



**AgEcon** SEARCH  
RESEARCH IN AGRICULTURAL & APPLIED ECONOMICS

*The World's Largest Open Access Agricultural & Applied Economics Digital Library*

**This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.**

**Help ensure our sustainability.**

Give to AgEcon Search

AgEcon Search  
<http://ageconsearch.umn.edu>  
[aesearch@umn.edu](mailto:aesearch@umn.edu)

*Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.*

---

**Summaries**

		Page
1.	Sources of Income and Income Distribution Among Farm Households of Sira Taluk, Karnataka	336
	<i>Afrin Zainab Bi and P.S. Srikanthamurthy</i>	
2.	Transformation of Cropping and Consumption Pattern of India: Implications for Marketing System	336
	<i>Rakesh Singh, Shubhi Patel, Mukesh Kumar, Rupesh Karan, O.P. Singh, and O.P. Singh</i>	
3.	Agrarian Relation and Unviability of Agriculture: A Comparative Study of Eastern and Western Regions of Uttar Pradesh	337
	<i>Abhishek Prakash and Khursheed Ahmad Khan</i>	
4.	Determinants of Marketed Surplus of Tomatoes in Telangana State: A Grassroots Level Study	338
	<i>Kappa Kondal</i>	
5.	Agriculture and Industry: A Study of Linkages	338
	<i>K.N. Rai, Dalip Kumar Bishnoi, Jitender Kumar Bhatia and Anil Dhaka</i>	
6.	Economics of Production and Marketing of Fig in Pune District of Maharashtra	339
	<i>R.D. Shelke, S.H. Kamble and K.V. Deshmukh</i>	
7.	Partial Equilibrium Approach on Impact of ASEAN - India Free Trade Agreement on Indian Agricultural Trade	339
	<i>V.R. Renjini, Amit Kar, G.K. Jha, Pramod Kumar and R.R. Burman</i>	

---

## **Sources of Income and Income Distribution Among Farm Households of Sira Taluk, Karnataka**

**Afrin Zainab Bi and P.S. Srikanthamurthy\***

The present study was undertaken to understand the income generating patterns among the different categories of farmers such as rainfed and irrigated along with the land holding size classes. Specifically the linkage between size of land holdings and irrigation facility in altering the economic variables such as income, expenditure, savings, migration of family members and land fallows of the 120 sample farm households was studied in Sira taluk of Karnataka during 2014-15. The sample consisted of 30 farmers each in small and large farmer categories, with and without irrigation. The analysis of data revealed that the impact of irrigation on the income of farm households was higher than that of size of landholdings. Irrigated farmers earned on an average 300 per cent more income than rainfed farmers with same area under cultivation irrespective of crops grown. Per capita annual income from all sources was Rs.24, 222, Rs.38, Rs.573, Rs.32,160 and Rs.55,927 for small farmers without irrigation (SR), small farmers with irrigation (SI), large farmers without irrigation (LR) and large farmers with irrigation (LI) category of farmers, respectively. The average income earned from livestock formed 23.55 per cent of total annual income, whereas, the income earned from cultivating agriculture and horticulture crops together formed 34.9 per cent of total annual income. Off farm sources contributed only 4.91 per cent to the total annual income and non-farm sources contributed to the extent of 36.64 per cent of the total annual income. It is evident from the results that access to irrigation has significant positive impact on net income than size of land holdings. Hence more and more efforts should be directed towards making irrigation available to the farmers, which is not a viable solution as it is mostly governed by nature. Alternative approach could be to develop and promote technologies for efficient utilisation of water for irrigation.

## **Transformation of Cropping and Consumption Pattern of India: Implications for Marketing System**

**Rakesh Singh†, Shubhi Patel‡, Mukesh Kumar†, Rupesh Karan†, O.P. Singh†, and O.P.Singh‡**

Since Independence, Indian agriculture has witnessed unprecedented transformation from subsistence to semi-commercial and commercial mode of

---

\*M.Sc (Agricultural Economics), and Associate Professor, respectively, University of Agricultural Sciences, Bangalore-560065 (Karnataka).

†Department of Agricultural Economics, Institute of Agricultural Sciences, Banaras Hindu University, Varanasi-221 005 and ‡Department of Agricultural Economics, TD PG College Jaunpur (Uttar Pradesh), respectively.

agriculture. Production of horticultural crops recorded 287 mt which is more than the production of food grains 272 mt. The proportion of population employed in agriculture has gone down to 50 per cent while the contribution of agriculture to the gross domestic product (GDP) of the country is below 14 per cent. This has resulted in widening of the income disparity between the agricultural and allied non-agricultural sectors. Keeping in view the changing scenario of Indian agriculture the study was carried out with the objectives to analyse the changes in cropping and consumption pattern in India. The study also tried to examine whether market and marketing institutions have fully responded to these changes or not? Based on secondary data of 44 crops from 17 states collected from various sources, three years average (triennium ending, TE) of different variables like share of area under major crops in India as per cent of GCA (gross cropped area) and NSSO data of consumption pattern was worked out for the analysis. The results clearly indicated that there is a significant shift from food grains to non-food grains such as fruits and vegetables, oilseeds, fibers and condiments and spices. On the demand side, consumption behaviour of households revealed significant decline in share of cereals among all the item groups from 26.3 per cent to 15.6 per cent in rural India and from 15 per cent to 9 per cent in urban India. For the rural sector, pulses, edible oil, sugar, and “salt and spices” indicate a decline, and for other groups, the evidence was not very conclusive. Data on market and marketing institutions showed the existence of gap in market infrastructure required to fulfill the needs of changing production and arrival pattern. Therefore the marketing system should be reoriented to bring institutional changes like contract farming, farmer producers organisations and producer companies etc. It is suggested that smallholders should be encouraged to diversify their production pattern as per market demand and they should be provided market information and access through new institutional arrangements supported by suitable market reforms.

### **Agrarian Relation and Unviability of Agriculture: A Comparative Study of Eastern and Western Regions of Uttar Pradesh**

**Abhishek Prakash and Khursheed Ahmad Khan\***

The paper has dealt with the issue of evolution of agrarian relation and its linkage with status and viability of agriculture. Specifically it attempts to draw indicators from the existing literature in order to identify the particular kind of production relation that exist in different regions of Uttar Pradesh and then develop certain objective indicators on viability of agriculture in order to investigate whether there exists any relationship between the existence of production relations and viability of agriculture or not. The analysis indicate that the eastern region of the state is under

---

\*Research Scholar, Department of Economics, and Post-Doctoral Fellow, Indian Council of Social Science Research, respectively, Banaras Hindu University, Varanasi-221 007 (Uttar Pradesh).

semi-feudal stagnation while the western region is under high capitalist development. Both the regions faced different set of problems. But in the eastern region the extent of unviability is very high and agriculture is insufficient. However, in the western region the condition is much better for big farmers but the small and marginal farmers are in deep distress.

### **Determinants of Marketed Surplus of Tomatoes in Telangana State: A Grassroots Level Study**

**Kappa Kondal†**

The study aims to identify the factors affecting the marketed surplus of tomatoes in Telangana State, India. Primary and secondary data have been used; primary data was collected from tomato growers by using multi-stage random sampling method through structured questionnaire. Descriptive statistics and multiple natural log linear regressions have been employed. The study revealed that on an average production and marketed surplus of tomatoes were 63.69 and 62.89 quintals respectively. Production and total retention are the dominant and significant factors for increase and decrease in the marketed surplus of tomatoes respectively in the study area. The hypothesis is rejected. It states that there is significant effect of non-price variables such as production and total retention in the study area. Thus production and total retention emerged to be the predominant and significant factors for increase and decrease in the market surplus of tomatoes respectively.

### **Agriculture and Industry: A Study of Linkages**

**K.N. Rai\*, Dalip Kumar Bishnoi\*\*, Jitender Kumar Bhatia\*\* and Anil Dhaka\*\*\***

The farm sector not only provides a major domestic market for industrial consumer products but additionally also generates the demand for non-traditional inputs produced in the industrial sector. Thus it simultaneously promotes the growth of non-farm sectors along with its own development. In this context the study examines the supply or the forward linkage and the demand or backward linkage of agricultural sector with the industrial sector of Indian economy and analyse the effect of agriculture's terms of trade on the production of consumer durables and non-durables. The findings of the study reveal strong forward and backward linkages between agriculture and industries. Thus there is need to strengthen agriculture-industrial relations. This could be achieved through bringing agricultural research institutes/universities, industry associations/industrial houses and farmers associations on a common platform to search out the ways and means for increased

---

†Doctoral Scholar, Department of Economics, Osmania University, Hyderabad-500 007 (Telangana State).

\*Former Professor and Head, \*\*Assistant Scientist and \*\*\*Assistant Professor, respectively, Department of Agricultural Economics and Agronomy, CCS, Haryana Agricultural University, Hisar-125 004.

industrial sector investment in agriculture. Industrial houses/associations need to be convinced about the benefits which they will derive through their increased support to the agricultural research and development. Modern agro-processing technology helps in conservation and elimination of avoidable losses and improves quality of agro-products, low grade raw materials and by-products by value addition. It holds great potential for industrialisation of rural areas and will help in arresting the migration of rural people to urban areas in search of job. For proper development of agro-industries primary processing facilities need to be developed with all modern infrastructures for on-farm processing of all agricultural main and by products. Initially it requires government support through allocation of sufficient budget.

### **Economics of Production and Marketing of Fig in Pune District of Maharashtra**

**R.D. Shelke, S.H. Kamble and K.V. Deshmukh<sup>†</sup>**

Fig (*Ficus carica* Linn.) is one of the oldest fruit known to mankind. Maharashtra is leading state in fig cultivation followed by Karnataka and Uttar Pradesh with area of 947 ha and production of 2705 mt. Fig being an orchard crop possesses an important role in the cropping pattern and the economy of the cultivators in Purandar and Bhore tehsils of Pune district. This region on account of its special climatic conditions and the high altitude of about 610 meters offers very good opportunity to the growers to cultivate this crop on a large scale. The study has analysed the cost and returns structure of fig cultivation in Pune district of Maharashtra. Multistage sampling design was adopted in the selection of district, tehsils, villages and fig growers. Tabular analysis, regression analysis, discount cash flow technique, frequency and percentage method were used for the analysis. The net establishment cost of fig orchard by deducting the net returns from establishment cost was Rs. 71,577. Fig production was 93 quintals/hectare in fig orchard. Cost-C was higher as Rs.1,29,003.60 in fig orchard. In regard to fig orchard gross return was Rs.3,42,259.20 and per quintal cost of fig was 1,387.73.

### **Partial Equilibrium Approach on Impact of ASEAN - India Free Trade Agreement on Indian Agricultural Trade**

**V.R. Renjini\*, Amit Kar\*\*, G.K. Jha\*\*, Pramod Kumar\*\* and R.R. Burman\*\*\***

The study has analysed the impact of ASEAN - India Free Trade Agreement (AIFTA) signed in 2009 in the Indian agricultural sector. The study employed partial

---

<sup>†</sup>Department of Agricultural Economics, College of Agriculture, Vasant Rao Naik Marathwada Krishi Vidyapeeth, Parbhani (Maharashtra).

\*Scientist, Division of Agricultural Economics, Indian Agricultural Research Institute (IARI), New Delhi, \*\*Principal Scientists, Division of Agricultural Economics, IARI, New Delhi, \*\*\*Principal Scientist, Division of Agricultural Extension, IARI, New Delhi.

equilibrium analysis using SMART model of the World Bank to simulate the impact of tariff reduction scenarios for Indian agricultural trade with special emphasis on trade creation, trade diversion, revenue effect and welfare effect. The findings of the study indicated that higher tariff reduction commitment by India will benefit ASEAN countries to gain market access. The tariff reduction in pulses, palm oil, tea, coffee and spices will favour Indian consumers but may adversely affect the producers. The study found that AIFTA is trade creating FTA than trade diverting FTA in agriculture which will eventually lead to net welfare effect through increased consumer surplus that outweighs tariff revenue loss of the government. The results emphasises to study further the effect of AIFTA on domestic producers as they will be adversely affected due to the increased cheap imports from the ASEAN countries. Thus there is a need to revisit the production policy of these products in order to maintain the competitiveness and productivity in future to avoid losses.