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CONTENTS

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Editorial Note

The business and investment climate in the country appears to be on the upswing. With government pushing hard the business agenda at the national and international level, the confidence of investing community is bullish. The rise in the contribution of the industrial and service sector to the total national product, since the last few years is the result of the favorable policy climate created by the new regime. In spite of the short term fall in the production indices the analysts predict a quick recovery in the coming months. The coordinated policy decisions regarding the fiscal and monetary policy issues are sending the right signals to the markets. Keeping in view the dynamic changes taking place in the business environment the management concepts of mergers and acquisitions is selected for publication in the present issue.

But the only dark cloud appears to be the weak agriculture sector. The rising trend of farmers' suicide in different states is becoming a cause of concern to the policy makers at the state as well as national level. Accordingly an article on agriculture sector is being published in the present issue of our journal. Such studies on agriculture and their publication are the need of the hour. Discussions and deliberations in different forums as well as publications of findings of studies on agriculture will bring forth new solutions to the current burning problem in India. Keeping in view the issues of national importance articles pertaining to these are selected for publication in the present volume. The published articles will be of use for young researchers, scholars and academicians.

Dr. T. V. G. Sarma
Editor

An Economic Analysis of Organic Farming in Belagavi District of Karnataka State

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Abstract : The Green Revolution made Indian Economy self sufficient in the production of food grains but with declining crop productivity and the ill effects of the use of chemical fertilizers and pesticides. Organic Farming (OF) is considered as the best known alternative to conventional agriculture. OF involves the management of agro-eco system, as autonomous, based on the capacity of soil in local climatic conditions. The IFOAM established in 1972 has more than 120 member countries including India. The studies conducted by the Institute of Cotton Research Nagpur, results of field demonstration under National Project on Development and Use of Bio-fertilizers, etc., have shown the less cost of cultivation and increased profitability under OF than under Conventional Farming. The present study of organic farmers of two Talukas of Belagavi District of Karnataka State viz; Khanapur and Hukkeri shows that cost of cultivation organic farming is less than under conventional farming. The study also shows that yield under organic farming is less than under conventional farming. However, the yield loss is compensated by 20-25% more premium price for organic farm output.

Key Words : Organic Farming, Less Cost, Increased Profitability.

1. 0 Introduction:

The present crisis of food prices in India brings out the inability of Indian agriculture to meet the demand for food even after six decades of independence. Though the green revolution made the economy self sufficient in the production of food grains, it could not make the Indian agriculture sustainable. Droughts and deluges continue to haunt the agriculture and are proven constraints of its growth. Moreover the achievements of green revolution were at the expense of ecology and environment and to the detriment of the people. The ill effect of chemical agriculture, adopted from the West, has increasingly become the source of ill fate for thousands of Indian farmers. The negative effects of the modern technology, particularly the use of chemical fertilizers and pesticides on the environment are manifested through soil erosion, water shortages, salination, soil contamination, genetic erosion, etc.

The conventional farming has resulted in declining crop productivity and not able to meet the rising demand for food by increasing population of the country. Sustainable development is achievable only with sustainable agricultural development. According Food and Agricultural Organization (FAO), sustainable agriculture is the successful management of resources for agriculture to satisfy changing human needs while maintaining or enhancing the quality of environment and conserving the natural resources. It emphasizes on maintaining the agricultural growth rate to meet the demand for food of all living things without draining the basic resources. The necessity of having an alternative agriculture method which can function in a friendly eco-system while sustaining and increasing the crop productivity is realized now. Organic farming is recognized as the best known alternative to the conventional agriculture.

1.1 Organic Farming: Meaning and its Beginning

Organic farming is one of the many approaches found to meet the objectives of sustainable agriculture. Many techniques used in organic farming like inter-cropping, mulching and integration of crops and livestock are not alien to Indian agricultural system. However, organic farming is based on various laws and certification programmes, which

prohibit the use of almost all synthetic inputs and health of the soil is recognized as the central theme of the method.

The US Department of Agriculture (USAD) defines organic farming as "a system that is designed and maintained to produce agricultural products by the use of methods and substances that maintain the integrity of organic agricultural products until they reach the consumer. This is accomplished by using substances, to fulfill any specific fluctuation within the system so as to maintain long term soil biological activity, ensure effective peak management, recycle wastes to return nutrients to the land, provide attentive care for farm animals and handle the agricultural products without the use of extraneous synthetic additives or processing".

The origin of organic farming goes back, in its recent history, to 1940's. During this period, the path breaking literature on the subject published by J.I.Rodale in the United States, Lady Balfour in England and Sir Albert Howard in India contributed to the of organic farming. Organic farming involves management of the agro-eco system, as autonomous, based on the capacity of the soil in the given local climatic conditions. Despite of much ridicule, organic farming has come to stay and is spreading steadily but slowly all over the world. India has been very slow to adopt, though farming techniques practiced in the country prior to the green revolution were basically eco friendly.

Sensing the importance of rules and regulations of WTO trade regime, the Central and State governments have taken several initiatives to popularize organic farming in the country.

2.0 Review of Literature:

Howard's (1940) 'Agricultural Testament', deals with the destruction of soil and the consequences of it; and suggests methods to restore and maintain the soil fertility. It makes a detailed deposition of Indore method of maintaining the soil health. The reasons and the sources of erosion of soil fertility and its effect on living things are discussed. It criticizes the agriculture research and suggests the ways to protect the soil and its productivity.

Save and Sanghavi (1991) firmly believe in economic profitability of organic farming. They compare banana growing by natural and conventional farming. Comparing the yields for four rounds, they found that the aggregate output was 88 kg on the natural farm and 75 kg by conventional farming.

Rahudkar and Phate (1992), discuss the experiences of organic farming in Maharashtra. Farmers growing sugarcane and grapes, after using the vermi compost, found the soil fertility increased, irrigation decreased by 45% and sugarcane quality improved. It was found that the net profits from both the crops are high in organic farms.

Save (1992) found that after three years of natural cultivation the production increased and the use of inputs decreased. The farm yielding 200 to 250 coconuts per tree gave 350 to 400 per annum.

Korah Mathen (1992) points out at the problems in evolving representative and rigorous yardsticks for comparison between modern and alternative farming. Yields could not be compared because of the monoculture nature of the chemical farming with those of multi crops under natural /organic farming. Economic analysis faced problems because of the quantification of the intangibles. He suggests use efficiency analysis.

Kaushik (1997) analyses the issues and policy implications in the adoption of sustainable agriculture. He says that before adopting organic farming at the individual and national level careful consideration of public vis-à-vis private benefits, current vis-à-vis future incomes, current consumption and future growths, etc. are very pertinent issues to be determined.

Anon (1998) opines that the organic agriculture is economically viable. He emphasizes on the marketing of the organic products on the basis of reputation and credibility.

Singh and others(2001) recording the experiments on rice-chick pea cropping sequence using organic manure, found the yields substantially higher compared to the compared group. Similar results were obtained for rice, ginger, sunflower, soya been and sesame.

Sankaram Ayala (2001) the author admits that the benefits from high yielding varieties are short term in nature and cause adverse effects in the long term. The author suggests an appropriate blend of conventional farming system and its alternatives. He rules out organic farming based on the absolute exclusion of fertilizers and chemicals.

Veeresh (1999) says that in different countries organic farming is perceived differently. While in advanced countries its focus is on prevention of chemical contamination, in countries like India the concern is about low soil productivity. Doubts about the availability of massive sources of organic inputs also exist. He opines that both high technology and sustainable environment cannot go together. He advocates slow introduction of organic farming in India and recommends conversion of only 70% of the total cultivable area where un- irrigated farming is in practice.

Sharma (2001) discusses the disadvantages of conventional farming. He argues for organic farming as the most widely recognized alternative farming system to the conventional farming and discusses other alternatives such as biological farming, natural farming and perm culture.

The foregoing overview of literature makes it clear that opinions about organic farming are divided among the experts. Though there is divergence of views about the profitability and yield increases in organic farming, there is a consensus on its eco-friendly nature and inherent ability to protect human health. There are strong views for and against organic farming. The criticism is mainly on the grounds of practicability of feeding more than a million people, financial and economic viability, availability of organic inputs and the know-how. There are many who while approving organic agriculture want a mixture of both the systems or advocate approach by proceeding slowly towards the conversion of the conventional farms into organic. But the most important of all is the yield and financial viability form the point of view of farmers. The questions on the yield and economic viability are not clearly answered.

3. 0 Need for the Study

3.1 The World Scenario:

The relevance and the need for an eco-friendly alternative farming arose from the ill effects of the chemical farming practices adopted worldwide during the second half of the last century. People began to search for various alternative farming systems based on the protection of environment which in turn would increase the welfare of the mankind by various ways like clean and healthy foods, an ecology which is conducive to the survival of all living and non-living things, low use of the non –renewable energy sources, etc. Several systems of farming resulted as the result of many experts and laymen. Organic farming is considered to be the best among all of them because of its scientific approach and wider acceptance through out the world.

The organic farming was adopted on relatively large scales in those countries which had introduced it initially. There are very large organizations promoting the organic farming movement in European countries, America and Australia etc. The organizations like International Federation of Organic Agriculture Movements (IFOAM) and Greenpeace have studied the problems of the chemical farming methods and compared the benefits accruing to the organic farming with the former. Since then, organic farming movements have spread to Asia and Africa as well. The IFOAM was established in 1972 in France. It spearheads and coordinates organic farming efforts through out the world. It emphasizes the low use of non renewable natural resources and minimum pollution. There are more than 600 organizational members spread in 120

countries including India. The Food and Agricultural Organization (FAO) of the United Nations provide support to the organic farming in the member countries. It attempts for the harmonization of national organic standards which is essential to increase international trade in organic products. The FAO in association with the World Health Organization (WHO) evolved the Codex Alimentarius for organic products. Consumers too have become health conscious and are willing to pay for the clean, healthy and natural food.

There have been significant strides in the growth of organic food market in the world. In 1990s the international trade in organic foods showed an annual growth rate of about 20-22%. Many retail chains and super markets in advanced countries are accorded with "green status" to sell organic foods. The organic food processing industry is considered nature friendly and thus encouraged. The important organic products traded in the international market are dried fruits and nuts, processed fruits and vegetables, cocoa, spices, herbs, oil crops and derived products, sweeteners, dried leguminous products, meat, dairy products, alcoholic beverages, processed fruits and fruit preparations. The US and the European Union have very comprehensive National Organic Farming Programmes and the early nineties have witnessed organic farming regulations in Japan, Canada, Australia, New Zealand, Israel and Brazil. China, Thailand, South Korea, Turkey, Philippines have established certifying agencies. India too has adopted the National Programme for Organic Production (NPOP) with national standards.

3.2 The Indian Scenario:

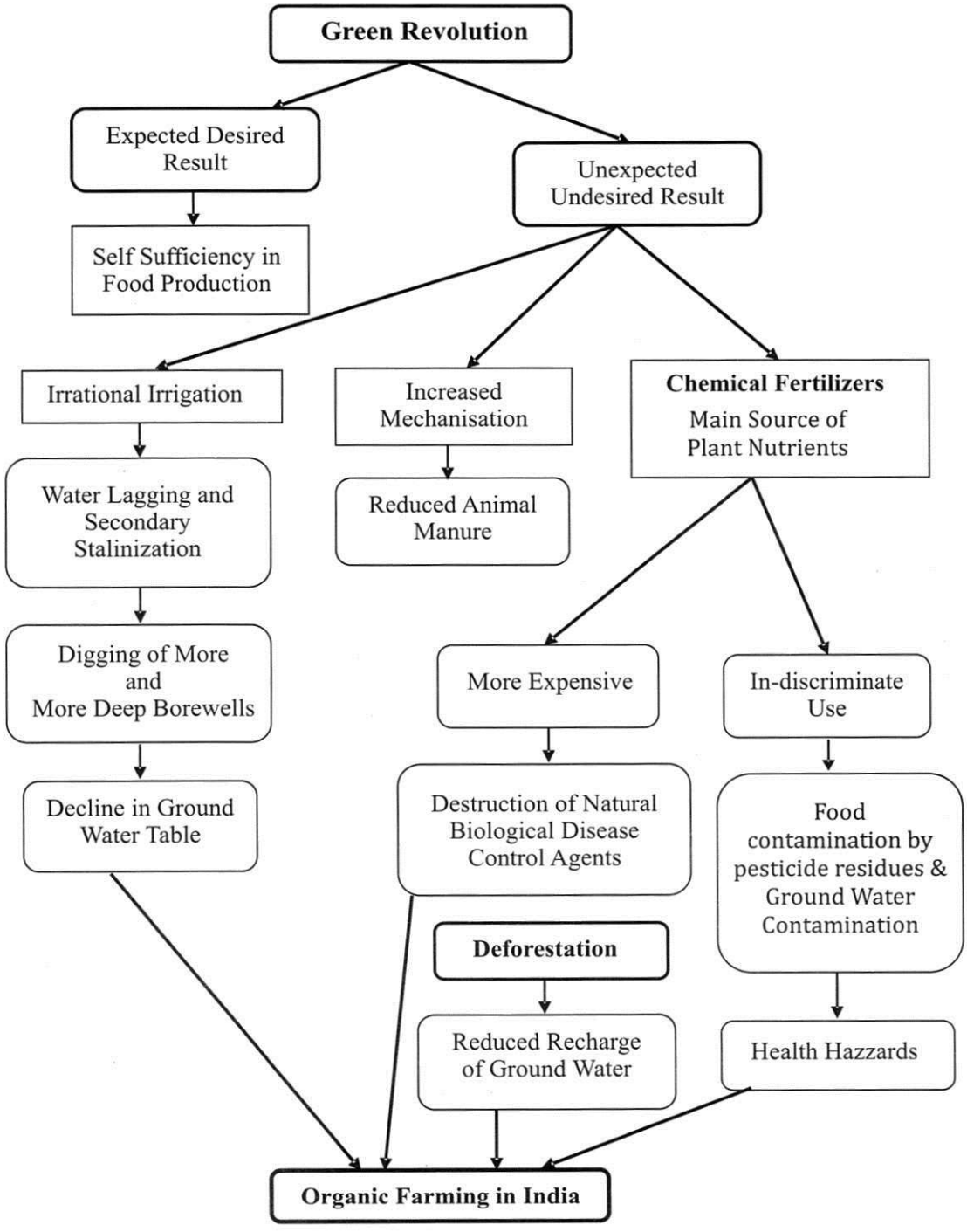
The Indian agriculture switched over to the conventional system of production on the advent of the green revolution in the 1970s.The change was in the national interest which suffered setbacks because of the country's over dependence on the foreign food sources. The national determination was so intense that all the attention was focused on the increase in agriculture production. The increase in population has led to a rise in the demand for food grains. An estimated area of 140 million hectares under cultivation cannot be increased. At the same time there has been decline in the cultivable area because of the urbanization and industrialization. This in turn exerts pressure on the existing cropped area.

Organically cultivated soils are relatively better attuned to withstand water stress and nutrient loss. Their potential to counter soil degradation is high and several experiments in arid areas reveal that organic farming may help to combat desertification. India which has areas of semi-arid and arid nature can benefit from the experiment.

The organic agriculture movement in India received inspiration and assistance from IFOAM. All India Federation of Organic Farming is a member of IFOAM and consists of a number of NGOs, organizations of farmers, promotional bodies and institutions. There have been several studies in India which show that the organic farming has better results than the conventional system. The Institute for Cotton Research, Nagpur conducted a study of economics of cotton cultivation in Yavatmal district of Maharashtra. The cost of cultivation of cotton was lower in the organic farming than in the conventional farming. The low costs were due to the non-use of fertilizers and chemical insecticides. The input costs were low with a 20% of premium of prices of output. The appreciation of net income from organic cotton cultivation by the sixth year was 80% over the conventional crop. Results from 150 field demonstration cum trials under the National Project on Development and Use of Bio-fertilizers in different parts of the country show an increase of 4% yield in plantation crops, 7% in fruit crops, 9% in wheat and sugar cane, 10% in millet and vegetables, 11% in fiber, condiments and spice crops, 14% in oil seeds and flowers and 15% in tobacco. A study 100 farmers in Himachal Pradesh during a period three years found that the total cost of production of maize and wheat was lower under organic farming and the net income was 2 to 3 times higher. Both productivity and premium prices contributed to the increased profitability. Another study of 100 farmers in five districts of Karnataka indicated that the cost of organic

farming was lower by 80% than that of the conventional one.

An important event in the history of organic farming in India was the starting of the National Programme for Organic Production (NPOP) on 8[Th] May 2000 and the subsequent Accreditation and Certification Programme on 1[St] October 2001.The logo "India Organic" was released on 26[th] July 2002 in support of NPOP.



Source: Organic Farming : Approaches and Possibilities in the Context of Indian Agriculture, Policy Paper 30, National Academy of Agricultural Sciences, India. Feb,2005.

3.3 Organic Farming in Karnataka:

Karnataka has been one of the pioneer states in India to adopt the organic farming. After Uttaranchal, it is the first state to adopt the Organic Farming Policy. High level empowered committees at government level to plan, implement and monitor the under the policy. A separate Organic Farming Cell is created in the Department of Agriculture. Since 2004-05, the government is encouraging the farmers to adopt the organic farming and gradually give up the use of chemical fertilizers and pesticides. It is even allocating the financial resources in the budget for this purpose.

The Karnataka Organic Farming Policy is a comprehensive policy and has the following objectives: to reduce the debt burden of farmers and to achieve sustenance and self respect, to enhance soil fertility and to create living soil, to increase the food security and achieve sustainability, to prevent migration to urban areas by increasing rural employment opportunities, to equip farmers to effectively mitigate the drought situation, and to make judicious use of precious natural resources. The government is implementing this policy through NGOs, Farmers Associations, Farmers Clubs, Co-operatives and SHGs. It is encouraging the bio-mass production, bio-diversity, mixed farming, and soil and water conservation. It is providing the assistance to procure organic inputs, value addition of organic products, on farm processing, marketing and certification. The emphasis is on for research and development, conducting extension and training activities and providing publicity and propaganda. The government has established two research stations one at Dharwad and another at Shimoga.

The Organic Village/Site Programme was initiated in 2004-05 to create model organic sites in each district. The programme is extended to Taluka level from 2006-07.The implementation of the programme is through the NGOs based on their knowledge and experience in organic farming. This programme aims to educate and popularize organic farming concepts and principles among farming community, to help extension activities and research organizations .The programme facilitates farmers to organize into farmer groups/farmer clubs/farmer companies which help in sharing the common resources like land, water and bio-mass. It also facilitates farmers for on-farm processing, value addition and marketing of the produce generated in the site. The programme is an integrated approach to have 100 hectares of land converted into organic farming for which various line departments are pooled. 28 Model Organic Villages/Sites are established comprising total area of about 3080 hectares in the state.

The other promotional activities include conversion of one farm each of Agriculture, Horticulture, Sericulture Departments UAS Bangalore and Dharwad to model organic farms, documentation of existing organic farming practices to develop package of practices, to provide training to farmers, department officers, and NGOs. The government assisted the Jaivik Krishik Society to facilitate marketing of organic products. The government departments extensively participate in fairs, exhibitions, and other promotional activities at various levels. The government assistance is provided for large scale production of organic inputs and to SHGs (Shtree Shakti Groups) for production of organic inputs. It organizes educational tours to model organic farms, provides organic inputs like green manure seeds, bio-fertilizers, bio-pesticides etc. It is helping the creation of Organic Farming Library at district level.

3.4 Organic Farming in Belagavi District:

The Belagavi District has an area of 13415 sq kms and the population of 4214505 according to 2001 census. It is bounded on the West and North by Maharashtra state, on the north east by Bijapur district, on the by Bagalkote district, on the south east by Gadag district, on the south by Dharwad district, on the south west by Uttar Kannada district and the state of Goa. The district has 10 talukas viz.: Athani, Bailhongal, Belagavi, Chikkodi, Gokak, Hukkeri, Khanapur, Raibag, Ramdurg and Saundatti. The district has a total of 706476 cultivators and 586876 agricultural laborers. The gross sown area is 916217 hectares of

which the net sown area is 746907 hectares. The total numbers of land holdings are 497708 and area is 1005677 hectares. The net irrigated area is 325476 hectares. The major cereal crops are Paddy, Jawar, Maize, Wheat, and Bajra. Ragi is a minor cereal in the district. Gram and Tur are main pulses; groundnut and sunflower are main oilseeds. Fruits and vegetables are grown in all talukas. Sugarcane, cotton and tobacco are main commercial crops in the district.

4. 0 Methodology:

4.1 Study Area:

Belagavi District is the area of study and two talukas are considered of which one from Malnad region i.e. Khanapur Taluka and another from Maidan region i.e. Hukkeri Taluka.

4.2 Data:

Both secondary and primary data are used. The secondary data is collected from various government publications, official websites and office records. The primary data is collected personally by the researcher through structured schedules / questionnaire. Initially the pilot study was undertaken at Gundyanatti village of Khanapur Taluka and final collection of data was undertaken after incorporating the necessary changes required. 10% of the organic farmers' responses are considered for data analysis. The data on conventional farming is collected from the farmers to compare and contrast both conventional and organic farming. The data is processed and analyzed by using the necessary research tools.

4.3 Sample Design:

There are 190 organic farmers in Khanapur taluka and 250 in Hukkeri taluka. 10% of the farmers in each of the talukas are selected as sample for the study purpose.

Table1 : Sample Structure

Taluka	Organic Farmers	Sample Selected
Khanapur	190	20
Hukkeri	250	25
Total	440	45

Source :Primary Data

4.4 Tools of analysis:

The collected data is processed both manually and with the help of computers. The statistical tools like percentage, Correlation Coefficient are obtained from using the SPSS package to draw inferences.

4.5 Objectives:

The study envisages following objectives:

1. To study and compare the cost of production of organic farm products to that of conventional farm products.
2. To study and compare the yield of organic farm products to that of conventional farm products.
3. To suggest the policy measures to the government to make the organic farming more acceptable by the farmers.

4.6 Hypotheses:

Following are the hypotheses of the study:

1. H_0: The cost of production in conventional farms is same in organic farms.
   H_1: The cost of production in conventional farms is more than in organic farms.
2. H_0: The yield in conventional farms is same in organic farms.
   H_1: The yield in conventional farms is more than in organic farms.

5.0 Data Collection and Analysis

5.1 Cost of Cultivation in Khanapur Taluka

The main food crop in the taluka is Paddy. The researcher has considered the cost of cultivation of paddy. The commercial crop considered for the study is sugarcane for the purpose of comparing it to the cost of cultivation in Hukkeri taluka.

5.1.1 Paddy Cultivation

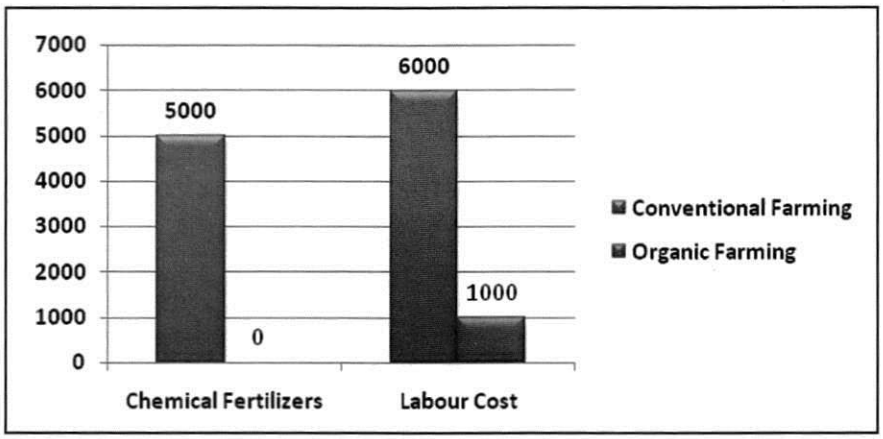
The following table shows the cost of cultivation of paddy crop in Khanapur Taluka under both conventional farming and organic farming.

Table No.2:
Cost of Cultivation of Paddy Crop (₹)

Expenditure	Conventional Farming	Organic Farming
Chemical Fertilizers	5000	--
Labour Cost	6000	1000
Total	11000	1000

Source: Primary Data

Chart No.1: Cost of Cultivation of Paddy Crop (₹)



Source : Table No.2

One-Sample Statistics

	N	Mean	Std. Deviation	Std. Error Mean
Conventional Farms	2	5500.0000	707.10678	500.00000
Organic Farms	1	1000.0000		

One-Sample Test

	Test Value = 11000					
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
Conventional Farms	-11.000	1	.058	-5500.00000	-11853.1024	853.1024

Under conventional farming the cost of production of paddy is Rs.11000 per acre which includes Rs.5000 for chemical fertilizers and Rs.6000 as labour cost.

Under organic farming the cost of labour is less by Rs.1000 (i.e. cost is Rs.5000) and no expenditure is incurred for the use of chemical fertilizers. Hence, the total cost of paddy cultivation under the organic farming is almost ten times less the cost of cultivation under the conventional farming.

An obtained p-value shows a theoretical risk of Type-I error. Researchers usually want p to be less than 0.05.

The result of One Sample Test table shows that there is a significant difference between the hypothesized mean and the sample mean, since t-statistics is -11.00 and its associated p-value is 0.058 which is greater than 0.05. A Type-I error occurs when the null hypothesis H_0 is rejected and hence H_1 accepted. Therefore the cost of production in Conventional farms is more than in Organic farms.

5.1.2 Sugarcane Cultivation

Under the conventional farming the total cost of cultivation of sugarcane is Rs.22000 per acre which includes Rs.5000 for the use of chemical fertilizers, Rs.3000 for the use of pesticides. Rs.1000 is labour cost and Rs.4000 transport cost.

Under the organic farming for the production of sugarcane labour cost is only Rs.3000 and no

expenditure is incurred as transport cost. The labour cost of less because of reduced weeding out activity. Labour cost is implied cost of hired labour and not the cost of family labour. Under the organic farming the cost of sugarcane cultivation is more than 7 times less than under the conventional farming.

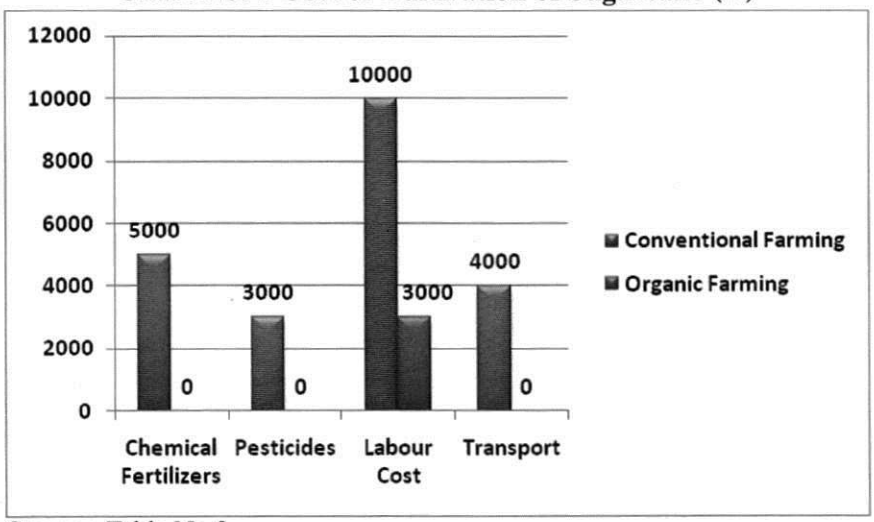
The following table shows the cost of cultivation of sugarcane in Khanapur Taluka under both conventional farming and organic farming.

Table No. 3: Cost of Cultivation of Sugarcane (₹)

Expenditure	Conventional Farming	Organic Farming
Chemical Fertilizers	5000	--
Pesticides	3000	--
Labour Cost	10000	3000
Transport	4000	--
Total	22000	3000

Source: Primary Data

Chart No.2: Cost of Cultivation of Sugarcane (₹)



Source : Table No.3

One- Sample Statistics

	N	Mean	Std. Deviation	Std. Error Mean
Conventional Framing	4	5500.0000	3109.12635	1554.56318
Organic Framing	1	3000.0000		

One-Sample Test

	Test Value = 22000					
	T	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
Conventional Farms	-10.614	3	.002	-16500.00000	-21447.3138	-11552.6862

An obtained p-value shows a theoretical risk of Type-I error. Researchers usually want p to be less than 0.05.

The result of One Sample Test table shows that there is a significant difference between the hypothesized mean and the sample mean, since t-statistics is -10.614 and its associated p-value is 0.002 which is less than 0.05. A Type-I error occurs when the null hypothesis H_0 is rejected and hence H_1 is accepted. Therefore, the cost of production in Conventional farms is more than in Organic farms.

5.2 Cost of Cultivation in Hukkeri Taluka

Jawar is the main food crop in Hukkeri taluka and hence, the cost of cultivation of Jawar is considered for study. The commercial crop considered for the study is sugarcane for the purpose of comparing it to the cost of cultivation in Khanapur taluka.

5.2.1 Jawar Cultivation

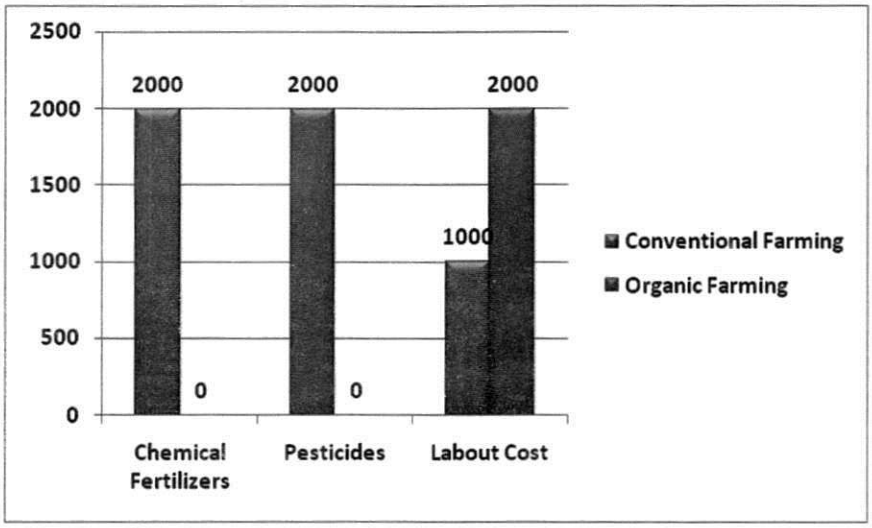
The following table shows the cost of cultivation of Jawar in Hukkeri Taluka under both conventional farming and organic farming.

Table No. 4 :Cost of Cultivation of Jawar (₹)

Expenditure	Conventional Farming	Organic Farming
Chemical Fertilizers	2000	--
Pesticides	2000	--
Labour Cost	1000	2000
Total	5000	2000

Source: Primary Data

Chart No.3: Cost of Cultivation of Jawar (₹)



Source : Table No.4

One-Sample Statistics

	N	Mean	Std. Deviation	Std. Error Mean
Conventional Framing	3	1666.6667	577.35027	333.33333
Organic Framing	1	2000.0000		

One- Sample Test

	Test Value = 5000					
	t	df	Sig. (2 tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
Conventional Farms	-10.000	2	.010	-3333.33333	-4767.5509	-1899.1158

The cost of cultivation of Jawar under conventional farming is Rs.2000 for chemical fertilizers, Rs.2000 for pesticides and Rs.1000 for labour the total cost is Rs.5000 per acre.

Under organic farming labour cost is the only expenditure for the cultivation of Jawar. It is Rs.2000 per acre. Hence, the cost of cultivation of Jawar is more by Rs.3000 per acre i.e. 2½ times more under conventional farming than under organic farming.

An obtained p-value shows a theoretical risk of Type-I error. Researchers usually want p to be less than 0.05.

The result of One Sample Test table shows that there is a significant difference between the hypothesized mean and the sample mean, since t-statistics is -10.00 and its associated p-value is 0.010 which is less than 0.05. A Type-I error occurs when the null hypothesis H_0 is rejected and hence, H_1 is accepted. Therefore the cost of production in Conventional farms is more than in Organic farms.

5.2.2 Sugarcane Cultivation

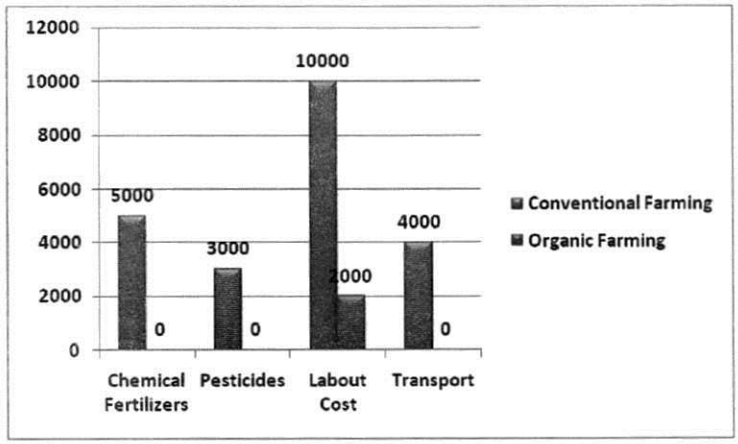
The following table shows the cost of cultivation of sugarcane in Hukkeri Taluka under both conventional farming and organic farming.

Table No.5: Cost of Cultivation of Sugarcane (₹)

Expenditure	Conventional Farming	Organic Farming
Chemical Fertilizers	5000	--
Pesticides	3000	--
Labour Cost	10000	2000
Transport	4000	--
Total	22000	2000

Source: Primary Data

Chart No. 4: Cost of Cultivation of Sugarcane (₹)



Source : Table No.5

One-Sample Statistics

	N	Mean	Std. Deviation	Std. Error Mean
Conventional Framing	4	5500.0000	3109.12635	1554.56318
Organic Framing	1	2000.00		

One-Sample Test

			Test Value = 22000			
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
Conventional Farms	-10.614	3	.002	16500.00000	-21447.3138	-11552.6862

An obtained p-value shows a theoretical risk of Type-I error. Researchers usually want p to be less than 0.05.

The result of One Sample Test table shows that there is a significant difference between the hypothesized mean and the sample mean, since t-statistics is -10.614 and its associated p-value is 0.002 which is less than 0.05. A Type-I error occurs when the null hypothesis H_0 is rejected and H_1 is accepted. Therefore the cost of production in Conventional farms is more than in Organic farms.

The cost of cultivation of sugarcane under conventional farming is Rs.20000 per acre. It includes Rs.5000 for chemical fertilizers, Rs.3000 for the use of pesticides, Rs.10000 for labour and Rs.4000 for transport.

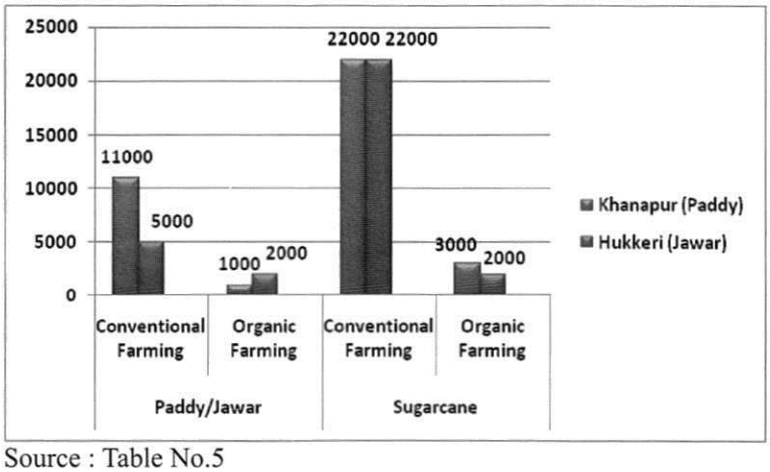
Under organic farming the cost of cultivation of sugarcane is mainly the labour cost. It is Rs.2000 per acre. Hence, the cost of producing sugarcane under organic farming is less by Rs.18000 per acre than under conventional farming.

Table No. 6: Cost of Cultivation of food crop : A Comparative Study

Taluka	Paddy/Jawar		Sugarcane	
	Conventional Farming	Organic Farming	Conventional Farming	Organic Farming
Khanapur (Paddy)	11000	1000	22000	3000
Hukkeri (Jawar)	5000	2000	22000	2000

Source: Primary Data

Chart No.5: Cost of Cultivation of food crop : A Comparative Study



Source : Table No.5

Paddy/Jawar

One-Sample Statistics

	N	Mean	Std. Deviation	Std. Error Mean
Conventional Framing	2	8000.0000	4242.64069	3000.00000
Organic Framing	2	1500.0000	707.10678	500.00000

One-Sample Test

	Test Value = 16000					
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
Conventional Farms	-2.667	1	.228	-8000.00000	-46118.6142	30118.6142
Organic Farms	-29.000	1	.022	-14500.00000	-20853.1024	-8146.8976

An obtained p-value shows a theoretical risk of Type-I error. Researchers usually want p to be less than 0.05. A Type-I error occurs when the null hypothesis H_0 is reject it.

The result of One Sample Test table shows that there is a significant difference between the hypothesized mean and the sample mean, since t-statistics is -2.667 and -29.00 and its associated p-value is 0.228 and 0.022 which is greater than 0.05. A Type-I error occurs when the null hypothesis H_0 is reject and H_1 accept it. Therefore the Cost of production in conventional farms is more than in Organic farms.

Sugarcane

One-Sample Statistics

	N	Mean	Std. Deviation	Std. Error Mean
Conventional Framing	2	22000.0000	.00000[a]	.00000
Organic Framing	2	2500.0000	707.10678	500.00000

One-Sample Test

	Test Value = 44000					
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
Organic Farms	-83.000	1	.008	-41500.00000	-47853.1024	-35146.8976

An obtained p-value shows a theoretical risk of Type-I error. Researchers usually want p to be less than 0.05.

The result of One Sample Test table shows that there is a significant difference between the hypothesized mean and the sample mean, since t-statistics is -83.00 and its associated p-value is 0.008 which is less than 0.05. A Type-I error occurs when the null hypothesis H_0 is rejected and hence H_1 is accepted. Therefore the Cost of production in conventional farms is more than in Organic farms.

6.0 Findings

The study looks into the economics of organic farming and its impact on agriculture. The study brings out the principles of organic farming as stated by International Federation of Organic Agricultural Movement (IFOAM). These principles emphasis the production of high quality food grains, encouraging the biological cycles within the farming system involving micro organisms, soil, flora and fauna, to increase the long term fertility of soils,

to maintain the genetic diversity of the production system and its surroundings, conservation of renewable resources like water, to co-ordinate crop cultivation and animal husbandry, etc.

The study area covers two talukas viz.; Khanapur and Hukkeri of Belagavi district. The Khanapur taluka receives more rainfall as it is in the malnad region. Hukkeri taluka has mainly rainfed agriculture and area irrigated by borewells. Both talukas have sugarcane as the common commercial crop. The most distinct feature of these two talukas is that there are renowned organic farmers who work as resource persons, received several awards by the Government and the National and International Institutions. Each taluka in the district has 300 farmers identified for organic cultivation under the Savayava Krishi Mission. Of these farmers 2/3rd are active and remaining are passive. The study shows that the literate farmers are more inclined towards the organic farming with certification.

The study observed that the cost of cultivation of both commercial crop and food crop in both the taluka under organic cultivation is significantly less compared to conventional farming in which chemical fertilizers and pesticides are used. In the initial 3 to 4 years of organic cultivation the yield per acre is considerably less. However, this yield loss is compensated by 20-25% more premium price for organic products than under conventional farming.

Regarding the cost of production the study rejects the null hypothesis and the alternate hypothesis is accepted. As far as the yield is concerned the study rejects the null hypothesis and the alternate hypothesis is accepted

The organic farming policy was declared by Government of India in 2005. It was the result of the realization of the indiscriminate and excessive use of chemicals during the periods of Green Revolution and also the Post Green Revolution. The sustainability of the Indian agriculture was in question and hence it called for long run attention for sustainable production which shall also address social, ecological and economical issues together. In fact it was a realization for integrated management system for the Indian agriculture to take care of the soil health, human health and environment health. The Organic Policy of the government aimed at promoting technically sound, economically viable, environmentally non-degrading and socially acceptable use of natural resources. The policy aimed at to actualize the area and crop potential for organic farming, sustaining soil fertility, conserving bio-resources, strengthening rural economy, promoting value addition, accelerating the growth of agro-business and securing a fair standard of living for the farmers and agriculture workers and their families.

The organic farming policy was declared by Karnataka in 2004. The state policy on organic farming has a principal aims of food self reliance, rural development and nature conservation. Organic Farming emphasizes agriculture's contribution to bio-diversity and biodiversity and bio diversity's contribution to agriculture.

7.0 Policy Suggestions

After making the study of organic farming in Karnataka and in particular in the study area i.e. Khanapur and Hukkeri talukas of Belagavi districts, the following suggestions are made:

i. The programmes which are identified in policy statement but not implemented, needs to be implemented on priority.
ii. It is observed that the Government departments lack interest in the implementation of organic farming projects. Hence, the present agriculture and horticulture departments should be totally devoted to organic farming.
iii. Farmers have to undertake multiple cropping pattern rather than single cropping pattern.
iv. Farmers should take interest in income generating allied activities like animal husbandry etc. along with the crop cultivation.
v. Government should involve in Primary Agricultural Co-operative Credit Societies in the promotion of organic

farming in the State.

vi. Government should stop providing seeds and instead help the farmers to have indigenous Seed Bank in every village.

vii. Farmers should have 'Soil Health Passbook' in which the entries are to be made by a joint group consisting of farmers, government departments and accreditation agencies.

viii. Each Consumer Co-operative Society in the State should have an outlet to sell the organic produce.

ix. The accreditation fees should be affordable by the farmers.

x. Organic cultivation and products, importance to the human health and maintaining the bio-diversity and other related topics should be included in the school curriculum. Every school should have a Organic Club to educate students about the benefits of organic food and arrange students visit to organic farm as an essential extension activity.

xi. Print and e-media should be extensively used for propagating the organic farming.

xii. Organic cultivation is to be considered as farm business. Hence, every farmer should be taught the principles of farm planning like farm enterprise budget.

xiii. The farmers should be taught the proper methods of keeping the farm records which includes cost, yield, income, data on livestock, etc. This would convert the farmer into an Agri-businessman.

8.0 Conclusion

Having more concern with the farmers in Belagavi district the research would like to suggest the Organic Food Club of Yamakanmardi to start a monthly bulletin on the lines of 'Adike Patrike' of Dakshin Kannada district.

Amartya Sen opines that 'Policy is a function of political organization and depends on a variety of factors including the nature of the government; the sources of its power, and the forces exerted by other organizations'. This opinion emphasizes the role and responsibility of leaders of the government to have necessary political will for the successful implementation of any policy of the government for which organic farming policy is not an exception.

Before concluding it is essential to alley the unfound criticism /apprehension about the organic farming in India. This apprehension is about the food security. Critics say that too much and hurried importance to organic cultivation in India would once again push the economy to dependence on food imports because of the low productivity under organic cultivation it the initial years. But, critics have not considered the fact that despite repeated floods and famines in different parts of the country every year, Indian economy has the capacity to withstand any such crises and provide the food grains to the people of India for a minimum of two years. After the initial years under the organic cultivation the soil fertility is not only maintained but enhanced and hence, there will be increased yield.

Hence, the importance of agriculture in the Indian economy as Rangarajan says, 'a 1% increase in agriculture output tends to raise industrial production by 0.5% and augment national income by 0.7%'.

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Mergers and Acquisitions in India: A Trend Analysis and Forecasting

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Abstract: The corporate sector all over the world is restructuring its operations through inorganic growth with different types of consolidation strategies like mergers and acquisitions in order to face challenges posed by the new pattern of globalization, which has led to the greater integration of national and international markets. Mergers and Acquisitions are key forms of corporate restructuring. Over the last two decades, Mergers and Acquisitions (M&A)-related issues have drawn considerable interest from practitioners and academicians. There is massive literature available over developed economies but very not as much of studies exist in India. This paper is an explanatory attempt for examining the different studies that have been carried out in the field of global M&A. The study is based on secondary data of cases of mergers & acquisition in various geographies across global market. This research also aims to study the trend of M&A and future prospects of M&A in India. To gaze the status and competitiveness of M&A extensive literature review and desk research has been carried out .The results reveals that Indian markets have witnessed burgeoning trend in mergers which proves that Indian industries have already entered into the M&A process of value creation.

Keywords: Competitiveness, Globalization, Inorganic growth, Mergers & Acquisitions, Performance, profitability, Restructuring, Value Creation.

1.0 Introduction:

A merger is a transaction involving two or more corporations in which shareholding is exchanged and at the end one corporation exits. Merger is also defined as agreement between equals to pool their operations and create a new entity. Merger generally refers to a situation in which the assets and liabilities of two or more companies (merging company) are vested in another company (the merged company). The merging entity loses its identity and its shareholders become shareholders of the merged company. A merger is nothing but a mutually agreed decision for joint ownership between organisations.

An acquisition occurs when one firm deploys its capital resources, such as stock, debt, or cash, to buy another company. Under acquisition an organisation takes ownership of another organisation. Acquisition involves two parties that is acquiring company and acquired company.

- Acquiring company is a single existing company that purchases the majority of equity shares or ownership of acquired company.
- Acquired company is the company that surrenders the majority of their equity shares or ownership to an acquiring company.

Mergers and acquisitions emerged as one of the most effective methods of such corporate restructuring, and became an integral part of the long-term business strategy of corporates across cross borders. The mergers and acquisitions come into existence from the post independence period in India. The M&A has been taking a fundamental area of the corporate strategy and after the liberalization of 1991 has acquired a new dimension in the global economy. The major reasons of such M& A activity has been attributed to the enhancement of the market share, higher profitability and attainment of economies of scale.

Mergers and Acquisitions has been undergoing a sea change since liberalization in India. In Indian industry, the pace for mergers and acquisitions activity picked up in response to various economic reforms introduced by the Government of India since 1991, in its move towards liberalization and globalization. The Indian economy has undergone a major transformation and structural change following the economic reforms, and "size and competence" have become the focus of

business enterprises in India. Indian companies realised the need to grow and expand in businesses that they understood well, to face growing competition; several leading corporates have undertaken restructuring exercises to sell off non-core businesses, and to create stronger presence in their core areas of business interest.

2.0 Objectives:

i. To analyze & evaluate the different studies that has been carried out in the field of M&A globally.

ii. To study the global trends of M&A with special reference to Indian Companies.

iii. To analyze the progress and status of M&A in American region, European region, Asian region and African region with reference to the specific sectors.

iv. To identify the impact and future prospects of global M&A'S in Indian Industry.

3.0 Methodology:

This study is based on secondary data. Researcher has used various journals, research articles, newspapers, internet, books, e-books, reports by various Research Agencies (e.g. Bloomberg, CMIE, BCG), etc. for this study.

4.0 Review of Literature:

There is a substantial body of literature that examines the performance of M&A deals both for the acquiring firms and target firms. The following papers try to bring into focus the various inferences that have been drawn by the papers and enumerate the different schools of thoughts regarding the M&A activity.

Table No. 1 : A synthesis matrix organized by the key studies:

Sr. No	Author & Year of study	Purpose	Method	Sample	Inferences
1	Healy Palepu and Rubak (1990) titled, "Does corporate performance improve after mergers?"	To understand and analysis of impact of mergers on performance	Compared the operating performance through accounting data	50 major public industrial firms.	The industry adjusted results proved that there was an improvement in the post-merger performance, whereas the unadjusted results give a diametrically opposite view. The "industry related" has also been checked for any anomalies. There was evidence that the pension per employee had declined after the merger.
2	Seth, Song & Pettit, (2002) titled "Value creation and destruction in Cross-Border Acquisitions: An empirical analysis of foreign acquisitions of U.S. firms"	The investigation of the sources of gains in cross-border acquisitions wherein decision-making was taken to be a function of different behavioral assumptions.	The data was consistent with the expectation that multiple sources of value creation existed in synergistic cross-border acquisitions like asset sharing, reverse internalization of valuable intangible assets, and financial diversification.	All cross-border acquisitions of U.S. industrial corporations from 1981-90.	For value-destroying acquisitions it is observed that the data are consistent with only one of the sources of value destruction, i.e., risk reduction.Large relative size of the target to the bidder mitigates the negative effects of risk reduction.
3	Carline, Linn & Yadav (2003) titled "Can the stock market systematically make use of firm- and deal-specific factors when initially capitalizing the real gains from Mergers and Acquisitions?"	To study the impact of firm-specific and deal-specific factors on the change in industry-adjusted operating performance around corporate mergers and acquisitions.	The operating performance improvement through EBT (+ depreciation & goodwill + net interest income).	The sample taken is domestic UK mergers.	Mergers were associated with improvements in operating efficiency and the total abnormal revaluations of bidder/target pairs are both positive. Operating performance improvement depends on whether the merger was friendly or hostile.

Sr. No	Author & Year of study	Purpose	Method	Sample	Inferences
4	Beena(2004),titled "Towards understanding the merger – wave in the Indian corporate sector: A comparative perspective"	Understand the motives and implications of the merger wave in the second half of the nineties.	The performance has been measured in terms of price –cost margin, rate of return, shareholder's profit, debt-equity ratio, etc. The significance of their mean difference between pre and post-merger phase by using t-statistic.	115 actual mergers which accounts for 22% of the total number of M&As that occurred in the Indian manufacturing sector in the time frame of 1995-2000.	It has been observed that foreign –owned acquiring firms have been performing better than Indian owned acquiring firms. Also the return on shareholder's equity has increased after merger.
5	Chari, Ouimet & Tesar (2004) titled "Cross Border Mergers and Acquisitions in emerging markets"	The stock price reaction, an inherently ex-ante measure, to news of an acquisition as a summary statistic to capture the gains and losses from an acquisition.	International Mergers and Acquisitions database to identify merger and acquisition events in emerging markets over the period 1988-2003.	Data Stream and Bloomberg are the sources used for stock price information	The stock price reaction of acquiring and target firms to the announcement of an acquisition as a summary statistic for value creation through foreign acquisitions.
6	Ferrett (2005) titled "Greenfield investment versus Acquisition: Positive Analysis"	To explain the Greenfield/ acquisition choice by building a model where the form of FDI (Greenfield-FDI vs acquisition-FDI) is endogenously selected.	The three stylized facts about mergers-first, that acquirers, on average, lose money. Second, mergers concentrate in industries in which regime shifts can be identified and third mergers come in waves.	Select companies with green field investment and acquisitions	In industry structure (the size distribution of the firms in the industry) is an important factor for merger dynamics.
7	Baxamusa (2006) titled "Mergers That Create Value"	To know how the performance increases for the former. It documents the operating mechanisms that generate post-merger efficiencies.	Operating ratios of the combined firm pre and post-merger. The G index of acquirer and target is compared to combined firm.	The study included 423 acquisitions from 1994 to 1999	Post-merger performance of the firm is high if the corporate governance is higher+F10
8	Betrand, Hakkala and Norbäck (2007) titled "Cross-Border Acquisition or Greenfield Entry: Does it Matter for Affiliate R&D	Investigates empirically whether the choice of entry mode of FDI, that is M&A or Greenfield entry, is of importance for affiliate R&D activities.	Data is collected from Research Institute of Industrial Economics about Swedish multinational firms.	Swedish multinational firms and acquired affiliates.	Restricting cross-border acquisitions leads to a reduction in MNEs' technology transfers, gap in affiliate R&D performance by differe + F11nces in parent, affiliate and country characteristics.
9	Kumar and Rajib (2007) titled "Mergers and corporate performance in India: An empirical study	To capture the variations in the operating performance of the merged firms from 1995 to 2002.	Examine the abnormal returns to shareholders in the period surrounding the announcement date such activity.	The sample consists of 57 large mergers.	An efficient market capitalizes the value of any expected post restructuring improvement in the acquirer's performance at the takeover announcement date.
10	Beena(2008) "Trends and Perspectives on Corporate Mergers in Contemporary India"	Examine significant difference in the performance between pre- and post-merger phases	case study method-70% were horizontal M&As, 11 % were vertical M&As rest from conglomerate mergers.	acquiring firms during 1990-2005 under smanufacturing sector as a whole.	new economic environment has facilitated M&As betwe+F13en companies under domestic or foreign ownership.

Sr. No	Author & Year of study	Purpose	Method	Sample	Inferences
11	Mantravadi & Reddy (2008) titled "Type of Merger and Impact on Operating Performance: The Indian Experience"	to enumerate the method of mergers which improves the performance at the maximum.	The measures of performance are Operating profit margin, G.P. margin, N.P margin, RNW, ROCE, D/E ratio. Sample includes the listed companies at NSE/ BSE.	Sample includes the listed companies at NSE/ BSE.	Mergers do not improve the performance,the negative effects were greaterfor RNW and ROCE.The study suggested that horizontal mergers had caused the highest decline in the operating performance of the merging companies, followed by conglomerate and vertical mergers respectively.
12	Ramakrishnan (2008) titled "Long term post-merger performance of firms in India"	To validate if the long term post-merger performance of the firms improves.	The basis of performance is the operating cash flow-scaled by the assets, operating margin and sales turnover.	The select indian companies	On an average the merging firms have performed better in India as compared to their pre-merger performance. It says that the operating performance has improved due to the merger.
13	Saboo & Gopi (2009), titled "Comparison of post-merger performance of acquiring firms (India) involved in domestic and cross – border acquisitions"	To review the operating performance of firms advancing the M&As path for their expansion plans in the Indian corporate scenario post 2000.	firms advancing the M&As path for their expansion plans in the Indian corporate scenario post 2000.	The corporate merger between the sample period is 2000- 2007	The performances of the acquiring firms have been impacted negatively after the foreign merger. The decrease was observed when the results were analyzed for performance ratios of pre and post 1-year of merger and pre and post 2 –years of mergers.
14	Saraswathy (2010) titled "Cross-border mergers and acquisitions in India: extent, nature and structure"	To analyze merger wave in the overseas economies where the M&A is the favorite mode of corporate restructure as compared to Greenfield investment.	Service sector mergers with world FDI movement	Firm level data for identifying three distinct phases of merger activity of India.	From 1994 to 2007, there were 563 such deals of which the majority took place after 2000. A gradual shift from foreign investment to Brownfield investment can be observed which would eventually lead technology spillovers and thereby higher productivity and efficiency.
15	Paulo(2013) Mergers and Acquisitions: An Efficiency Evaluation	Evaluates the efficiency of M& A in Brazil among publicly-traded companies	Models with multiple objectives from Goal Programming and Data Envelopment Analysis (GPDEA), employing accounting indicators as input and output variables,	Few publicaly traded companies in Brazil	The cases investigated were proved to be effective with new application for multi-objective approach that can be used to assess mergers and acquisitions. GPDEA leads to a greater understanding of efficiency generation in synergy creation by means of M&A.
16	Neethu, Rajaesh (2015)titled, "A Study on Financial Performance of Companies Before and After M &A"	The impact of mergers and acquisitions on the monetary potency of the chosen producing firms in Republic of India.	To analyze financial performance, ratio analysis, standard deviation and 't' test are used as standard tools of research using CMIE	Sample includes consists of 10 merged manufacturing companies in India.	There is significant effect of merger and acquisition on the financial performance of selected units

Sr. No	Author & Year of study	Purpose	Method	Sample	Inferences
17	Dr Poonam Bassi (2015),A Study on impact of announcement of merger and acquisition on the valuation of the companies (with special reference to banks)	The impact of Merger and acquisition on the fundamental value of Acquirer bank	To examine the financial performance of merged companies five years before merger and five years after merger.	FIVE BANKS AS: HDFC, ICICI, SBI, IOB,IDBI	The event of merger and acquisition has positively affected the net worth, earning per share, return on capital employed

5.0 Global Scenario of M& A:

The corporate sector all over the world is restructuring its operations through different types of consolidation strategies like mergers and acquisitions in order to face challenges posed by the new pattern of globalization, which has led to the greater integration of national and international markets.

Global M&A volume up 23% from $732.8bn announced in first quarter of 2014 and the highest first quarter total since 2007 ($1.08tr)

5.1 Global Trends : Growth Trajectory of M& A from 2007-2014

- After a year that delivered the biggest global M&A volume since 2007 ($3.6 1tr announced in full year 2014), the first three months of 2015 got off to a strong start with $902.2bn, up 23% from $732.8bn announced in 1Q 2014 and the highest 1Q total since 2007 ($1.08tr).

- Healthcare was the top targeted sector with $126.5bn – only the sixth time that the sector has surpassed the $100.0bn mark during a quarter. Healthcare M&A revenue ($1.2bn) surpassed $1bn for the first quarter on record.

- Real Estate was the second most targeted sector with $113.0bn in 1Q 2015, the highest 1Q level since 2007 ($145.0bn). Technology ranked third by volume with $84.3bn, though led global M&A by activity (2,058 deals).

- The estimated $45.4bn merger of HJ Heinz and Kraft Foods Group (51%, 49%), was the largest transaction announced in 1Q 2015 and the third largest global Food & Beverage M&A deal announced on record.

- Global cross -border M&A volume totaled $315.2bn in 1Q 2015, up 54% on 1Q 2014 ($204.2bn) and the highest 1Q volume since 2007 ($357.9bn)The largest M& A transaction 2014 was the purchase of Time Warner Cable Inc by Comcast Corporation. This deal was signed in February 2014 and the transaction value amounted to 68.5 billion U.S. dollars. . The global value of M&A transactions in the Energy, Mining and Utilities sector amounted to 106.4 billion U.S. dollars in 2014.(fig: 2)

- Deal value expected to climb: Despite the large, headline grabbing deals, such as Face book's $19 billion acquisition of What's App, the market research for sees that the M&A environment will be dominated by smaller and middle market deals.

Table No. 2 : Top 10 Mergers and Acquisitions at a global level as on August 2013

Top 10 Mergers & Acquisitions globally				
Rank	**M&A Deal**	**Current name of acquirer**	**Value (in $ billion)**	**Announcement date**
1	America Online acquires Time Warner	Time Warner	186.2	01/10/2000
2	Vodafone Airtouch acquires Mannesmann	Vodafone Group	185.1	11/14/1999
3	Fortis, Banco Santander, Royal Bank of Scotland group acquires ABN Amro holding	Ageas, Banco Santander, Royal Bank of Scotland group	100.0	04/25/2007
4	Pfizer acquires Warner-Lambert	Pfizer	87.3	11/04/1999
5	AT&T acquires BellSouth	AT&T	83.1	03/05/2006
6	Exxon acquires Mobil	Exxon Mobil	80.3	12/01/1998
7	Royal Dutch Shell merges with Shell Transport & trading	Royal Dutch Shell	80.1	10/28/2004
8	Comcast acquires AT&T Broadband	Comcast	76.1	07/09/2001
9	Sanofi-Synthelabo acquires Aventis	Sanofi	73.5	01/26/2004
10	Glaxo Wellcome merges with SmithKline Beechap	GlaxoSmithKline	72.4	01/17/2000
Source: -http://www.bloomberg.com last updated on August 2013				

5.2 Overview of Regional M&A:

A. American M&A:

I. United States:

US targeted M&A reached $415.0bn in 1Q 2015, up 28% on 1Q 2014 volume of $324.6bn, and the highest first quarter total since 2007 ($430.7bn

- 15 $20bn+ US targeted M&A deals were announced between 2010-2013. In contrast, 12 $20bn+ deals have been announced since January 2014, with three of these deals announced in 1Q 2015

1. Healthcare led US targeted M&A with $104.1bn, the highest 1Q total since 2009 ($132.1bn). Healthcare M&A hit an annual record high of $326.1bn in 2014.

Case: The $21.0bn bid for Pharmacyclics by AbbVie, announced on March 4, 2015, is one of only nine $20bn+ healthcare M&A deals announced since 2010.

2. Food & Beverage ranked second for US targeted M&A with $54.3bn, the second highest 1Q level on record, behind $60.5bn in 1Q 2007

Case: The merger of HJ Heinz with Kraft Foods Group is the third largest Food & Beverage M&A deal announced on record globally. The top six deals include two Kraft Foods demergers – the spin-off from Altria Group in 2007 ($56.1bn) and subsequent split into two separate companies in 2012 ($36.7bn) – and the Berkshire Hathaway/3G Capital buyout of HJ Heinz ($27.5bn) in 2013

3. US cross-border M&A of $139.5bn was over double the total in 1Q 2014 ($68.6bn) and accounted for 44% of global cross-border M&A, up from 34% in 1Q 2014

- Inbound volume reached $82.1bn, highest 1Q total since 1999 ($118.6bn), led by NXP Semiconductors' $16.7bn bid for Free scale Semiconductors, the largest inbound M&A deal in the US Technology sector on record.

II. Canada

Canada targeted M&A reached $14.2bn in 2015, the lowest 1Q level since 2003 ($11.2bn). Healthcare led with $4.0bn, up from $888m announced in 1Q 2014. Oil & Gas M&A

volume dropped to $3.3bn from $8.0bn in 1Q 2014.

III. Latin America

- Latin America targeted M&A volume of $18.4bn in 1Q 2015 was down 22% on 1Q 2014 ($23.6bn) although up from $18.3bn announced in 1Q 2013
- Brazil M&A volume of $9.2bn was down 27% year-on-year.

B. Asia Pacific (ex Japan) :

Its targeted M&A volume reached $200.6bn in 1Q 2015, up 41% year-on-year and the highest 1Q volume on record

- The $41.0bn reorganization of Cheung Kong / Hutchison Whampoa into CK Hutchison Holdings and Cheung Kong Property Holdings is the largest M&A transaction announced in the region on record
- 27 $1bn+ deals were announced in 1Q 2015 for a combined total of $111.4bn, the highest quarterly volume on record, surpassing the previous high of $84.7bn in 4Q 2006. $1bn+ deals accounted for a record high 56% share of total Asia Pacific (ex Japan) M&A volume
- China was the top targeted nation in the region with a record 1Q high of $88.6bn in 2015, up 63% on the $54.4bn announced in 1Q 2014.
- 14 $1bn+ China targeted deals were announced for a total of $37.9bn. The $10.4bn bid for a 19.7% stake in CITIC by Itochu Corp and CP Group, is in line to be the largest cross-border China targeted M&A deal on record
- Australia was the third most targeted country in Asia Pacific (ex Japan) by deal volume, with $19.3bn in 1Q 2015, up 13% from 1Q 2014 ($17.1bn) and the highest 1Q volume since 2011 ($23.2bn)
- Southeast Asia targeted M&A volume of $19.5bn was up 8% compared to 1Q 2014 ($18.1bn), the highest 1Q level since 2010 ($19.9bn). Real Estate was the top targeted sector in the region with $6.1bn in 1Q 2015
- Asia Pacific (ex Japan) outbound volume totaled a 1Q record high of $51.8bn in 2015, led by Hutchison Whampoa's pending $15.5bn bid for O2 UK, the second largest Asia Pacific (ex Japan) outbound M&A deal on record

C. Japan :

- Japan targeted M&A volume totaled $14.7bn in 1Q 2015, down 19% on 1Q 2014 ($18.3bn) and the lowest 1Q volume since 2002 ($11.7bn)
- o Domestic volume of $13.4bn was at the lowest 1Q level since 2002 ($10.9bn). In contrast, outbound M&A reached $41.1bn, the highest 1Q level on record
- o Japan Post Holdings' $6.4bn pending acquisition of Toll Holdings is the largest Japanese acquisition announced of an Australian target on record and the second largest Japan outbound M&A deal in 1Q 2015

D. Europe:

- Europe targeted M&A reached $217.5bn in 1Q 2015, up from $193.0bn in 1Q 2014 and the highest 1Q level since 2011 ($222.0bn)
- European targeted cross-border M&A totaled $162.3bn, the highest 1Q level since 2008 ($168.8bn). Intra-Europe M&A volume stood at $101.7bn, the lowest 1Q volume since 1998 ($98.5bn) and down 39% from 1Q 2014 ($167.1bn).
- UK was the top targeted European nation with $72.7bn announced in 1Q 2015, the highest 1Q volume since 2008 ($91.8bn). Cross-border acquirors ($59.0bn) accounted for 81% of UK targeted volume.
- Hutchison Whampoa's pending $15.5bn bid of O2 UK is the largest UK targeted deal by a Hong Kong acquiror on record, and the largest Europe targeted M&A deal announced in 1Q 2015.
- Ball Corp's (US) pending $8.5bn acquisition of Rexam, announced on February 5, is the fourth largest European Metal & Steel deal on record.
- Construction volume was led by CRH's $7.3bn pending acquisition of Lafarge and Holcim's assets in Europe and other countries, in what is the fourth largest Europe targeted deal announced in 1Q 2015.

E. Middle East and Africa:

- Middle East targeted M&A stood at $6.3bn in 1Q 2015, the highest 1Q volume since 2011 ($9.4bn) and more than double the $2.9bn announced in 1Q 2014.
- ENOC's pending $1.7bn acquisition for the remaining 46% stake in Dragon Oil (UAE), announced on March 17, is in line to be the largest Middle East targeted Oil & Gas M&A deal on record.
- Africa targeted M&A totaled $8.1bn in 1Q 2015, up on $4.5bn in 1Q 2014.
- OCI NV's $1.6bn acquisition for 23% stake in Orascom Construction Industries SAE – OCI is the largest Africa targeted M&A deal in 1Q 2015.

5.3 Mergers and Acquisitions in India

Total number of merger and acquisition (M&A) deals of Indian companies in 2014 rose to 1,177 – valuing at about USD 50 billion – the highest ever in a decade and the momentum is set to pick even higher this year. M&A deals contributed close to USD 38 billion from 573 deals and Private Equity (PE) deals contributed USD 12 billion from 604 deals. E-commerce within the Information & Technology (IT) space was the major contributor for PE investments with about USD 4 billion being raised from over 100 deals.

Table No. 3: Detail of M&A'S Deals Both in Terms of Value and Volume

Deal Summary	Volume			Value (US$MN)		
Year	2011	2012	2013	2011	2012	2013
Domestic	216	234	220	5036	6078	5749
Cross Border	288	262	221	39,577	14,507	17891
Mergers & Internal Restructuring	140	102	59	-	14799	4546
Total M&A	644	598	500	44613	35384	28186
Private Equity	373	401	450	8751	7378	10392
GRAND TOTAL	1017	999	950	53,363	42,761	38,578

Source: Annual Report of Ministry of External Affairs.

Table No. 4 : Top Acquisitions Made by Indian Companies Worldwide(2007-2014)

Acquired Company	Acquirer	Deal Amount	Date of Deal
Corus Group (U.K.)	Tata Steel	U.S. $12.11 billion	January 31,2007
Zain Africa	Bharti Airtel	$10.7 billion	February, 2010
Novelis (U.S.)	Hindalco Industries	U.S. $6 billion	Feb 11, 2007
Jaguar Cars and Land Rover (U.K.)	Tata Motors	U.S. $ 2.3 billion	2008
Honiton Energy Holdings (China)	Tanti group	U.S. $2 billion	April, 2010
Abbot Point Coal Terminal (Australia)	Adani Enterprises	$2-billion	May, 2011
Algoma Steel (Canada)	Essar Steel Global	$1.85 billion	April, 2007
Marcellus Shale (U.S.)	Reliance Industries	$1.7 billion	April, 2010
Minnesota Steel (U.S.)	Essar Steel Holdings	$1.65 billion	April, 2007
Oil & Gas Assets (Kashagan oilfield)	ONGC	$5 billion	November, 2012
Port Terminals (Abbot Point X 50 Coal Terminal)	Australia Adani Enterprises	$1.97 billion	May, 2011
Orient- Express Hotels (Bermuda)	Indian Hotels Co	$1.67 billion	October, 2012
Oil & Gas Assets (Eagle Ford shale gas field) (United States)	Reliance Industries	$1.35 billion	June, 2010
Myntra	Flipkart	$300 million	May 2014

Source: Annual Report of Ministry of External Affairs.

5.4 Cross Border M&A in India: The Latest Trends

The new Government's intent to revitalize the Indian economy positively affected business environment. Indian companies were more open and aggressive in acquisitions post elections. At the same time, some companies divested their assets to raise cash for repaying debt and reducing their interest costs.

Table No. 5 :Top 10 deals of M&A 2014

Geography	Date	Target	Target Country	Acquiror	Acquiror Country	Value (US$ Million)	Sector
Domestic	Apr	Ranbaxy Laboratories Ltd	India	Sun Pharmaceutical Industries Ltd	India	3,226	Pharmaceuticals
Domestic	Nov	Ing Vysya bank Ltd.	India	Kotak Mahindra bank Ltd.	India	2,400	Banking
Inbound	Apr	United Spirits Ltd	India	Diageo PLC	UK	1,901	Retail and consumer products
Domestic	Sep	Himachal Baspa Power Co Ltd	India	JSW Energy Ltd.	India	1,572	Infrastructure
Inbound	Nov	Bharti Airtel's Nigeria-based telecom towers	India	American Tower corp	US	1,050	Tele communications
Domestic	Aug	Udupi Power CorpLtd	India	Adani Power Ltd	India	982	Infrastructure
Domestic	May	Dhamra Port Co Ltd	India	Adani Ports & Special Economic Zone Ltd	India	925	Infrastructure
Domestic	Dec	Jaiprakash Associates Ltd's two cement plants	India	UltraTech Cement Ltd	India	847	Cement and building products
Inbound	May	United Spirits Ltd's UK-based subsidiary Whyte & Mackay Ltd	India	Alliance Global Group Inc	Philippines	725	Retail and consumer products
Domestic	May	Network 18 Media & Investments Ltd	India	Reliance Industries Ltd	India	680	Media and entertainment

Source: EY Analysis of Thomson One Data

5.5 Inbound activity witnesses positive momentum:

The inbound activity registered a 27% increase in the number of deals to 257 from 203 during the last year. Foreign players continued to buy/ increase stake in the Indian companies to establish/ increase their presence in India. These companies were further attracted by the newly elected Government's intent to foster a more benign investment climate in the country for international players. While inbound transactions increased in volume, their value was relatively smaller in size.

Consequently, the cumulative deal value of inbound deals declined to US$10.4 billion from US$13.7 billion seen in the previous year.

Table No. 5 :The Geographical Distribution of Deals

	2013		2014	
	Count Value	**(US$ million)**	**Count Value**	**(US$ million)**
Domestic	437 6	179 494 16	212	437 6
Inbound	203 13	747 257 10	402	203 13
Outbound	102 7	068 119 2	005	102 7
Total	**742 26**	**995 870 28**	**620**	**742 26**

Source:EY Analysis of Thomas One Data

i. The US was the most active cross-border partner, followed by Japan, UK, Germany and France. The US was the most active cross-border partner. Companies from the US were the most prominent with regard to cross-border transactions involving Indian players. They were involved as acquirers in 71 inbound deals worth US$1.5 billion and targets in 38 outbound deals worth US $ 1billion.

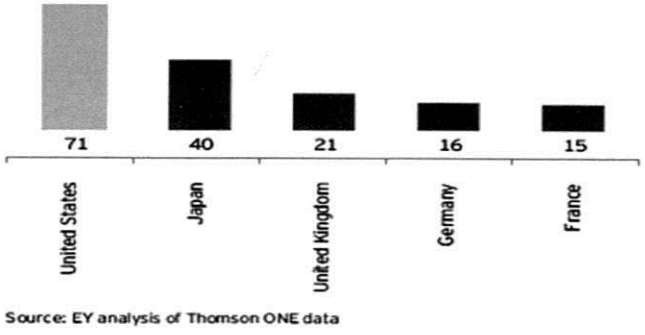


Figure:1 India's cross border Partners

ii. By value, infrastructure was at the forefront, followed by pharmaceutical, and retail and consumer products.

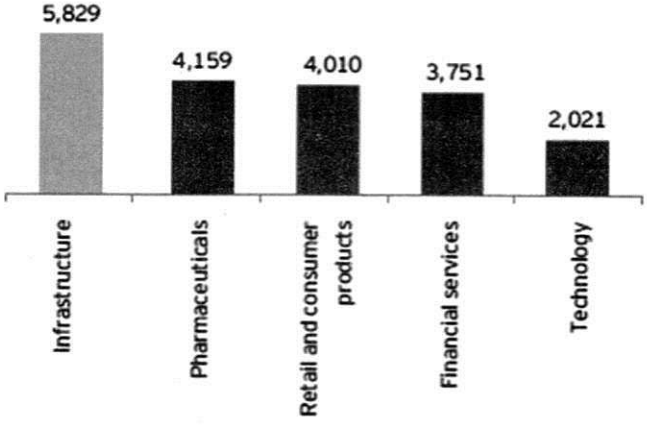
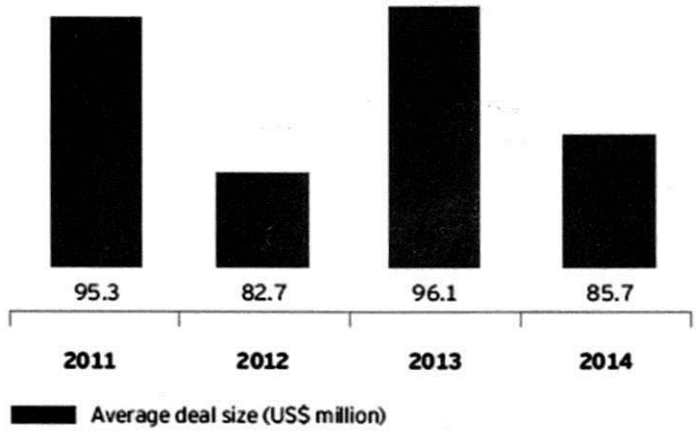


Figure: 2 Value deals –Sector wise

iii. Average size of domestic deals more than doubled to US$87 million in FY14 from US$39 million last year. M&A activity continued to be driven by small- and mid-market deals.



Source: EY analysis of Thomson ONE data

Figure: 3 Average size of deals

6.0 Future Prospects of Cross Border M&A In India:

With the increasing number of Indian companies opting for mergers and acquisitions, India is now one of the leading nations in the world in terms of mergers and acquisitions. 2014 has been an encouraging year for India's business environment, as well as the M&A landscape. After experiencing a long period of lull, the Indian economy seems set towards accelerated growth.

i. The newly-found business optimism, on the back of strong macroeconomic fundamentals, a stable government at the helm and an improved pace of economic reforms, is expected to continue through 2015 and drive M&A activity.

ii. Inbound M&A activity is expected to rise further .The Indian Government's move to strengthen ties with other key economies, such as the US, China, Japan and Australia, is expected to boost bilateral trade and create opportunities for inbound investments.

iii. Among the different Indian sectors that have resorted to mergers and acquisitions in recent times, telecom, finance, FMCG, construction materials, automobile industry and steel industry are worth mentioning.

iv. The "Make-in-India" campaign is envisioned to reignite growth in Indian manufacturing sector.. The Government's focus to speed-up project approvals and improve ease of doing business in the country have uplifted the morale of corporate leaders. Furthermore, clearance of pending reforms related to land acquisition bill and GST, coupled with the recently concluded coal block auctions would further boost investor sentiment.

v. On domestic front last year are likely to continue in 2015. Sectors like healthcare, pharmaceuticals and retail & consumer products are likely to witness a wave of consolidation in 2015 as companies, driven with the need to generate high growth are eyeing opportunities to strengthen market presence and add revenue streams.

vi. Outbound activity by Indian Companies recorded an improvement last year in terms of volume and is expected to remain stable in 2015. Companies in sectors like technology, automotive and pharmaceuticals will continue to assess the acquisition opportunities overseas. However, historically active sectors for outbound transactions such as oil & gas and mining are expected to see subdued activity..

Table No. 6. Proposed Major M&A deals yet to conclude

S.No.	Name of the Acquirer	Expected Deal Size	Target Company	Type	Industry
1	Amazon.com	1.2B USD	Jabong.com	Inbound	e-commerce
2	Adani Power	680M USD	Korba West Power Co Ltd	Domestic	Power
3	Tech Mahindra	240M	Lightbridge Communications Corporation	Outbound	Information Technology
4	Balaji Telefilms	N.A.	Marinating Films	Domestic	Media & Entertainment
5	Majesco Inc (US arm of Mastek Ltd.)	N.A.	. Marinating Films	Outbound	Information Technology
6	Nihon Nohyaku	N.A.	Hyderabad Chemicals Ltd	Inbound	Chemicals
7	Pricol Limited	N.A.	Mellin do Brazil	Outbound	Auto Component
8	Tata Power	N.A.	Ideal Energy Projects	Domestic	Power
9	Birla Corporation Limited	N.A	Lafarge India Private Limited	Outbound	Cement

(Compilation of information from various sources by Researcher)

7.0 Conclusion:

Globally, acquisition of Arcelor by Mittal Steels, Daewoo Trucks by Tata motors and domestically acquisition of Air Sahara by Jet Airways further emphasizes that companies are aiming to foster the synergies by economies of scale apart from other criterion such as gaining new market, maintaining existing share, etc. M&As have been found to be beneficial in the sense that Indian companies grew in size, and attain better market share which is substantiated by empirical analysis.

Further, it has been observed that M&As in India are strategic in nature that motives range from growth and expansion to high quality of human resources, strong brand presence and global identity and leadership. To remain ahead of competitors, business leaders need to have a global vision, be pro-active, able to take calculated risk and initiate and manage acquisition and consolidation process smoothly.

Large Indian companies are going through a phase of growth as all are exploring growth potential in foreign markets and on the other end even international companies is targeting Indian companies for growth and expansion. Some of the major factors resulting in this sudden growth of merger and acquisition deal in India are favorable government policies, excess of capital flow, economic stability, corporate investments, and dynamic attitude of Indian companies. Therefore, it is good time for business houses and corporate to watch the Indian market going global, and grab the opportunity.

M&As have been found to be beneficial in the sense that Indian companies grew in size, and attain better market share which is substantiated by empirical analysis. Throughout the period of study, turnover increased after the companies experienced an M&A.

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Reducing Channel Members in Agribusiness Industries : An Effective Tool for a Win-Win Situation

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Abstract: Distribution of agricultural products from farmers to customers has been a continual challenge in agribusiness industries. Over the years a relatively traditional system has evolved into a more complex distribution network that includes farmers, consolidators, commission agents, trader, wholesalers, retailers and the customers. A number of factors are forcing the traditional distribution system to be substantially restructured and reconfigured.

This paper will throw a light on how increased number of channel members in traditional distribution channel reduces the profit margin to the farmer, how the middle men makes money and how the product price increases till the time it reaches to final consumer. In developed countries the number of channel members is very less as compared to countries like India; therefore the farmers and the final consumers both are getting maximum benefits.

This paper explains the feasibility of the different distribution channel alternatives and how might one make intelligent distribution channel choices in this increasingly competitive business environment.

Keywords: Agribusiness distribution, Distribution channels, Channels in agricultural products, Distribution strategy, Marketing intermediaries in agribusiness.

1.0 Introduction:

In the developed countries, agribusiness is defined as the total output arising from farm production and product processing at both pre and post farm gate levels. In developing countries like India, the agribusiness sector encompasses four distinct subsectors, viz. agricultural inputs; agricultural production; agro-processing; and marketing and trade. All these add value or utility to the goods. Agribusiness is emerging as a specialized branch of knowledge in the field of management sciences. In this context, agribusiness can be defined as science and practice of activities, with backward and forward linkages, related to production, processing, marketing, trade and distribution of raw and processed food, feed and fiber, including supply of inputs and services for these activities.

Marketing channels for agricultural products vary from product to product, country to country, lot to lot and time to time. For example, marketing channels for fruits are different from those of food grains. Packaging plays a crucial role in the marketing of fruits. Most farmers or producers, perform one or more marketing functions. They sell the surplus either in the village or in the market. Some farmers especially the large ones, assemble the product of small farmers, transport it to the nearby market, sell it there and make a profit.

1.1 Traditional system of distribution in India:

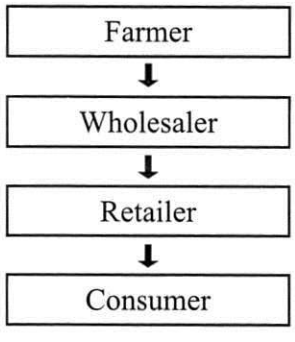
According to Pankaj Kapoor (2001), the traditional system of distribution of agricultural products which is generally followed in India is shown in the following flow chart.

In the traditional distribution system of agricultural products, the farmer generally sells it to the nearby consolidator who assembles the products of small farmers at very marginal prices who sells it to the commission merchant at a better price in which he has purchased from farmers. Then the commission merchant sells all these products purchased from different consolidators to the trader in the market again at a better price. Similarly the trader sells all these products to a wholesaler which he has purchased from different commission merchants with a better profit margin. Finally the retailer purchases these products from the wholesalers to sell them with the real and final consumer to earn the profits.

Hence we have seen that the product has to cross five levels to reach to the real and final consumers. All the marketing intermediaries from consolidator to the retailer are earning huge profits and making money through these transactions. At each level the price of the product is increasing gradually and when it reaches in the hands of the consumer it becomes very costly for them. In these transactions the ultimate loser is the farmer whereas the sufferer is the consumer.

1.2 Distribution system in developed countries:

The distribution system of agricultural products which is generally followed and which is also described by Pankaj Kapoor (2009) in developed countries is shown in the following flow chart.



In the distribution system of developed countries, the product has to pass through only two channel members to reach to the final consumer. In this system, the farmers sell their products to the distributors of the agricultural products at marginal prices. Then the distributors sell all these products collected by different farmers to retailers at a better price in which he purchased from farmers. And then the retailer sells it to the real and final consumers to earn the profits.

1.3 Issues and problems in the present distribution system:

The problems and issues which we can find in the above mentioned two systems of distribution of agricultural products are enumerated below.

- The price of the product is increasing as the number of level in the marketing channel increases.
- Delay of products in reaching to the final consumer.
- Perishability of the product comes into picture specially in case of fruits and vegetables.
- Farmer is the ultimate loser who is not getting actual benefits by selling his products through this system.
- Consumer is the sufferer who has to pay a huge amount to purchase the products of his daily needs.

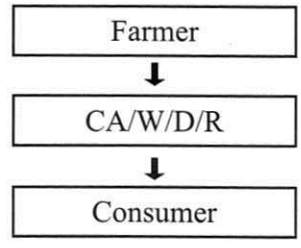
2.0 Proposed channel alternatives:

After keeping in mind about the issues and problems in the present distribution system of agricultural products, the author recommends two alternative channels of distribution for agricultural products which are as follows.

1. One level channel
2. Zero level channel

2.1 One level channel of distribution:

The flow chart for the proposed one level channel of distribution of agricultural products is as follows.



In this type of channel of distribution for agricultural products, there is only one marketing intermediary who may be a commission agent or distributor or wholesaler or a retailer. In this type of distribution system the farmer sells his products to the only marketing intermediary present in the market at some what better prices as compared to the distribution system which were discussed above.

2.1.1 Examples of one level channel:

The following are some of the examples of the one level channel of distribution of agricultural products introduced in India.

i) Mother Dairy booths:

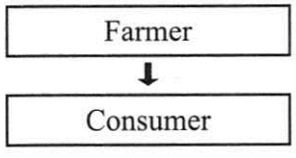
Mother Dairy basically handling milk in Delhi, was asked to try its hand in retail vegetable marketing by direct purchasing vegetables from farmers. Mother Dairy management has opened retail outlets in almost all important colonies of Delhi for providing vegetables to the consumers at reasonable prices.

ii) Apni Mandi / Kisan Mandi:

An innovative concept of 'Apni mandi' was introduced in Punjab by the Punjab Mandi Board at Chandigarh in February, 1987. Apni Mandi also called as 'Kisan Mandi', is different from the traditional Mandi, where the produce moves to the buyer through either a commission agent or trader. In Apni Mandi, farmers sell their produce directly to the consumers without involvement of the middlemen.

2.2 Zero level channel:

The flow chart for the proposed zero level channel of distribution of agricultural products is as follows.



In this type of distribution channel of agricultural products, there is no marketing intermediary between farmers and consumers. The farmers can sell their products directly to the final consumers and can enjoy maximum profits.

2.2.1 Examples of zero level channel:

The following are some of the examples of the zero level channel of distribution of agricultural products introduced in India.

i) Hadapsar vegetable market:

Hadapsar vegetable market is a model market for direct marketing of vegetables in Pune city. This is one of the ideal markets in the country for marketing of vegetables. In this market there are no commission agents or middlemen between farmer and consumer. Buyers purchase vegetables in lots of 100 Kilograms or 100 numbers.

ii) Rythu Bazars:

Rythu Bazars have been established on 26th January 1999 in the major cities of Andhra Pradesh state with the prime objective to provide direct link between farmers and consumers in the marketing activity of fruits, vegetables and other essential food items. Both producers and consumers are benefitted from Rythu Bazars as producer's share in the consumers rupee is more by 15 to 40 percent and consumers get fresh vegetables, fruits and food items at 20 to 35 percent less prices than the prevailing prices in nearby markets.

iii) E-Choupal:

Choupal is a Hindi word which means "village meeting place". E-choupal is a virtual market place innovated by ITC Ltd. where farmers can transact directly with a processor and can realize better price for their produce. E-choupal has the advantages of the market but spans very large varieties of vendors and customers. Geographical distances do not restrict participation in the E-choupal. The main disadvantage of conventional market is that information asymmetry is inherent in the market whereas E-choupal provides for transparent transactions. This enables the participation of smaller as well as larger players. Elimination of some layers of intermediaries allows for larger share of profits to reach the lower end of value chain.

iv) Uzhavar Sandies:

Uzhavar Sandies (Farmers' market) were established in selected municipal and panchayat areas of the Tamil Nadu by the state

government. In these markets, farmers enjoy better marketing infrastructure free of cost and also receive considerably higher prices for the products than what they use to receive from middlemen at village or primary markets of towns.

v) Shetkari Bazars:

On the lines of farmers markets in other states, the Shetkari Bazars were established in the state of Maharashtra for the marketing of fruits and vegetables. The Shetkari Bazar, by eliminating marketing intermediaries, links producers directly to the consumers, reduces price-spread (margin of intermediaries) and enhances producer's share in consumer's rupee.

vi) Krushak Bazars:

Government of Orissa has taken a programme of establishing Krushak Bazars in the state of Orissa in the year 2000-01 with the purpose to empower farmers to compete effectively in the open market to get a remunerative price for his produce and to ensure products at affordable prices to the consumers.

3.0 Findings:

By comparing the traditional channels with the proposed channels, the author feels that the proposed channels are far better than the traditional channels in a number of ways as follows.

- As the number of marketing intermediary is one or absent, the price of produce is not adversely affected.
- Delay of products in reaching to the final consumer and Perishability is avoided.
- Farmers will get maximum benefit by selling their produce at better prices, at the same time consumers will buy their needs at reasonable prices.

As both one level and zero level channels are equally good, the farmers can sell their produce according to the availability and convenience in their own locality.

4.0 Recommendations:

i) Awareness:

Majority of the farmers as well as consumers are not aware about availability of such kind of markets. Therefore the government should create awareness among farmers as well as in consumers about it.

ii) More markets:

All the state governments should take necessary actions about introducing these kinds of markets on taluka levels for the benefit of farmers and consumers and in turn for the development of the nation.

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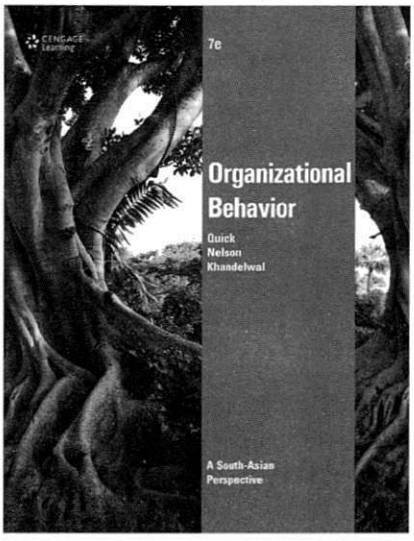
BOOK REVIEW



Organizational Behavior, A South – Asian Perspective, 7th Edition.

James Campbell Quick
Debra L. Nelson
Preetam Khandelwal

Cengage Learning India Pvt. Ltd.,
418, F.I.E., Patparganj, Delhi 110092,

Year of Publication : 2013

ISBN-13:978-81-315-1852-6
ISBN-10:81-315-1852-3

This book, Organizational Behavior: A South – Asian Perspective, 7th edition, gives special focus on South Asia. It studies individual and group processes in the industrial set up. The book studies the impact of individual on the organisation and vice versa. The book has been divided into four parts to discuss the two-way relationship and its outcomes.

The first part of the book introduces the concept of organizational behavior and discusses the challenges for managers. The second part discusses the individual processes in the organizational environment. It focuses on personality, perception, attribution, attitudes, emotions, motivation, stress, well-being and so on. The reader can visualize organizational environment and take an inside-out approach while going through this part. The third part is about inter-personal processes and behavior, which helps reader to take the outside-in route while studying the OB.This part discusses such themes as communication, teams, power, political behavior, leadership, conflicts etc. The last fourth part of the book consists of intrapersonal and interpersonal processes in a formal organizational structure. It throws light on design of work, organizational design, organizational culture and issue of change management, among the other related concepts.

The edition contains features like- The Real World, Science, You, Diversity Dialogue, Ethical Dilemma, and Experiential Exercises. These features help students to understand the concept, theories and facts. Students find this type of features valuable and stimulating. The book contains new cases also at the end. These cases are based on the South –Asian experiences, especially Indian experiences. The book contains conceptual as well as practical aspects of the organizational behavior.

Many real world examples are taken from variety of organizations- business, not-for- profit, large and small, private and public sector- for explaining the basic concepts of OB. This feature is a important feature throughout the book. They provide management practices implemented in South Asian and Indian organizations. Many examples relate to the leading corporate houses, such as the Tata Group, Aditya Birla Group, Bajaj Group, ITC, Infosys, WIPRO, and public sector companies such as NTPC.

The special features are designed to

enhance the application of the theory and research in practice to stimulate interest of students. Each chapter contains Science features. "Science" refers to the broad and deep research roots of the discipline. The "The Real World" reflects what is going on in the organisations. Short case studies and examples are given within the chapters. Longer cases are given at the end of the chapters. Some select Indian cases are given at the end of the book.

Experiential exercises at the end of the chapters offer opportunities to develop interpersonal and teamwork skills, and the questionnaires provided in the features "You" within the chapters help the readers get feedback on important aspects of the topics and learn more about them.

Students need help in developing their oral and written communication skills. Discussion and communication questions are included at the end of the each chapter for practice.

An extensive chapter-by-chapter reference list is given under each chapter at the end of the book for an in-depth study of topics. Thus this book is a good reference book as well as text book useful to researchers and academicians. The book is based on contemporary and classic research literature. Most of the Indian references are of the recent origin.

By giving examples of actual organizational practices throughout the book, an attempt has been made to make the text more interesting and thought provoking. The subject OB has brought to the life for the target audience.

This text through a comprehensive and adequate coverage of each topic and up-to-date research base as well as the national and international real examples, would empower students to succeed in the ever-changing world of work.

The authors are experts in their fields. Dr. James Quick is professor of OB in the University of Texas. Dr. Debra Nelson is professor of management in Oklahoma State University . She has written 90 plus journal articles. Dr. Preetam Khandelwal is an associate professor of organizational behavior in faculty of management studies, University of Delhi. She has immense experience of designing, developing, and conducting management education programs in all types of organizations.

Dr. B. T. Bandgar
CSIBER, Kolhapur.

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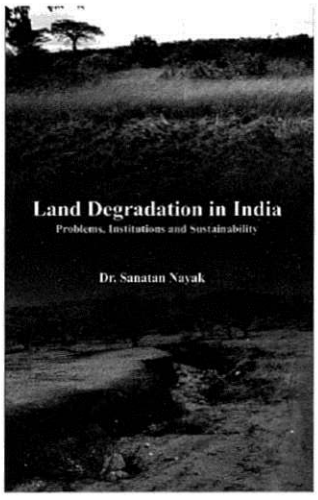

Land Degradation in India: Problems, Institutions and Sustainability

Dr. Sanatan Nayak

Abhijeet Publications, New Delhi, 2014, ISBN: 978-93-5074-152-8. Pp 266. Hardback, Rs. 1250.

Land degradation is a serious problem which affects not only the natural resources but also causes for the different kinds of natural disasters. Land degradation occurs due to water erosion, waterlogging, salinisation, deforestation, excess use of chemical fertilizers and pesticides and many other direct and indirect causes. The book, "Land Degradation in India: Problems, Institutions and Sustainability" makes a valuable contribution to the literature on the issue. The main objective of the book is to assess the impacts of sodic / alkaline land on cropping pattern, productivity, employment opportunities and income of the people. For this purpose the book makes an attempt to understand the sustainability of socio-economic conditions of the people living in the fragile regions of sodic reclaimed villages in Uttar Pradesh. The book examines the issue in an organized manner.

The book consists of eight chapters. The first two chapters highlight the macro level land degradation and pattern of change of land use. The third chapter provides the background of the study. Chapter four is based on primary data. In the fifth chapter the author tries to estimate the incidence of poverty under different environmental conditions. Chapter six describes the linkages of adoption of participatory model and its outcome. Chapter seven highlights on sustainability of reclamation and factors for poverty alleviation. Chapter eight deal with major finding and recommendations for policy implications.

The first chapter 'Land Degradation in India: A Macro Revelation' brings up the different approaches, issues, causes and classification of land degradation at national and state level. It also makes an attempt to measure the extent and dimension of land degradation and finds that instability is highest under current fallow lands due to variation in rainfall, as most of the areas are under rainfed at all India level. Chapter two of the book, 'Agriculture and Environment: State and Regional Level Analysis in Uttar Pradesh' deals with analyzing the factors responsible for agricultural growth and economic development in various regions of Uttar Pradesh. Development of an economy depends on agricultural sector which is affected by economic factors such as occupational pattern, land holding size; ecological factors, i.e., rain fall, temperature and some social and institutional factors. The chapter points out that the deceleration of agricultural growth in recent year at all India level as well as Uttar Pradesh due to instability and decline of average rainfall and some other social and economic factors.

The chapter 'An Introduction to Sustainable Livelihood' deals with analyzing the theoretical review of sustainable livelihood. A livelihood comprises the capabilities, assets

and activities required for a means of living. The author points out that there is no unified approach for sustainable livelihood concept. It also provides the socio, economic and agricultural profile of the survey households. Chapter four 'Land Reclamation and Agriculture: An Economic Analysis' is about the changing scenario of the cropping pattern, intensity, production, productivity, net gain under reclaimed condition to that of non-reclaimed conditions. The author observed that there has been substantial increase of intensity of crops and per-acre productivity in reclaimed land over the non-reclaimed land in the villages. However, the productivity of the reclaimed land for various crops has been still lower than the productivity of normal land. In this book it is argued that there is very strong positive relationship between extent of investment and firm sizes.

The fifth chapter 'Environmental Degradation and Poverty: The Linkages' provides the classical and mainstream views on poverty. According to the classical school of thought poverty is a major cause for environmental degradation, while mainstream economists argue that the demographic, cultural and institutional factors play important role for poverty and land degradation. The study finds that incidence of poverty is 31.46 percent; however, there is marginal difference of poverty incidence in reclaimed and non-reclaimed households. It can be concluded that incidence of poverty is highest in non-reclaimed SCs and marginal farmers.

In the chapter six entitled 'Dynamics of Participatory Model' the author has highlighted the theoretical origin of participatory approach and its application in real life. The author empirically examines the impact of knowledge on participatory model of reclamation and its sustainability on sampled households. Chapter seven of the book 'Sustainability of Reclamation and Factors of Poverty Alleviation' highlights the sustainability which basically emphasizes to maintain the quality of soil after reclamation. For this purpose soil samples were collected and results reveal that substantial proportion of samples are coming under the sodic category followed by normal and acidic category. The sustainability of the sodic land has been assessed by looking into the existence of extent of patches and its dimensions. In this chapter, the author also examines empirically the poverty alleviation. The logistic regression model has estimated the likelihood of the factors influence on poverty alleviation in reclaimed households and to avoid multi-collineority problem and hugeness in logistic regression among the factors on awareness development, Principal Component Analysis (PCA) used and developed three indexes, i.e., index of participation, technology and institutions. It is observed that educational qualification and caste of the family played significant role for promoting the household to reach above poverty line. The author concludes that the index of participation, technology and institution helped to reduce poverty as it corroborate with theoretical linkage.

The last chapter of this book provides conclusions and policy recommendations based on the analysis carried out in the previous chapters. The author recommends that most of the landless, marginal and small farmers should be included in reclamation process and subsidized water can help them for higher and sustainable production. Marginal and small farmers should be provided gypsum at total free of costs. The book is written in a very readable style. It has depicted the situation of land degradation in a very systematic manner. This book is useful to researchers, academicians, policymakers and others interested in agriculture as it is based on field study and portrays the problem of land degradation precisely in parts of the country.

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Cummins, Thomas G. & Huse, Edger E. (1998) Organisational Development and Change. West Publishing Company, St. Paul, New York.

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