



## **INTERNATIONAL JOURNAL OF LAW, EDUCATION, SOCIAL AND SPORTS STUDIES (IJLESS)**

**[www.ijless.kypublications.com](http://www.ijless.kypublications.com)**

ISSN:2455-0418 (Print), 2394-9724 (online)

©KY PUBLICATIONS 2013, INDIA

[www.kypublications.com](http://www.kypublications.com)

Editor-in-Chief

**Dr M BOSU BABU**

(Education-Sports-Social Studies)

Editor-in-Chief

**DONIPATI BABJI**

(Law)

## A SURVEY ON SOCIO-ECONOMIC FACTORS IN PRICE FORMATION OF TURMERIC IN GUNTUR DISTRICT OF ANDHRA PRADESH, INDIA

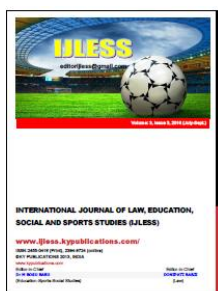
**VISHNU VARDHANA RAO.V**

Lecturer

Department of Commerce

SVRM College (Autonomous), Nagaram, Guntur, A.P., India

**RESEARCH ARTICLE**



©KY PUBLICATIONS

### ABSTRACT

The article provides an overview of the state of the art of Socio-Economic research on price formation of turmeric products in Guntur district of Andhra Pradesh. The dominant trait of the Socio-Economic approach to prices is to understand price formation not as the outcome of individual preferences but as the result of the social and political forces operating within the market field. The article proceeds from the concept of market fields and is organized around the three dominant approaches in economic sociology: the network approach, the institutional approach, and the cultural approach.

### INTRODUCTION

Turmeric (*Curcuma longa*) is native to Asia and India. The tuberous rhizomes or underground stems of turmeric have been used from antiquity as condiments, a dye and as an aromatic stimulant in several medicines. Turmeric is very important spice in India, which produces nearly entire whole world's crop and consumes 80% of it. India is by far the largest producer and exporter of turmeric in the world. Turmeric occupies about 6% of the total area under spices and condiments in India. India is the largest consumer, producer and exporter of turmeric in the world. The country consumes most (80 percent) of its turmeric production and it exports the surplus. Turmeric is grown in as many as 25 states of India including Andhra Pradesh. India has nearly 1.73 lakh hectares under turmeric cultivation with a total production of 8.55 lakh tones during the year. Andhra Pradesh, topped both in area and production during the year 2005-2006, with 69990 hectare (40.46%) and 518550 tonnes (60.60%), respectively. Tamilnadu followed with acreage of 25970 hectares (15.01%) and production of 143358 tonnes (16.75%). India has monopoly in turmeric trade at world level. Although India is the largest producer of turmeric in the world (846700 tons) but it exported only 6% of the total production. India, exported 51500 tons of turmeric during 2006-07. This is substantial compared to 37,644 tons during 2003-04.

In Andhra Pradesh, there is an increase in the turmeric acreage- from 12,333 ha last year 2012 to 19,377 ha in the year 2013. The acreage in almost all the major turmeric growing districts - YSR Kadapa, Guntur, Krishna, Kurnool, and Visakhapatnam increased this year. Though the crop is in the vegetative stage, any major crop damage hasn't been reported till now. Considering these facts we expect the production figures to be around 45,000 – 48,750 metric tonnes for 2015-16.

**Crop seasonality** Turmeric is a 8-9 months crop. The main harvest season begins from end of January and extends up to March. Turmeric is harvested when leaves turn yellow and start drying up. In harvesting, the whole clump is lifted out with the dry plant, then the leafy tops are cut off, the roots are removed, all the adhering mud particles are shaken or rubbed off

and the rhizomes are then washed well with water. The fingers, sometimes called the daughter Rhizomes are separated from the mother rhizomes and kept in shade for 2-3 days.

Crop calendar: Planting is done either on raised beds or on ridges during June. The crop-harvesting season starts between end of January and March in India. It starts entering into the market by March. The peak arrivals season is between March and April.

Conducting a social impact assessment is important for several reasons. In general, it is used to alert the community, including residents and local officials, of the impact and magnitude of the proposed development on the community's social and economic well-being. The assessment can help communities avoid creating inequities among community groups as well as encourage the positive impacts associated with the development.

The impact assessment provides estimates of expected changes in demographics, housing, public services, and even the aesthetic quality of the community that will result from the development. Equally important, the assessment provides an opportunity for diverse community values to be integrated into the decision-making process. Together, these components of the assessment provide a foundation on which decisions about whether to alter or change a proposed development can be made.

#### **Statement of the problem**

Agricultural prices and marketing have enormous economic and political implications. These not only bring a balance between demand and supply but also affect the inter-sectoral distribution of income and the rate of capital formation in the farm sector. In developing countries like India, where agriculture continues to provide employment and incomes for about two-thirds of the work force and where considerable proportion of the people is poor, agricultural prices and marketing have profound effect on the levels of living on the one hand and on the tempo of technology adoption for increasing the production of farm products on the other. It is the concern with both the level of agricultural product prices and wide fluctuations in them which led the governments in many countries to evolve agricultural price policies and to intervene in agricultural produce markets. However, the choice of objectives and instruments of price policy varied across countries and changed over time, depending on the place of agriculture in the national economy and the stage of economic development. In India, major initiatives have been taken to liberalise the trade and industries and link Indian economy with the global market. In this context, the policies relating to the ii agricultural sector, particularly those relating to the pricing and trade are receiving the utmost attention of planners, economists, farmers and trade organizations. In view of the importance of the sector, it has become imperative to have proper planning for monitoring activities relating to agricultural prices and marketing. One of the requirements for proper planning is the collection of reliable and authentic data through sound statistical procedures.

#### **Importance of the study**

The principal use of turmeric worldwide is a major ingredient is curry powder, but it is also used in spices mixes. It was treasured by the ancient not only for fragrance and flour but also for its brilliant yellow colour. It is mentioned in the "Vedas" that the turmeric has been used of the time of marriages, worship and other religious ceremonies of the Hindus even known is considered a sign of good omen of given prominence of the time of festival, etc. Turmeric has been used as an ingredient in Ayurvedic and Unani system of medicine in India for ancient times. It is claimed to be a stomach tonic, blood purifier, anthithistance, antacid, antiperiodics and carminative. Turmeric as a flavour agent and for importing digestion. It is added not only for colouring but also for increasing the flour and hotness of the food. It is used in pickles as a preservative and also as colouring matter for butter, cheese and other food stuffs. In most of the Asian countries, turmeric is used as a food additive in almost vegetables, meat and fish preparations. In the textile industry turmeric was used as a dye a silk, cotton and wool though it is no longer used as a dye due to lack of fastness. In the cosmetics in pharmaceutical industry, it is extensively used in preparations of indigenous medicines, turmeric is also an important spice used in culinary preparation. Therefore the present study made an attempt to throw on socio-economic conditions, production and marketing of turmeric cultivations in Guntur district.

## Review of Literature

The researcher analyse the problems faced by turmeric farmers in Guntur district. Many studies is undertaken to examine the cultivation practices of turmeric farmers in Guntur district of Andhra Pradesh and also confines only to Guntur district as this district is the first in terms of area under turmeric cultivation.

This study aims to analysis cultivation practices of turmeric farmers along with the satisfaction level of the farmers. It also aims to analyze the cultivation problems of the turmeric farmers in Guntur district of Andhra Pradesh.

## METHODS OF DATA ANALYSIS

Three sets of primary data collected through schedules from the respondents were computer processed.

**Selection of district :** One major district in Andhra Pradesh i.e., Guntur selected on the basis of purposive sampling technique.

**2. Selection of mandals** (revenue sub divisions): Five mandals from each major turmeric growing district viz, 1. Duggirala mandal, 2. Tenali mandal, 3. Thullur mandal, 4. Tsundur mandal, 5. Kollipara mandal, 6. Kollur mandal were selected

**3 Selection of villages :** Five villages from each major turmeric growing taluks were selected. Thus, a sample of fifty villages were identified for the purpose of data collection.

**4 Selection of sample respondents :** On the basis of land holdings, 10-15 farmers from each village were selected on the basis of convenient sampling technique which resulted in 500 sample respondents.

## Period of the study

Study was conducted during 2013-2014 in regular intervals along with research team members of Commerce and Economics of SVRM College, Nagaram.

## 5. Methodology

This study is an empirical research based on survey method. Both primary and secondary data have been used in this study. Required primary data have been collected with pre- tested, will structured and non-disguised interview schedules from the small farmers engaged in turmeric cultivation. Required secondary data have been collected from the Directorate of Economics and Statistics of Government web site, Season and Crop Report of Government of Andhra Pradesh. The sample size of the present study is 400 small farmers. The farmers who are engaged in cultivation of turmeric products in minimum of one acre land with a maximum not exceeding 5 acres in all the areas of Erode District. 378 farmers have been selected after editing process, 22 interview schedules were not considered for the data analysis due to missing information that were not helping to conclude the study. Hence, the final sample size was concluded to 228 small farmers.

## Results and discussion

The starting point is the price theory developed by Emile Durkheim. In several of his works (Durkheim 1947, 1992)<sup>1</sup> Durkheim deals with the issue of prices by asserting that prices are social facts. By this he means two things: first, that price is an external feature confronting market actors from the outside. Market participants are in this sense price takers. Prices provide crucial points of orientation for actors in market exchange that make heterogeneous objects and services commensurable. The significance of prices, however, goes beyond this coordination function. From the perspective of market participants, market prices are the costs to be paid or the revenue gained from a good or service and are thereby directly linked to the distribution of wealth.

## Survey Finding

Turmeric yield in Andhra Pradesh has come down to 15 quintals per acre this year as compared to the normal yield of 25 quintals. Adding to the problem are the recent floods, which washed away growing turmeric crop (2006 harvest) at island villages (lankas) of Guntur district.

## Turmeric prices drop 20% from five year high

Turmeric prices slipped about 20 percent after touching a five year high a quarter back. Abundant supplies is said to be the reason behind the fall. Adverse weather conditions have sprouted rumors of an low production due to the

<sup>1</sup> Durkheim's price theory is normative, drawing on theories of just price that are as old as thinking about prices itself. Aristotle was already contemplating the question of just prices (Kellermann 2008: 323).

dryness and excessive rains prior to harvesting in all areas including Guntur district in Andhra Pradesh had kept the prices high.

However from January this year (2013), prices started to fall expecting the better arrival but bounced back in February on good demand for quality turmeric from industrial buyers and stockists. During the peak arrival season (March-May) prices are likely to move both ways depending on export and upcountry demand.

During February-May quantity of turmeric arrival from growing regions were 71 percent higher compared to the last season. This season, turmeric production is estimated to increase 8 lakh tons from 7.50 lakh tons last year.

**Socio-economic factors:** Cultivators in the investigated regions are resource poor and have low produce holding capacity. Lack of storage facilities at farm, non-existence of organised marketing system/ growers association etc force the growers to sell their produce just after harvesting through commission agents. Sale in village markets (weekly markets), city markets are very limited. Absence of adequate number of post harvest processing units to absorb marketable surplus (which is nearly 70 per cent) forces the cultivators to sell the produce as fresh only. Unorganised marketing system is another constraint determining the low adoption of improved production packages and enhancing the productivity system. Establishment of processing units in the region is needed to absorb the market surplus and produce value added products that have longer shelf life.

**Future thrust:** The followings are the areas where more intensive research is needed so that overall scenario of the turmeric production can be changed by increasing production and productivity of turmeric in the Duggirala market region.

**Post- harvest management:** There is need to develop quality control measures, adequate packaging, transportation and storage techniques. Intensive research for protocol development of different value added products may be taken up. Low cost storage structure for long-term storage is the need of the hour. Sprouting inhibition after harvesting for a minimum period of 2-3 months using organic sources will increase the volume of export.

**Introduction, evaluation and improvement:** Introduction of indigenous and exotic high yielding strains suitable for the state may help in increasing the total production of the region. Breeding with local germplasms should be done for high yielding and better quality varieties with resistance to biotic and abiotic stress. DNA finger printing of the local germplasm should be done immediately to safe guard the interest of the farmers.

**Quality planting materials:** Since there is inadequate supply of quality planting materials and true to the type varieties are not maintained properly, a mechanism may be devised for regulating the production and supply of disease free planting materials to the growers. Micro propagation techniques may help in rapid multiplication of quality planting material.

**Emphasis on organic farming:** The production system in the northeastern region is organic by default. Bio-organics, bio-pesticides, integrated approach for pest and disease control and strategies for each farming systems has to be worked out. The need of the hour is to have a simplified and affordable organic certification system.

#### **Important Factors Driving Turmeric Prices**

- The arrivals of quality crop are less as farmers are holding back their stocks in anticipation of better— prices in the coming days. However, no sharp gains may be seen as prices may come under downside pressure once the arrivals of the new season crop picks up momentum and enters the markets in full swing. Also, spot market traders expect fresh export demand April onwards, thus prices may again take cues from the same, if any.
- The IMD may raise this season's rain forecast to 90-91% of the long period average, as the condition of the southwest monsoon has been positive so far.
- As per the recent report from Spices Board of India, shipments of turmeric rose 11 per cent in 2013-14 (Apr-Mar) to 92000 MT, from previous year.
- Fresh export demand which might support the prices to move higher. Export for the year 2015 is estimated at 0.78 lakh MT mainly to UAE, Bangladesh, Japan and Malaysia.

#### **Decline in area could be due to following reasons.**

- Labour cost has increased drastically due too tedious process in Turmeric.
- Turmeric is 9 months crop compare to other crop like Maize (3 months), Soya and cotton.
- Lack of water availability during summer.



- Higher realization in other crop grown in the same area.

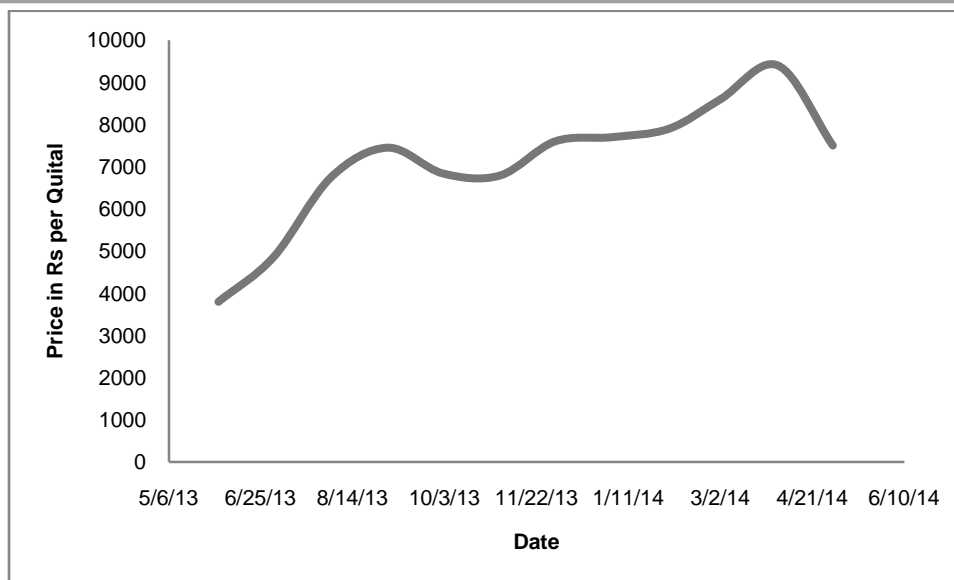
**Economics and technology transfer:** The cost benefit analysis of different farming systems is required. There is immense need to strengthen the extension system for transfer of technologies and to provide training to the farmers.

#### Findings

- Only 55.40% of the sample farmers on overall basic are found to be dissatisfied with the existing marketing system and neutral and satisfied are 29.60% and 15% respectively.
- It is clear that the main problem felt by the sample farmers is the labour shortage; this is followed by high wage rate, lack of finance, lack of water facilities, irregular supply of electricity, natural disaster, decreasing soil quality, severity of pest and diseases and high cost of inputs.
- It is found that 320 (59%) sample farmers are in the old age group. Further 57.50% of the middle aged and 47.10% of the young sample farmers are dissatisfied with the existing marketing system.
- It is shown that 370(65%) sample farmers are educated up to school level. Further, 74.50% of the illiterate sample farmers and 50.15% of the school level sample farmers and 27.50% of the college level sample farmers are dissatisfied with the existing marketing system.
- In size of the family analysis, it is found that 54.70% sample farmers are in the small group. Further 57.80% of the medium size and 53.80% large size family sample farmers are dissatisfied with the existing marketing system.
- In nature of the family analysis 58.40% of the nuclear family and 47.90% of the joint family sample farmers are dissatisfied with the existing marketing system.
- It is found that 53.50% sample farmers are in group „A“ and 59.50% of the Group „B“ sample farmers are dissatisfied with the existing marketing system.
- In the size of grower's analysis, it is found that 35% sample farmers are in big. Further, it is clear that 81.80% of the marginal farmers and 69.10% of the small farmers are dissatisfied with the existing marketing system.
- It is found that 52.90% of sample farmers are in Group „A“, 66.50% of sample farmers are in group „B“ and 45.20% Group „C“ sample farmers are dissatisfied with the existing marketing system.
- In farm experience analysis 52.80% sample farmers are having less farm experience, 44.80% of the medium farm experience sample farmers, and 68.60% of the high farm experience sample farmers are dissatisfied with the existing marketing system.
- It is found that 73.90% of the low gross annual income group, 52.10% of the middle gross annual income group and 20.00% of the high annual income group are dissatisfied with the existing marketing system.
- In annual net income in turmeric cultivation analysis, 80.30% of sample farmers are in low income level group, 65.60% of sample farmers are in middle income level and 32.40% of high income level sample farmers are dissatisfied with the existing marketing system.
- It is found that 40.10% of sample farmers are in the low level annual expenditure, further, 39.90% of the medium level annual expenditure, and 45.30% of the high level annual expenditure sample farmers are dissatisfied with the existing marketing system.
- In annual net expenditure in agriculture analysis, 34.50% sample farmers are in the high level annual net expenditure, 60.10% of the medium level expenditure sample farmers and 80.74% of the low level

#### Turmeric market Price Recap from 2013-2014

The Turmeric crop year of 2013-14 (Figure) began on a good note this year as the southwest monsoon arrived on time. Weather conditions were ideal at the start of the sowing season. Turmeric price witnessed a gradual correction from June as the pace of sowing picked up. Turmeric prices corrected from the high of Rs.9400 per quintal recorded in Apr 2014 and fell to Rs.7500 per quintal by May 2014. Turmeric prices have remained on the higher side since August 2013 as below average rainfall from July till the end of September has severely impacted the yield and dented the prospects of a bountiful crop this season.



Daily Turmeric Price (2013-14)

Source: Field survey

### Suggestions

In the higher of the findings of the present study and on the basic suggestions offered by the sample respondents, the following suggestions are offered.

1. In the present study, it is found that area and production of turmeric in Guntur district 300 hectares reduced in 2013 -14, because of unfavourable price, fluctuation in price, high cost of inputs, high wage rate, lack of water facilities, lack of finance and inadequate subsidies. Hence, it is suggested that the Government of Andhra Pradesh should initiate the provision of seeds, fertilizers and pesticides at a subsidised ratio through co – operative societies. If government has consider this suggestion seriously, it is hope that more number of farmers will come forward to cultivate the turmeric in more areas and this will increase the economy of the nation.
1. Besides, considering the importance of turmeric production to agricultural economy, the government of Andhra Pradesh has to take all possible efforts to popularise the basic turmeric production technology by way of improved varieties of seeds, fertilizers recommendations plant production schedule.
2. In the present study, it is found that labour shortage as an important problem in turmeric cultivation and due to this, turmeric growers are facing a lot of problems. Farm mechanisation is the viable solution to overcome this problem
3. As seed play a vital role in enhancing the agricultural production, it is must to check the quality of seeds before used the sowing. The seed testing laboratory is the hub of quality control. Seed testing services are required from time to time to gain information regarding planting value or seed lots. To carry out the responsibilities effectively, it is necessary that seed testing laboratory is established, manned and equipped in a manner such that whatever samples are received from the district could be analysed in the least possible time, so that seed quality control work and the tread of the seed industry are effectively met.
4. While examining the factors influencing the sample farmers to turmeric cultivation, it is found that sample farmers are considering more return as an important factor for turmeric cultivation. In this regard government has to fix the price for turmeric by considering the cost of cultivation.
5. In the present study, it is found 55.40% of the turmeric growers are dissatisfied with the existing marketing system. Hence, it is suggested that the government of India, Ministry of agriculture, Government of Andhra Pradesh co-operative banks should take all possible steps to provide loan, marketing development and technical assistance to the turmeric growers also evolving.

6. In the present study, it is found that price fluctuation has been identified as an important marketing problem to the turmeric growers.. In this regard Government of India has to provides price support policy in order product the sample farmers from the exploitative practices of the private traders.
7. It is observed that the turmeric market is still unregulated in Guntur district, it is suggested their turmeric market should be well – regulated In this regard, Government of Andhra Pradesh should intervene to ensure proper and efficient functioning or regulated market & and co- operative societies.
8. In the present study, it is observed that majority of the turmeric growers are dissatisfied about the information provided by the agricultural efficient in their respective blocks. Hence, It is suggested that agricultural officers should provide necessary information to the turmeric growers relating to cultivation of through field visit or through conducting awareness campaigns at a regular intervals.

### CONCLUSION

The findings reported here have implications for future social research programs. As should be evident from the preceding discussion, socio-economic impact assessment is a complex, yet important aspect of development impact analysis. The various changes in the social environment and social well-being of a community that result from development may be significant, yet they are often subtle and not easy to quantify. However, this does not mean that socio-economic impact assessment should not be considered an essential component of the development impact assessment process. In contrast to the research and evaluation issues, concerns examined about program implementation were often supported by the empirical literature. For most social marketing topics, empirical articles suggested that a key market segment exists that is negatively predisposed to messages directed toward them or toward changing their behavior.

The study has been purposively conducted to assist the small farmers to achieve profitable returns for their hard work and also encourage them to continue their agricultural operations. It is found that the maintaining labour by small farmers are having level of impact in their business when not retained the small farmers had to meet un-necessary and unexpected losses. Hence it is important to encourage the small farmers and help them to achieve greater heights in the years to come.

**Acknowledgment :** I offer my sincere thanks to SERO-UGC, Hyderabad for providing financial support under the scheme of minor research Project File Ref.No.MRP-4682/14 (SERO/UGC) Dated March 2014 and Management committee and Staff of SVRM College for their continuous support throughout the research Program.

### References

- Dodke, S.S., Kalamkar, N.V., Shende and Deoghare, B. (2002). Economics of Production and Marketing of Turmeric. Ind. J. Agril. Mrkt., 16 (2).
- Murlidharan, A. and Varma (1973). Effect of Nitrogen, Phosphrous and Potash on Growth and Yield of Turmeric. Ind. J. Agron., 19 (2): 102-104.
- Patil, P.S. (2002). Turmeric CultivationTechnique in Sangali District. Un-published Thesis, Open University, Nashik. Patil, P.R. (2000).
- “Economics of Production and Marketing of Turmeric in Sangali District” un-published M. Sc. (Ag.) Thesis, Mahatma Phule Krishi Vidyapeeth, Rahuri (M.S.).
- Pawar, J.R. and Murlidharan. M.A. (1988). Future Marketing and Price Stabilization.” A Case Study of Sangali Turmeric Market, Indian J. Agril. Mktg., 2 (3): 182-188.
- Dr.P.Kanagaraju, N.Venkatesan (2016), A Study on Production and Marketing of Turmeric in Perambalur District, IJEMR – July 2016 - Vol 6 Issue 07, pp1-7
- <http://www.commodityonline.com/news/printnews/turmeric-prices-drop-20-from-five-year-high/5604>