<u>Integrating Corporate Social Responsibility Initiatives of Agro-Based Industries with Sustainable Rural</u> Development in India"

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Abstract

There is very strong and positive relationship between development of Agro-based industries, rural area and conservation of natural resources. For uninterrupted supply of good quality of raw material agro-based industries solely depend on rural area/agricultural production. Therefore it is imperative on the part of agro-industries to invest on rural development and integrate their Corporate Social Responsibility(CSR) initiatives for improving skill of farmers for producing good quality and required quantity of raw material, development of infrastructure for quick transport of raw material and conservation of environment for sustainable development of industry and rural economy.

It was observed that 25.7 and13.7 percent population is living below poverty line in rural and urban area respectively (Planning Commission's Report, 2013-14). Companies Act 2013, Section 135 states that each business organization with net profit of INR 5 crore or more should invest 2% of their average net profit in the previous three years on CSR activities. Therefore, it is imperative that agro based industries should integrate their CSR activities for sustainable rural development because their survival depends on sustainable development in agriculture, conservation of natural resources and finally on sustainable rural development.

Keeping these facts into consideration a study was conducted to find out certain success stories of integrating CSR of agro-based industries for sustainable rural development. To have a deep insight into the problems and opportunities related to rural development comprehensive review of available literature was done. In this paper an attempt has been made to demonstrate the ways and means how some leading Agro-based industries are helping various stakeholders and country at large for sustainable development. Though there are large number of Agro-Industries engaged in CSR activities to help their stakeholders in different ways, however, examples of some success-stories of IFFCO (Indian Farmers Fertiliser Cooperative Limited), Nestle and ITC have been illustrated, which can be followed by other similar organizations also for building a stronger and self- sustainable nation for all times to come.

Among several CSR programmes of these organizations, Farmers Advisory Service of IFFCO, echoupal of ITC and providing health service and good quality of feed for animals of milk producers of Moga (Punjab) by Nestle were found to be most important activities. Several opportunities for integrating CSR of agro-based industries for sustainable rural development have been suggested in this paper.

Keywords: Corporate Social Responsibility (CSR), Sustainable Development, e-choupal.

1. INTRODUCTION

"Nature has given enough to fulfill our needs but not our greeds." India on 2.4 percent of world's geographical area is supporting 17 percent of world's total population. With about 7 fold population density compared to global average, India is facing a serious challenge for sustainable development. It is also a fact that compared to Europe and America with 9 percent and 2.3 percent population engaged in agriculture still 60 percent population in India is dependent on agriculture.

Inspite of all these limitations India has made tremendous progress in all the sectors, including agriculture and has emerged from a food deficit to food surplus country. India has increased its food grain production from 51 million tonnes in 1950-51 to about 257 million tonnes in recent past. Similarly production of other essential commodities and commercial crops like sugarcane, cotton, oilseeds, etc. has registered 5 to 6 fold increase, highest being in case of sugarcane.

Basmati rice has become an important foreign exchange earning crops and with an export of 4 million tonnes worth INR 33,000 crores was earned during 2013-14.

This unparalleled growth in agriculture sector has resulted into establishment of large number of new units of agro-based industries like sugar factories, ginning, oil extracting, rice milling factories etc. This has resulted into revolutionary growth of agro-based industries. Also with increasing demand for important inputs, to keep the vehicle of green revolution moving, fertilizer, pesticide, seed, farm machinery manufacturing industries also have registered a very significant growth during post-independence era of our country. However, to meet basic needs of our growing population we have to redouble our efforts to provide food and nutritional security, education, health while keeping our environment (air, water and soil) clean for decent living on this planet.

Large number of industries have contributed in a big way in our 20.53 fold increase in GDP (at 2004-05 price) compared to 1950-51. (*Ref. statisticstimes.com.*) However, indiscriminate use of non-renewable resources and unsafe disposal of industrial waste; increase in fertilizer use from 0.5 kg per hectare in 1950-51 to about 150 kg per hectare in recent years and increased pesticide consumption from 2.35 thousand tonnes in 1950-51 to 82.36 thousand tonnes in recent past has created lot of problems of soil, water and air pollution, which is becoming a threat to sustainable development. Over exploitation of surface and ground water resources in growing high water requiring crops like sugarcane in Maharashtra and rice in Punjab and Haryana in particular has created a serious problem. Now, a situation has come that 25 percent of country's population in 11 states is facing problem even for drinking water. This shows that our efforts have not been in right direction of sustainable development, both in agriculture and agro-based industries.

Recently guidelines for adoption of CSR and Company Act have been approved by Government of India and it is expected that CSR activities of agro- based industries, whose survival depends on sustainable development of agriculture in our country, will go a long way in addressing to all these and other related issues for sustainable rural development in India.

Keeping these facts into consideration a study on this aspect was conducted with following objectives:

2. Objectives

- 1. To study relationship between agro-industries, agriculture and sustainable rural development.
- 2. To study challenges for sustainable development.
- 3. To study CSR activities in agro-based industries for sustainable rural development.
- 4. To identify opportunities for sustainable rural development.

3. Review of Literature

According to World Business Council for Sustainable Development, "CSR" has been defined as the continuing commitment by business to behave ethically and contribute to economic development while improving the quality of life of the workforce and their families as well as of the local community and society at large (SDU, 2007).

According to UN World Commission on Economic Development, Sustainable Development is meeting the needs of the present generation without compromising the ability of future generations to

India has made tremendous progress in agriculture and has increased its food grain production from 51 million tonnes in 1950-51 to about 257 million tonnes in recent past.At the same time per capita availability of cultivated land in India has declined from 0.40 hectare in 1950-51 to about 0.11 hectare in recent past. However, 70 percent of Indian population is still living in rural area and 60 percent of total population is mainly dependent on agriculture. (Agricultural Statistics at a Glance 2014)

According to Planning Commission Report 2013-14, 25.7 and 13.7 percent Indian population is living below poverty line in rural and urban area respectively.

Kurien(1995) emphasized that small scale dairy and processing units, mainly in rural area with facilities for processing of other agro-products can provide gainful employment and can go a long way in sustainable rural development.

4. Research Methodology

Necessary information and data for this research study was collected after comprehensive review of literature available on concept of CSR and sustainable development from worldwide literature available on this aspect, including that from World Bank and UNDP publications. Authenticated data on challenges for sustainable development, rural, urban poverty etc.was collected after detailed study of Planning Commission's reports, agricultural statistics, daily newspaper, etc. To get reliable information on CSR activities already undertaken by some leading agro-based industries their reports and other related published work on this aspect were screened.

To have deep insight into the problems of rural development, and prospects of integrating CSR activities of agro-based industries for sustainable rural development, discussions with managerial staff of selected sugar mills in Meerut district and farmers was also held so as to get useful information on this subject and to make practical suggestions for sustainable rural development.

5. Findings

Information on relationship between agro-based industries and sustainable rural development, challenges for sustainable development, CSR initiatives in agro-based industries for sustainable rural development and opportunities for sustainable rural development have been presented and discussed in this section of the paper.

5.1 Relationship between agro-based industries, agriculture and rural development:

Broadly there are two categories of agro-based industries viz.; 1). Supplying agriculture inputs like seed, fertilizer, pesticide, etc. to the farmers and 2). Processing farm grown produce for value addition or to make it suitable for human/animal consumption or for some other industrial uses.

Both kinds of these agro-industries heavily depend on farmers and vice-versa. Sustained supply and availability of good quality raw material for processing will lead to sustainable development/ growth

of industries. Similarly supply of good quality input will lead to good production and thereby increasing demand for agricultural inputs will continue, which will sustain growth of industry as well as that of agricultural commodities.

This kind of relationship makes a very strong case that farmers are most important stake-holders for agro-based industries. Therefore all the agro-based industries should liberally contribute for betterment of rural society and should spend major share of their CSR funds on technical education to the farmers, development of infrastructure in rural area, conservation of environment, etc. in areas from where they are getting raw material to run their industries.

It is a known fact that survival and growth of agro-based industries depend on availability of raw material and sustainable growth and development in agriculture and sustainable rural development. Therefore agro-based industries should integrate their CSR activities with sustainable rural development.

5.2 Challenges for sustainable rural development:

During last 60 years there has been continuous decline in share of agriculture to GDP and rural India is facing problem of poverty and multiple developmental issues, including declining natural resources.

5.2.1 Decline in share of agriculture in GDP:

Data in Table-1 and Figure -1 clearly show that in last sixty years (from 1950-51 to 2010-11) percentage of total population living in rural area has declined from 82.7 percent to 68.9 percent, whereas corresponding decline in GDP from agriculture and allied sector has come down from 51.81 percent to 18.21 percent and from agriculture alone it has come down from 45.48 percent to as low as 15.78 percent.

Table-1: Percentage of rural population and Share of Agriculture & alliedand Agriculture to GDP

Year	%Rural	% of GDP from Agriculture &	% of GDP from Agriculture
	Population	Allied sector	sector
1950-51	82.7	51.81	45.48
1960-61	82.0	42.56	37.45
1970-71	80.1	41.95	36.88
1980-81	76.9	35.39	30.20
1990-91	74.5	29.02	24.65
2000-01	72.2	23.02	19.43
2010-11	68.9	18.21	15.78

Source: 1. Registrar General of India cited from Agricultural Statistics at Glance- 2014 2. Databook Dec 2014, Planning Commission, 2014

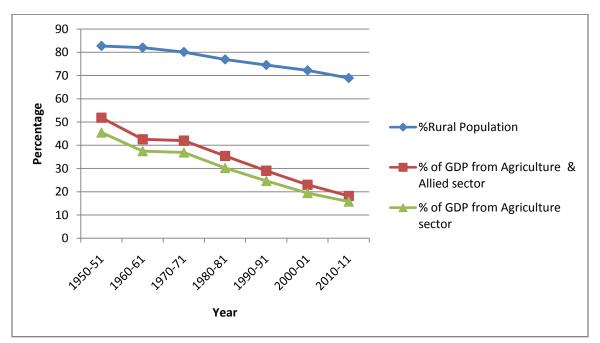


Figure-1: Percentage of rural population and Share of Agriculture & allied and Agriculture to GDP

This drastic reduction in GDP from agriculture sector clearly indicates that compared to 1950-51 relative earnings in rural India has decreased compared to other sectors. It is worth mentioning that there has been only 13.8 percent reduction in population living in rural area in last sixty years whereas contribution of agriculture and allied sector to GDP has declined to the tune of 33.6 percent. These alarming figures show that rural sector, particularly agriculture and allied sector has lagged far behind in growth rate in India compared to other sectors. Therefore there is urgent need to pay serious attention for rural development by government as well as by agro-based industries through their CSR and other welfare programmes for sustainable rural development so as to get continued supply of raw material for the growth of agro-based industries.

5.2.2 Poverty and multiple developmental problems:

According to World Bank report (2009) population living below poverty line in rural and urbanarea of India was 28 and 26 percent respectively, which according to latest available Planning Commission's Report is 25.7 and 13.7 percent in rural and urban area respectively. Recently Ranjan (2015) reported that about 75 percent of 179 million rural families are having below INR 5000 per month family income.

World Bank report (2009) further indicated that besides poverty India is faced with several other developmental problems, viz;infant mortality per thousand live birth was 57, maternal mortality per 10,000 live birth was 45, percentage of underweight children below 5 years was 46 percent, literacy rate of 15 years and above in male and female was 73 and 48 percent respectively, access to pure water was to 89 percent of population and access to sanitation was only to 33 percent of country's population.

These developmental issues need attention of all concern. Agro-based industries should focus their attention on rural area from where they are getting raw material for sustainable development/growth of their organizations.

Besides these issues, pollution of water bodies, groundwater, rivers and soil is another big threat for sustainable development of agriculture and growth of industries. Declining water table, increasing cost of water, both for industrial as well as agricultural purposes is also a matter of great concern.

We have to address to these issues and after making scientific use of two most important natural resources i.e. "land and water" only then sustainable development will be possible. Since survival of agro-industries depends on sustainability of natural resources and sustainable development of rural India, therefore agro-industries have to contribute significantly for sustainable development in rural India.

5.3 CSR Initiatives in agro-based industries for sustainable rural development :

Now there are large numbers of agro-based industries in India, which are undertaking CSR activities for the betterment of their stakeholders. However, illustrative examples of ITC, Nestle and IFFCO carrying on CSR activities for their various stakeholders, with particular reference to sustainable rural development, have been given in this paper.

5.3.1 ITC and its CSR Initiatives:

ITC was initially established on August 24, 1910 under the name "Imperial Tobacco Company of India Limited". In a period of over a century the company has witnessed tremendous changes, both in its nomenclature and areas of activities.

As per ITC's Philosophy of CSR policy business enterprises are economic organs of society and draw on social resources, it is ITC's belief that a company's performance must be measured by its Triple Bottom Linecontribution to building economic, social and environmental capital towards enhancing social sustainability.

Keeping in view the philosophy, vision and concept of ITC for sustainable development, it has designed its CSR activities which are pro-poor aimed at sustainable rural development because out of five persons living below poverty line in India, four of them are from rural area including the landless, small and marginal farmers. The CSR programs being undertaken after strengthening farmer linkage and with the establishment of its Agri-Business Division's e-choupal initiative have made significant progress to fulfill vision of the organization.

5.3.1.1 Strengthening Farmer Linkages:

In 1990, leveraging its agri-sourcing competency, ITC set up the Agri-Business Division for export of agri-commodities. The Division is today one of India's largest exporters. ITC's unique and now widely acknowledged "e-choupal" initiative began in 2000 with soya farmers in Madhya Pradesh. Now it extends to 10 states covering over 4 million farmers. Also, through the 'ChoupalPradarshanKhet' initiative, the agri services vertical has been focusing on improving productivity of crops while deepening the relationship with the farming community.

5.3.1.2 ITC's Agribusiness Division's e-choupal Initiative:

The ITC's Agribusiness Division's e-choupal Initiatives are very relevant in context with its CSR Initiatives for sustainable rural development. According to Dey and Sircar (2012) "ITC" launched its "e choupalprogramme" from 2001 under the banner of its "Agri-Based Division" to solve the problem of exploitation of small and marginal farmers by intermediaries. Small and fragmented farmers are unable to bargain a fair price for their produce and several intermediaries not only raise the end procurement cost of agriculture products but also these intermediaries more often than not seek to take undue advantage of the existing informational asymmetry with regard to aggregate demand and market prices. They pay, the ignorant Indian farmers, a much lower price than what the market rate would have been, had these unscrupulous intermediaries not systematically prevented the free interplay of the market forces. Also the productivity of the Indian farms (barring in some states) is quite low due to lack of farmer's knowledge of modernscientific farming techniques.

ITC's Agri-Based Division in its e-choupal initiative empower the small and marginal farmers with information on global and Indian market prices and aggregate demand, weather forecast, as well as scientific farming practices to increase productivity.

A strategic objective of the initiative is to streamline the value chain for agricultural produce. It seeks to completely eliminate intermediation from the chain of information flow while retaining some of the current value-adding intermediaries for physical transmission of produce and logistical support, but by and large removing the wasteful and non-value adding intermediaries.

The benefits of the initiative to the farmers are numerous. Firstly, by aggregating the small and marginal farmers, it has increased their bargaining power, creating almost a sort of virtual cooperative. It has also helped the farmers to procure high quality agricultural inputs from established and reputed manufacturers at fair prices. Secondly, armed with information about prices, farmers can be sure that they are receiving a fair price for their produce. Finally, the small and marginal farmers gain access to knowledge of agricultural best practices and scientific farming techniques developed through intensive research through the ChoupalPradarshanKhet initiative.

5.3.1.3 Impact of CSR activities:

- The Company's models of sustainable development and value chains generate sustainable livelihoods for around 6 million people, many of whom represent the weakest in society.
- ITC has sustained its position of being the only Company in the world of comparable dimensions to have achieved the global environmental distinction of being carbon positive (for 10 consecutive years), water positive (for 13 years in a row) and solid waste recycling positive (for 8 years in succession).
- ITC's renewable energy portfolio ensures that over 43% of its total energy requirements are met from renewable energy sources.
- ITC's premium luxury hotels, several office complexes and factories are LEED® (Leadership in Energy & Environmental Design) certified at the highest level by the US Green Building Council/Indian Green Building Council and the Bureau of Energy Efficiency (BEE) under its star rating scheme.

The footprint of ITC's CSR programmes reach out to over 6,70,000 households in more than 10,600 villages. Now, ITC's Social Investments Programme is spread across 14 states in the country and as per the latest available reports following CSR activities, with sharp focus on sustainable rural development have been undertaken. (Sustainability report- 2015, ITC)

- 1. Social and farm forestry in 223,915 hectare.
- 2. Soil and moisture conservation programme in 236,537 hectare.
- 3. Compost making units for sustainable agriculture in 28,557
- 4. Cattle development centres established- 250.
- 5. Artificial inseminations (number in lakhs)- 17.15
- 6. Self-help group members (economic empowerment of women)- 26,214
- 7. Livelihood created (number of persons benefitted)- 49,957
- 8. Primary education beneficiaries (children in lakhs)- 4.54
- 9. Number of Low cost sanitary units established- 11,188
- 10. Number of students enrolled for vocational training- 27,295

5.3.2 Nestle- Activities and Performance:

According to Biswas and Tortajda (2013) Nestle Milk plant established in 1961, Moga (Punjab), has transformed Moga district from a poor to prosperous area through its CSR activities. Main activities undertaken were: i) converting unorganized milk business to organized market, ii) Development of Infrastructure, iii) established reliable milk collection system, iv) Transparency in purchase of milk v) milk producer.

Besides all these activities Nestle, started free animal breeding facilities to the farmers along with medicine to the animals and high quality feed and fodder at no profit & no loss basis for the animals of the farmers of Moga area.

As a result of efficient execution of all these activities and their excellent performance, Moga milk plant has made remarkable progress. Milk collection for the plant, which was only 511 litres per day from 150 farmers of 4 villages in 1961, increased to 2064 tonnes/year in 1962 and increased to 26,660 tonnes in 1972.

In 1962, total payment for milk to the farmers made was INR 9.10lacs only, which in 2010-11 increased to INR 612 crores. Nestle is providing direct employment to 2400 persons and 86,371 persons are directly and indirectly getting benefit from the Nestle Milk Industry.

Nestle has significantly contributed to National exchequers and paid INR 55.7 crores as taxes to various Departments.

With the help and significant contributions made by Nestle- milk Industry there has been total transformation in financial, social and environmental conditions of Moga area. Nestle has always worked with mutual trust and has made significant contribution in community development of Moga and improved the life style and economic condition of residents of Moga area. This experience of Moga clearly demonstrates that corporate sector with its "CSR activities" can make significant contribution in poverty eradication and rural development.

5.3.3 IFFCO (Aonla) CSR activities and performance:

This is an excellent example depicting how the cooperative sector also can play a significant role in CSR. Baxi and Prasad (2005) in their book on "Corporate Social Responsibility" concept and cases have included this as a case study to illustrate the CSR activities, their performance and influence on society of cooperative sector.

Indian Farmers Fertilizer Cooperative Limited, popularly known as IFFCO has been giving the Indian farmers with Scientific Agricultural assistance, soil tests, health and educational programmes, all to improve their yield.

The idea of Mr. Paul Pothene, the first M.D. of IFFCO (1968-1981), who was one of the principal architects of the concepts and policies of IFFCO still guides the organization as they get reflected in mission statement of IFFCO which says: "Our Mission spans the globe because our commitment knows no bounds".

Commitment to Social Responsibility for sustainable development has been one of the important guiding principles of this organization and officials of IFFCO, Aonla take pride in claiming the unit's objectives goes beyond making money. Aonla plant officials further mention that unit always try to meet the needs of all the stakeholders, viz, society, customers, employees, government etc. by way of following the best possible practices and by making the maximum possible social contribution. Important activities being undertaken by IFFCO, Aonla are:

- 1. Quality control and resource conservation.
- 2. Safety practices.
- 3. Community development
- 4. IRDP programme and other welfare activities.
- 5. Cooperative culture.
- 6. Environment friendly approach.
- 7. Afforestation.
- 8. Zero effluent technology.
- 9. Socialforestry.

10. Energy conservation and cost reduction.

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- 11. Activities undertaken by marketing department for the benefit of farmers and rural population are:
- i) Crop Demonstration; ii) Farmers Meetings; iii) Critical input package;iv) Women training in skill development; v) Promotion of bio-fertilizers; vi) Soil testing; vii) Farmers service centre; viii) Village adoption programme.

Successful implementation of CSR related and IRDP programmes by IFFCO since inception of Aonla plant has brought tremendous improvement in the overall quality of life of lac of habitants, has motivated villagers to live healthy and happy life. IFFCO is being considered as socially responsible organization and provided safe working environment for IFFCO.

Implementation of all these activities and excellent performance of CSR activities related to farming community have resulted in overall increase in yield of field crops, economic improvement in return on investment, and so on. Because of its excellent performance IFFCO has won several National and International award in areas of social welfare, energy conservation, Afforestation etc. as a result of these IFFCO is now considered as one of the best performers in the field of cooperative sector in the country, which cares its all the stakeholders.

CSR activities being undertaken by these business organizations clearly demonstrate that these organizations can contribute significantly for sustainable development in India, with particular reference to rural India.

5.4 **Opportunities for sustainable rural development:**

India has great potential to increase its production and productivity, including dairying and agro-based industries. Some of the important areas needing attention for poverty eradication, removing problem of malnutrition, gainful employment, protecting natural resources etc. are:

- Fruits and vegetables processing- out of 250 million tonnesof fruit and vegetables, annually produced in India only 5 to 6 percent of this perishable commodity is being processed. There is immense scope in this area to avoid post-harvest losses and to increase the number of food processing industries, to increase capacity of already installed units to provide gainful employment to millions of youths.
- Dairying- As emphasized by Dr. V.Kurien (1995) dairying is another area for providing gainful 5.4.2 employment, nutritional security and poverty eradication. Small scale dairy and processing units mainly in rural area, with additional facilities for processing other agro products as a wholesome food can go a long way for sustainable development in India. He further suggested that certain percentage of net profit earned by these dairying units can be ploughed back for CSR activities for providing basic facilities like education, health, drinking water, etc. in rural area.
- 5.4.3 Most of the sugar factoriesremain operational only for 5 to 6 months. All these sugar factories should diversify their activities for processing of seasonal and locally available fruits, vegetables and other farm grown commodities. This will help in increasing utilization capacity of establishment, providing gainful employment to local people and ultimately lead to sustainable development of India, particularly the rural population and will help in halting migration of unemployed rural population to urban areas.

Long term sustainability of agro-industries as well as that of agriculture and rural sector cannot be achieved without paying full attention for conservation of our natural resources. These are some of the examples of opportunities awaiting our attention; there can be many more, depending on agro-climatic conditions, availability of raw material for processing/value addition etc.

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6. Suggestions

- 6.1 About 70 percent of Indian population still lives in rural areas and about 60 percent of our total population is still dependent on agriculture. About 80 percent of farm holdings are below 2 hectares and most of these farm families have about INR5000 per month family income. It is strongly suggested that agro-based industries should focus on sustainable development of rural area.
- 6.2 All the agro industries should liberally contribute for CSR activities. Besides providing help for education, health, sanitation main attention should be on knowledge upgradation of farmers and their families with an aim to increase input use efficiency and to increase their income. Also quality inputs should be made available to the farmers at no profit and no loss basis as is being done by IFFCO and Nestle.
- 6.3 Agriculture sector and particularly dairying and food processing areas have immense scope and opportunities for providing gainful employment. Government of India and State Governments should provide liberal support for establishing small and medium scale dairying and food processing industries in rural areas so as to halt migration of rural population to cities in search of jobs, who also faces lots of problems in urban area and result in mushrooming of slums. A small share of profit earned by all these units can contribute in a big way for overall sustainable development of the country.
- 6.4 All the agro industries should take a pledge for making safe disposal of their industrial waste and should establish treatment plants for industrial effluent, provide air cleaner, wherever necessary. All possible efforts should be made for conserving and recycling of water, conservation of energy for sustainable development and prosperity of future generations.

Every hand should get work, make every Indian citizen self-reliant and make them happy and healthy Indians. This can be possible by liberal contribution from industries under their banner of CSR, and by developing need based and location specific CSR programme, with top priority on conservation of natural resources.

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