He concluded that in the case of private trade in groundnuts to commission agents, in assembling regulated market and the commission agents sell the groundnut to sub wholesales or directly to retailers, who in turn sell to consumer.71

Babu and Jayabal (2005) observe that India is among the top three world producers of rice, wheat, milk, poultry products, fruits, vegetable, coconut, tea, spices, maize and freshwater products including sharing and fish. The agricultural sector provides 25 per cent of the GDP and 64 per cent of employment and accounts for 18 per cent of India’s export.72

Armenia’s 1991 privatization and land redistribution process handed ownership and control of agricultural production to over 300,000 inexperienced, financially distressed, subsistence farmers operating extremely small fragmented plots, the result was chaotic turmoil characterized by pervasive delayed payments, massive disinvestment, and rapid output declines. However, unlike, elsewhere, Armenia could not rely upon the entry of FDI to correct channel incentives and revitalize its agricultural and rural financial markets.

71 V.C.Mathur “Export potential of groundnut: A Case Study of India”, Regional Workshop on Commodity Export Diversification and Poverty Reduction in south and South East Asia, Bankok. 3-5 April 2005.
Instead, an alternative exogenous stimulus was required. This study analyses the instrumental case of how a quasi-public third party, the USDA market assistance program and agricultural production credit clubs, successfully imitated FDI-induced incentive structures through market linkages, social capital, and microcredit to establish economically sustainable channels. The findings provide important insights into the design of market-linked microcredit programs.\textsuperscript{73}

**Gerald McElwee, Alistair Anderson, Kari Vesala** in their article explore the strategy of an enterprising farmer. The background problem is that in Europe, Agriculture has faced dramatic pressures for restructuring, and facilitation of the strategic skills of farmers and a stronger entrepreneurial orientation have been suggested as a possible solution for the emerging problems. Case study is used to show how strategy formation and implementation may require different skills, competencies and attitudes, issues of strategy formation and implementation. Whilst the findings from the case may not be generalizable, our analysis provides an opportunity to conceptually reflect on the issues. These issues may have wider implications beyond the research site. The theoretical and case study analyses reveal that the concept of entrepreneurial strategy is ambiguous. Yet, if proper care is taken to distinguish the concept and relate it to, the elements in which it is embedded, the notion is a useful tool for both theory and empirical investigation.

By applying such a procedure, we show that the contexts of conventional farming and business diversification call for an understanding about the clearly different entrepreneurial skills and appropriate strategies and strategic implementation. This research suggests that a major challenge for the agricultural sector is to enable farmers to develop their strategic, marketing and entrepreneurial skills. This requires economic support and greater emphasis on education and training. It is hoped that this research will assist in this challenge to economic growth.\(^74\)

The TIFAC report analyzed the problem of Nasik groundnut farmers. It concluded that it was no more affordable to the farmers to cultivate groundnuts. The wages of farm-hand seem too high with no proper returns for the crop.\(^75\)

UNCTAD-LCD report 2006 contents at the outset that despite higher rates of economic growth and exports notched up by many least developed foundries than in the past. The fact remains that they do not translate efficiency into poverty reduction and improved well begin.\(^76\)

Economic census 2005 revealed that despite all efforts, crop production and plantation sector still employ 73 per cent of the total labour force and of 375 million in the country though it contributes just about 22 per cent to GDP.\(^77\)


\(^75\) Groundnut Farmers in Western Nasik Committee Suicides”, April 16, 2006.

Sonika Gupta et al. (2006) made a study to find out the trends in area, Production and productivity of Directorate of Economics and Statistics and Ministry of Agriculture. New Delhi. They found that all India level productivity was increased by 2.46% per annum and also found that increase in area is seen in Gujarat and West Bengal whereas in Madhya Pradesh and Uttar Pradesh reverse trend is observed. It is suggested that prices of sesame were influenced by the prices of other oilseeds in the market. Thus there is a need to make strategies to avoid the price reduction in the central market for oilseeds in general and sesame in particular.  

Sadeesh et al. (2006) identified the various constraints in increasing oilseeds production storage, insufficient technological inputs and exploitation by middlemen.  

Padmavathi (2006) used Compound Growth Rate to analyse the growth in area production and yield. She found that Compound Growth Rate of area is high in the soya bean (20.8%) followed by groundnut (11.3%). Rape and mustard (2.2%), castor (1.0%). Sunflower (0.4%) and Niger (0.4%) whereas it is high again in the production of soya bean (22.7%) followed by sunflower (10.7%). But on the whole the growth rate of production of local oilseeds is high (3.1%) followed by area (1.7) and yield (1.4%).

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According to Ministry of Agriculture, the total quantum of groundnut exports during the fiscal year 2006-07 stood at 10.23 lakhs tonnes valued to Rs.870 crores was on 17th February 2007. In the last five years, Groundnut exports have more than doubled in both quantity and in terms of value\textsuperscript{81}.

\textbf{Kari Mikko Vesala, Jusso Peura, Gerald McElwee,} in this research, shows that entrepreneurship is currently at the focus of much theoretical, practical and political interest. In Europe, agriculture has faced increasing pressures for restructuring: facilitation of marketing and entrepreneurial skills of farmers and a stronger entrepreneurial orientation have been suggested as a possible solution for the emerging problems. The central focus of this article is on the entrepreneurial identity of portfolio farmers in Finland and the extent to which the differences between portfolio farmers, other farmers, and non-farm rural businesses can be explained.

Findings – It emerges that portfolio farmers have a stronger entrepreneurial identity than conventional farmers. Compared to conventional farmers, the portfolio farmers in the sample perceive themselves as growth-oriented, risk-takers, innovative, optimistic, and having more personal control upon their business activities. This research suggests that a major challenge for the agricultural sector is to enable farmers to develop their entrepreneurial and marketing skills. This might require increased economic support and greater emphasis on vocational education and training\textsuperscript{82}.

\textsuperscript{81} The Business Line Mar 20, 2007.
India’s production of vegetables in 2002-03 registered a growth of 12.56 per cent, and export of fresh vegetables registered a steady growth of 46.19 per cent over the previous year. The working group on Agriculture for the 11th Five Year Plan (2007-2012) has suggested shifting “agriculture marketing” from the state list to concurrent list to speed up the reforms and evolved unified national market\(^8^3\).

The group headed by former chairman, CACP, Prof.Shabed,S.Acharya, has recommended redefining agriculture in terms of production, processing transport, marketing and trade in food feed and fibre and other agricultural products including livestock and fisheries\(^8^4\).

The Domestic and Export Intelligence Cell of the Centre for Agricultural and Rural Development studies of the university, after studying situations carefully, has advised farmers to store small groundnut till June to get a better price\(^8^5\).

Tamil Nadu accounted for five per cent of groundnut area contributed to 3.74 per cent of production. Trade sources according to Tamil Nadu Agricultural University (TNAU) said that 70 per cent of the total groundnut area was occupied by small groundnut production of groundnut in Tamil Nadu, in 2006, in an area of 26,220 hectares was 2,67,000 tones\(^8^6\).

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83 Business line, April 15, 2007.
84 Ibid.
86 Ibid.
Vishwakarma et al. (2007) made a study to assess the harvest and post-harvest losses of groundnut in Junagrh of Gujarat. Required data have been collected by using Stratified multi-stage random sampling technique. They found at the losses during harvest and storage are quite high and needs to be minimized. Losses during harvest took place mainly due to the pods left in the soil ring picking\textsuperscript{87}.

Dudhati and Khunt (2007) estimated the cost of production and marketing of groundnut seeds. Survey method had been used by them to collect the required data. They found that cost of production of groundnut seeds as Rs. 20,905.21 per hectare and Rs.1,604.92 per quintal and also found that high price of foundation seeds was common problem in cultivation of groundnut seeds\textsuperscript{88}.

Swain (2007) used Compound Growth Rate to analyze growth in area, production and yield of oilseeds. For this study, required data have been collected from the published sources of the State Government of Rajasthan. It is found that production has increased mainly because of steep rise in area\textsuperscript{89}.

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Mary Madhuri and Sathyanarayana Reddy (2008) examined the effect of new agricultural technology on groundnut production. They found that technology is a major determinant in groundnut production and the factors like supply of improved seed varieties and hybrids, modern irrigation facilities, nutrient supply, efficient crop management and effective technology transfer are the main components of agriculture technology\textsuperscript{90}.

Shard Bhatnagar and Shekar Bhatnager (2008) examined trends in area. Production and yield of sunflower, soyabean and mustard crops. Required data have been collected from the Agricultural Statistics at a glance. They found that area and production of soybean and average yield of mustard have shown the maximum gain than the other crops\textsuperscript{91}.

Rupesh Lawwa and Anil Kumar (2008) used Compound Growth Rate to examine the trends in area, production and yield of oilseeds. Required data have been collected from the Statistics Department of both State Government and Central Government. They found that improvement in production was mainly due to expansion in area as contribution of yield to the production was observed insignificant\textsuperscript{92}.


Taru et al. (2008) made a study on resource use efficiency in groundnut production. For their study, they have selected 143 farmers from Michika Local Government area of Adamawa state by using simple random sampling technique. Cobb-Douglas type of production function had been used and it is found that 76.84% of the total variations in groundnut yield are explained by combined inference of all the explanatory variables (farm inputs) in the regression equation.93

Alejandro nin Pratt, Bingxin Yu, Shenggen Fan (2009) Agricultural research has significantly contributed to improve agricultural productivity in both China and India. Even today returns to agricultural R&D investments are very high, with benefit/cost ratios ranging from 20.7 to 9.6 in china and from 29.6 to 14.8 in India. The applied methodology and the comparison between TFP growth patterns contribute to a better understanding of the consequences that the different approaches to agricultural reform followed by China and India and the performance of agricultural in both countries.94

This paper seeks to apply a framework of collaborative planning, forecasting (CPFR) to develop a procurement model for agricultural products. Considering the biological nature, seasonality and perishable characteristics of agricultural raw materials and products, the paper revise the CPER reference model.


The paper constructs an n-tier CPER procurement model by extending a two-echelon supply chain to a multi-echelon supply chain and incorporating upstream suppliers in the supply chain. Finally, a case study is analyzed and the efficacy of the proposed model is also validated. The finding suggests that CPER approach is applied in the procurement of agricultural products. The proposed model can thus improve the accuracy of forecasting and reduce inventory losses. The paper offers a useful insight into procurement of agricultural products. The proposed model is a useful development for the agricultural industry in implementing CPER in the future.  

This paper aims to determine the effects of agricultural, recreational and urban variables on Oklahoma land prices. An econometric model is estimated using price of agricultural land parcels as the dependent variable and independent variables representing agricultural, recreational and urban uses. Recreational variables include county-level recreational income from agricultural census data as well as deer harvest for each country. Urban variables are functions of population and income for each country. The agricultural variables include rainfall as well as crop returns for crop land and cattle prices for pasture. Agricultural variables are the most important, followed by urban and then recreational variables. Transaction prices are higher than commonly used land-value survey data. The major recreational variable is deer harvest, which is more important in small tracts.

The value of pasture is now greater than cropland. Small tract sizes receive substantial premiums. Agriculture is still an important part of the Oklahoma economy, so the findings might differ in more densely populated states. As with most econometric models, there are possible biases due to errors in measurement or missing explanatory variables. The paper provides information that could be used by those wanting to estimate land value or wanting to manage land to increase its value. The paper differs from previous work in both variables considered and the data used. Also, most previous work has not ass directly addressed the issue of the relative importance of agricultural, recreational and urban variables.\textsuperscript{96}

\textbf{Xiwen Chen} depicts in his paper that of the start of the twenty-first century China has stepped into a new stage of harmonious urban-rural development. Based on the brief review of policy changes since the new century, the purpose of this paper is to figure out the comprehensive policy framework, and analyzed its background and reasons. First, this paper offers a brief review of China’s rural reform with focus on the policy framework and changes since the reform of rural tax and fee system in 2000. Next, the paper focuses on food security to discuss grain price increase and China’s grain imports, then the current problems facing China’s agricultural and rural development are discussed and countermeasures provided.

The paper finds that several policies have been implemented toward the coordination between urban and rural areas and towards the integration of urban and rural development. However, China’s grain production is still facing big challenges, both from the increasing demand and the resource constraint. Therefore, food security should be given priority in future.

China’s current rural reform and development is also facing the problems such as slow growth of farmer’s income, the impacts of migrant rural labourer on economy and society and the outflow of rural resources. Originality/Value – This paper reviews systematically major policies of China’s agriculture and rural development, and analyses the characteristics of and reasons for China’s grain price increase. Meanwhile, the constraint of resources, especially land and water, is also studied in detail. The paper’s analysis can provide important advice for future policy making.

One of the major changes associated with economic globalization is the increasing importance of intellectual property. In the area of food production, the procurement of Intellectual property rights over life forms, particularly seeds, by the new life industry, are radically transforming agricultural production relations. One major effect of this transformation is the redefinition of farmers as contract growers by the life industry.

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This new status of farmers, which is part of a trend that was set in motion with the commodification of food, is making them free-lancing quasi-employees of agricultural businesses, including the life industry\(^9\)

**Patil et al. (2009)** made a study to find out trends in area, production and productivity of groundnut. Required data have been collected from the various published and unpublished sources, websites of Directorate of Economics and Statistics, Government of India and Department of Agriculture. They found that the production of groundnut has been decreased during the year 2005-06 i.e., 2,74,800 tonnes as compared to 5,12,300 tonnes during the year 1993-94. This is due to decrease in acreage under the crop and also found that decrease in productivity of groundnut is due to monsoon failure\(^9\).

**Shelke et al. (2009)** made a study to identify the price-spread and marketing pattern of groundnut. They have collected data from the groundnut growers, Commission agents, retailers and consumers. The study revealed that the agent-Retailer-Consumer and also found that the producer’s share in consumer’s rupee as 49.99\%\(^1\)\).

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Adinya (2009) analyzed the cost-returns profitability in groundnut marketing. For the study required data have been collected from 120 groundnut growers by using random sampling technique. It was found that problems are negatively affecting the efficiency of groundnut marketing in the study area\textsuperscript{101}.

Venkattakumar et al. (2010) examined cultivation constraints in oilseeds. The study was conducted in Mahabubnagar, Cuddappah and Raga Reddy districts of Andhra Pradesh. To identify the most significant problem Rank-Based Quotient (RBQ) analysis has been used. They found that non-availability of quality seeds as an important problem\textsuperscript{102}.

Vinod kumar (2011) made a study on marketing channels for groundnut and to estimate the price-spread in various channels. The marketing of groundnut is done through five channels viz., channel-I (Producer-Processor), Channel II (Producer-village trader-Processor), Channel III (Producer-Wholesaler-Processor), Channel IV (Producer-Village trader-Wholesaler-Processor) and channel V (Producer-Wholesaler-Retailer-Consumer).


They found that price-spread among the five identified channels indicate that the channel-I as the most efficient because the producers’ share was maximum (96.44%) whereas in channel-V the producers margin in consumer’s rupee was found to be minimum (42.50%).

Gote et al. (2011) examined the cost of cultivation of groundnut in Banaskantha district of Gujarat. Multi-stage stratified random sampling technique has been used by them to collect the required data. They found that the average cost of cultivation of groundnut was estimated as Rs.22,252 per hectare.

Pathan et al. (2012) used Compound Growth Rate to analyse the area, production and productivity of groundnut at State level and National level. Required data have been collected from the secondary sources mainly from the State and Central Government reports, websites and also from published and unpublished sources.

They found that rate of growth per annum as -4.70% for State was -25.50%. The growth rate for National level had been statistically insignificant at 1% level. This indicates that negative growth in production of groundnut in the country.

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Thus, the study differs from the earlier studies in respect of its scope, nature, contents and the area covered. The present study is thus significant and it is expected to be useful not only to the growers of groundnut in the Pudukkottai District of Tamil Nadu but also to the intermediaries, oil millers, Government and policy makers in better understanding of the present way of the groundnut marketing. Further, this study will be helpful to improve the oilseed economy of India.