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CORPORATE FARMING FOR SUSTAINABLE AGRICULTURE DEVELOPMENT IN INDIA

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ABSTRACT:

Agriculture sector occupies a prominent position in the economy of India. A large number of people depend on this sector for their livelihood. It is most important sector for ensuring food security and alleviating poverty in rural areas. It contributes about 17.5 per cent to total GDP. However, agriculture sector is facing several problems like fragmented land holdings, low productivity, low income, lack of credit, lack of inputs, lack of marketing facilities, inefficient use of available resources, and poor technology. It can also be seen that traditional farming families are shifting into new segments, they leaving agriculture which is an alarming condition to the growth and development of Indian economy. As we know that the food security is the key to sustainable development without which no development is possible. Therefore, Indian government has adopted corporate farming in the year 2000. Corporate farming system is capable to improves food security, prevents fragmentation of cultivable land, improve the transfer modern technology, cuts input costs, raises output, livelihoods sustainability, creates much needed forward and backward linkages between agriculture production, processing and marketing, and also pushes industrial growth and sustainable agriculture development in the economy. Government of India boost the corporate farming by adopting Model Land Leasing Act, 2016. The main objectives of this Act are to permit and facilitate leasing of agricultural land, to improve agricultural efficiency and equity, access to land by the landless and semi-landless poor, occupational diversity and to promote accelerated rural growth and transformation. Hence, the paper makes an attempt to prove how corporate farming could be a boon for Indian agriculture. The present work is based on some case studies of lease or corporate farming. This study is based on available literature on corporate farming and observation during the visits of corporate farms.

KEYWORDS: *Sustainable agriculture, Corporate farming, Landholdings, Modal land leasing act.*

INTRODUCTION :

The agriculture sector continues to be pivotal to the sustainable development and growth of the Indian economy. Not only it fulfils the requirements of food and nutrition, it also contributes significantly to production, employment and demand generation through various backward and forward linkages. Moreover, the role of the agricultural sector in alleviating poverty is very important. Ensuring the sustainable development of the economy by agriculture sector is well recognized.

At the same time agriculture sector is facing a crisis since two

decades. Now, problem is that it is taking place at a time when the overall Indian economy has been witnessing a high growth. The key aspects of the agricultural crisis can be listed briefly: Compared to the 1980s, agricultural production, productivity and value of output from early 1990s, have decelerated for almost all crops. The state instead of facilitating the risk-taking farmers has been withdrawing. There has been a decline of public investment in irrigation and related infrastructure. An increase in private investments on bore wells/tube wells in some parts of the country led to a tragedy of the commons through declining water table.

Since 1947, increasing fragmentation of land holdings is also a severe problem for concern. Near about 85 per cent of the operational holdings in India are small and marginal (less than 2 hectare). The number of marginal holdings increased from 75.41 million to 92.83 million (23 per cent rise) and number of small holdings increased from 22.70 million to 24.78 million (9 per cent rise) during the year 2000-01 and 2010-11. On the other hand, the medium holdings declined by 3 per cent and large holdings by almost 11 per cent. Semi-medium holdings increased by 0.7 per cent while the number of medium holdings decreased by 3 per cent and the number of large holdings declined by almost 11 per cent. In terms of the proportion of area under different size holdings, small and marginal holdings in 2010-11 accounted for 44.6 per cent of the area, while semi-medium and medium holdings accounted for 44.8 per cent of the area and the remaining 10.6 per cent by the large holdings. This indicates the significant fragmentation of operational holdings in India. Medium holdings are getting changed frequently into small and marginal holdings and no signs of reversal can be seen in the foreseeable future. It is estimated that the average size of land holding, which is 1.15 hectare at present, is likely to reduce further by 2020-21 (State of Indian Agriculture Report, 2015-16).

Further, the green revolution means introduction of high-yielding variety of seeds and fertilisers, increased the productivity of land. There is a significant decline in the income of farmers because growth in the productivity has been stagnant since last one decade. Negative environmental effects in the form of emission of greenhouse gases, depleting water table, and the contamination of surface and groundwater also affects agricultural productivity. So, the agriculture sector is in a state of distress, which is badly affecting to the peasants and marginal farmers.

Further, the share of Agricultural and Allied Sectors in GDP of the country has continuously decreased in comparison to other sectors. On account of structural changes due to a shift from a traditional agrarian economy to industry and service dominated one, where we can see that traditional farming families are shifting into new segments leaving agriculture which is really a bad indication for agriculture sector and also to the growth of a country. Food security is the key to sustainable development without which no development is possible especially in a vast populated country like India. Where the Agriculture sector really needs a booster and became the point of worrying which was once the primary source of income, both to an individual and the Country. Though there were many programs welcoming corporates into Agriculture sector from 2012. India has launched an ambitious program to participate private companies in producing wheat, corn and other crops in partnership with small farmers. The title of the project decided "Public-Private Partnership for Integrated Agricultural Development". The main objective of this project is to lift the country's annual farm output growth to 4 per cent, from an average of just below 3 per cent during the first four years of the 11th (2007-2012) Five Year Plan.

Aging of farmers is another issue of Indian agriculture. Most of the farmers are become aged and at the same time young generation do not want to involve in farming. Most of the rural youth wants a permanent source of income by join government or private jobs. The main reason of this migration from rural to urban areas by youth is low income in the farming. In future this migration problem will increase and the sustainability of agriculture will affect adversely by it.

Therefore, the Government's National Agriculture Policy, 2000 allowed private sector firms to participate through contract farming and corporate farming for the purpose of capital inflow, technology transfer, and assured market for crop production, especially of oilseeds, cotton and horticultural crops".

The government at the Centre has already drafted a model law on agricultural marketing to provide legal support to corporate farming. Several State governments as Gujarat, Punjab, Andhra Pradesh, Karnataka and Tamil Nadu are actively promoting lease farming by pvt firms. They changing laws to enable and support it and providing a variety of incentives, including lifting of land ceilings, subsidies and tax rebates to interested companies. Hence, corporate farming is a hope to solve all the problems exists in Indian agriculture sector and can help in sustain the development in the economy.

CORPORATE FARMING

Corporate farming is a contemporary view of modern developed western economies in which the productive sector is dominated by large corporations characterized by a separation of ownership from control. In lease farming, the corporation is an umbrella organization which determines the running of other individual farms – input and output prices and quantity of production. The main goal of corporate farming is to vertically integrate the entire process of food production, up to the point of the distribution and sale of food to consumers. Some corporations achieved this objective and working at a very large scale, such as Archer Daniels Midland, Monsanto and the privately held Cargill, with 2004 revenues of $62.9 billion (Corporate Watch Article, 2009). In the recent past, corporate farming immerged as an industry and multinational corporations (MNCs) were approved by the WTO member countries like Bangladesh to do business in agriculture.

Corporate farming (CF) is a modern food industry issue and encompasses not only the farm itself, but also the entire chain of agriculture-related business, including machinery, seed agrichemicals, supply, storage, food processing, transportation, distribution, advertising, marketing and retail sales. In other words, CF is like a mega-corporation which involved in food production at a very large scale. Various adverse, as well as beneficial implications are anticipated particularly on small farmers as MNCs start their operation in agriculture in developing countries. The big question- what is the future of small farmers who comprises around 80 per cent of the farm sector under corporate farming. The farmers are not yet prepared enough to face implications of CF and WTO in farm sector. It is no matter one agrees or not, in the current era of global market economy, each farmer of any place in the world is a market participant of the global agricultural market (Gupta, 2011).

SUSTAINABLE AGRICULTURE DEVELOPMENT

The problem of sustainable development has been a matter of great concern among researchers, environmentalists and policymakers since the early-1980. In the process, it has undergone numerous changes in its definition and objectives. However, the most popular definition so far has been given by the World Commission on Environment and Development (WCED). Sustainable development was defined as “sustainable development is development that meets the needs of present without compromising the ability of future generations to meet their own needs” (WCED, 1987). The concept of sustainable development has two dimensions, one is to make better (i.e. development) and another to maintain (i.e. sustainability) and the primary focus of sustainability is on the issue of intergenerational equity, which implies equal (or greater) availability of options in terms of human well-being or production prospects to future generation as compared to the present one. Sustainable Development is a multidimensional concept with three interacting angles for natural resource management: ecological security, economic efficiency and social equity (Vasudeva, 2010). Sustainable development does not end with the sustainability of just the environmental and resource system but also relate to the sustainability of social and economic system.

Sustainable agriculture refers to farming systems that are "capable of maintaining their productivity and usefulness for the society. These systems must be socially supportive, resource-conserving, environmentally sound and commercially competitive. Like all developmental activities, agricultural practices also affect the environment. Today the focussed problem in agriculture is the sustainability of resources and indiscriminate use of chemical fertilisers and pesticides. These problems have extended awareness for moving away from the input-intensive agriculture during the green revolution phase, to sustainable farming in different parts of the world (Gautam and Bhardwaj, 2011).

Now, degradation and depletion of the natural resource base is a widespread concern for growth process in agriculture has provoked many to express doubt about the sustainability of such growth.

India is still an agricultural country despite the recent spurt in manufacturing and services and the declining share of agriculture in the national income. A large number of its workforce are still engaged in agriculture and allied activities. It has been the noblest profession in India since ancient time and has been carried out on sustainable basis. It is only relatively recent phenomenon that large-scale forest areas, waste lands and grazing lands have been converted into harvest lands to support the rising population which has caused ecological imbalance and atmospheric pollution. There is no further scope for expansion of crop land area. So there is need to efforts to enhance the production of food grains using high-yielding variety of seeds, fertilizers, and irrigation along with advanced farm equipments. Though there was widespread awareness regarding the role of green revolution's role in boosting food-grain output in India (at least in its initial phase), doubts were growing regarding its cost-effectiveness and sustainability (Nadkarni, 1988). While green-revolution agriculture addressed mainly productivity issues, sustainable agriculture must not only address productivity issues more intensively but do so keeping multidimensional (economic, environmental and social) concerns of sustainability in sight (Rao & Rogers, 2006). Apart from this, so-called green revolution is limited to a few crops, viz. rice, wheat and maize and has been possible only in selected areas, i.e., Haryana, Punjab and Western Uttar Pradesh and certain selected districts of Andhra Pradesh, Maharashtra, and Tamil Nadu state.

The issue of sustainability of Indian agriculture has attracted attention due to, among other things, the observations that in recent years, the growth rates of output and productivity of a number of crops have been falling in different regions (particularly in the Green revolution regions) of the country and share of profitability of farming has started declining leading to abandonment of farming on an increasing scale. It means that despite the impressive growth achieved by Indian agriculture following the green revolution, instability too has shown a tendency to rise (Rao, et. al., 1988). These phenomena have often been explained in terms of adverse effects of the new irrigation–fertilizer based High Yielding Variety (HYV)-technology introduced in the mid-1980s. Most of the green revolution regions have reached a plateau in productivity, and profitability of farming has started falling, though these regions still continue to be highly productive compared to other regions and hold the key for meeting future food demands (Vyas and Reddy, 1993). Moreover, the high productivities achieved in green revolution regions are observed to be unstable and fluctuating (Mahendra dev, 1987). Therefore the issue of sustainability in Indian agriculture can be analysed on the basis of three dimensions namely social, economic and ecological with the help of some case studies of corporate farming.

CASES OF CORPORATE FARMING IN INDIA

There are some cases in the literature which will in the favour of corporate farming. I have also found two cases of corporate farming during my visits of corporate farms in Uttar Pradesh. All the cases show that the corporate farming can play a crucial role in the sustainable agriculture development in India. These cases are following as:

Field Fresh:

This is an equal partnership venture between Bharti Enterprises (Airtel Group) and Rothschild. It acquired 300 acres of land from the Government of Punjab for its model R&D farm called the 'FieldFresh Agri Centre of Excellence' near Ludhiana. The primary focus is on crop and varietal trials, progressive farming techniques, adoption and identification of suitable technologies. It has leased in 4000 acres land and is using those farmer owner-cultivators as labour on these leased farms. Distribution of fresh fruits and vegetables is done to the European Union, Eastern Europe, South East Asia, Middle East and the Commonwealth of Independent State countries. The project claims that the marginal leasee farmer livelihoods have improved compared to when they were cultivator owners as the project pays minimum wages (Rs. 80 per day). Thus, a farmer whose land is leased in by the company gets Rs. 15,000 per acre lease rent and if two of his family work on these leased out farms as labour, earn Rs. 57,600 annually. Thus, a two-acre farmer can earn about Rs. 90,000 (30000 rent plus

60,000 wages) annually compared with what he gets from his farm (Rs. 50,000) as gross output (without any cost deductions) if he goes for wheat and paddy crop cycle which is very common in Punjab (personal communication with Mr. Rakesh Bharti Mittal). It is also working with other agribusiness firms like Rajtech Agro Plantations, Jaipur and Satluj Organics, New Delhi for leased land production of fruits and vegetables. Rajtech had also leased 200 acres from 17 farmers near Chomu at the rate of Rs. 7000 per acre and was paying Rs. 5000 per month to supervising farmers. The company have 17 per cent of the profits made by Fieldfresh on the sales of the supplies made (Singh, 2006).

Ion Exchange Enviro Farms Limited (IEEFL):

The farms have been levelled and provided with drip and lift irrigation implemented by Excel and Netafim. All these farms are now totally organic and certified by EcoCert since 1997. The certification cost for all the farms is Rs.7 lakh per annum. The directors of the company bought farms as agriculturist to begin with some employees of the company who were also agriculturists, to avoid the Land Ceilings Act. The other shareholders in the scheme to whom the land was to be transferred were made agriculturists by buying 100 acres of wasteland in M.P. as it was already permitted there. This land was bought by the company in the name of investors. The titles of the farms bought in Maharashtra were transferred to these so-called agriculturists. In Tamilnadu and Goa, there is no condition of only agriculturists being eligible to purchase land. Though the share price varies across farms and farmers in Maharashtra, it was Rs.1,30,000 per acre per share of which Rs.30,000 was spent on land development and registration besides maintenance of the land. The gestation period has just got over and now the 80:20 sharing will take place. However, the land appreciation has already taken place for the investors. The company also gives gifts of farm or any other organic produce to the investors. Mainly horticultural crops are grown on IEEFL farms besides some intercrops. The organic bananas were sold to the NDDB during 1998-2003 for processing into banana puree for export which were of the order of 400 MT. These were advance orders with 50 percent advance payment and a premium of 30 percent on market price for conventional bananas in Jalgaon market in Maharashtra. Besides, a commission of Rs. 1 per kg was paid as transport cost for delivery to the NDDB factory at Goregaon in Mumbai. The NDDB factory was also certified organic as part of IEEFL's 'chain of custody' with the cost of certification being born by the NDDB. Other than selling to the NDDB, the organic produce was sold in the local market as the company was not involved in exports or domestic marketing of organic produce. Even now, there are no direct exports by the company. The supplies to NDDB have been stopped now due to crash of international prices for banana puree. The CIS still continues though no returns have been given to the investors so far. There is a farm manager for each farm and one assistant for 50 acres each. The labour supply comes from those who sold land to the company and work as casual labour. The manager and the assistant, besides a watchman, stay on the farm. The farm managers of the company have been trained in organic farming by experts. The present supply chain manager is a former employee of Excel Industries. Since its own farms were in wasteland, it got certification in first year itself. It also provides consultancy for organic farms at the rate of 15 percent of project cost except land and infrastructure or including them in some cases, so that it has larger base to procure from. It has provided such services to 12 farms in India already and one in Oman. So far as corporate farming is concerned, the cost of production is very high due to the high overheads. Here the company is continuing as its only managing the farms in the name of shareholders who are landowners (Singh, 2006).

Sunshine Farms Pvt. Ltd.:

Colonel Subhash Deswal (Retd.) and Lal Krishna Yadav are the owners of Sun Shine Agri Farms Pvt. Ltd. Both of them had pursued other vocations before turning to agriculture in 1998. Colonel Deswal served the nation by joining the Indian Army for 21 years and Yadav trifled in small business ventures after doing postgraduate in chemistry. But, belonging to agricultural families, both have farming in their blood. Since neither owned any sufficient property, they decided to get into corporate farming. For five years, they experimented and like all other small and marginal farmers lost heavily. Then they contacted some forward-looking agricultural scientists, who advised them to grow a single

crop. The strategy was to focus on to grow carrots. Two years later this strategy resulted in the introduction of sensible mechanization, which led to the production of carrot of the best possible quality and quantity. In next two seasons their product found its own market. They have started corporate farming in Sikandrabad of Bulandshahr district. Now, Sikandrabad is known as the carrot capital of north India.

At present the company cultivating approximately 963 hectares of land held by around 105 large and medium farmers, who are into lease farming. The experiment produces an average of 25,000 tonnes of carrot during a year. Cold storage facilities are set up and maintained well in different locations near to the cultivated land. According to company, the agribusiness institution has brought together to the farmers. Sikandrabad supplies carrots in different parts of India, including Bangalore and Hyderabad in the south. Now, they are supplying Sunshine carrot to a variety of wholesalers. They also supplying to the industrial processors and retailers such as Mother Diary and Fun tops and also to some suppliers of Reliance retail outlets. The stability and growth achieved by this medium scale enterprise attracted many other big agribusiness players and corporates. Some of those were Global AgriSystem, which is part of the Katra group involved in making strategic investments and carrying out businesses in diverse fields, and the Aditya Birla group, which runs the more retail outlets in different parts of the country. While Global AgriSystem had a joint venture with Sunshine to copy the Sikandrabad model in at least four centers in India. The Aditya Birla group made a collaboration to ensure systematic production of a number of agricultural products for the group. Both partnerships were shortlived. "The Aditya Birla group had a corporate style of functioning, with their executives setting up computerised operations from farms and even sending reports from the fields. But ironically, the corporate office used to function only from 10 A.M. to 5 P.M., and such time specification was not suited for agriculture, which during periods like harvesting is a 24x7 operation. Naturally, company approaches did not match," Deswal said. Global AgriSystem introduced this Sikandrabad model to other places. But Deswal says that only establishment of these farms can not achieve the desired goals on account of operational factors. Global AgriSystem moved back step by step from production and marketing. Since 2011, the entire operations have been done by the original Sunshine team. However, as per the agreement signed, the ownership of the biggest carrot cold storage built by Sunshine Farms now owned by Global AgriSystem. "It is a fair deal and company have leased out that storage from Global AgriSystem now. Though the joint venture is not operational company are coordinating and functioning well," Deswal said. However, the fact remains that corporate-driven joint ventures and funding in the agriculture sector put out the aspect of changing the hands of agricultural property rights. From their own experience in setting up a "trust-based contract farming system" between small and marginal farmers and corporate agribusiness entities, Deswal and Yadav stated that unless understanding the dynamics of Indian agriculture by corporates, they would not be able to go far. "It is one thing to visualize something sitting in air conditioned conference rooms and totally another to really understand how much of one product would grow in an acre in a particular region." Both of them as well as associate farmers say that it was the preservation technology innovations and infrastructure improvement that resulted in the form of laser land leveling and raised bed planting that took them a long way in existing up the Sikandrabad model (Ramakrishnan, 2013).

Firm also provide employment to lease out land farmers and landless farmers of the villages near to the farm. Around 250 labourers are working on the farm. They are getting wage of Rs. 250-300 daily. During the field survey, I have observed that the lease out farmers is better off in comparison to when they are doing farming itself. I have also observed that the corporate farming in the district is economically viable.

Hi-Tech Agriculture & Consultation:

This firm is established by Ram Saran Verma**.** This firm is situated on Lucknow-Faizabad national highway in the village Daulatpur, Block-Harakh, District–Barabanki about 40 km. away from Lucknow, the capital of the state U.P. He was the owner of nearly 6 acre cultivated land enthrone from his father. In the beginning of his career, he started traditional farming of rice, wheat, potato, mentha

etc. But it was not beneficial at initial stage. A keen desire to make the farming beneficial pinched him. So, he began to search new crops and techniques which are beneficial to farming. In this sequence, he came across with different training programme, papers-magazines, exhibitions and fairs/gosthies related to agriculutre. He also met with many farmers and visits their farms. He interacted and valuated them. In 1995, he started with the crop of banana and tomato as a new crop and mentha and potato with advanced scientific techniques.

Now about 20 year of time has elapsed. Now, the company has 100 acres of land of small and marginal farmers on which banana farming is going on. Company has taken land on lease from the farmers. Company gives rent to the lease out land farmers at the rate Rs. 5000 per bigha. The Hi-tech farming taking advanced techniques on hybrid tomato, tissue culture banana, bio-fertilizers irrigation management, rotation crop of potato-mentha green manuring, crop management, weed control, management of tillering, marketing and human resource development. After this the company have reached on one crore cost-benefit ratio per year. Besides this, company is in the contact of more than 50,000 visiting farmers, officers, visitors, officials, media persons. The company also interacted with scientists and political dignitaries for beneficial farming. Side by side the company created 50000 man-days and correlating with 100000 farmers, out of which about 20000 farmers are doing their farming on the basis of this company model.

The company has also generated employment in the village and migration has been stopped due to corporate farming. Company has been providing employment to 50-100 people's daily on the farm. Company gives Rs. 250-300 for labourer per day. Farmers and farm labours are engaged regularly at the rate 20-200 mandate/day in crop rotation production model. In village for the same work, 15-20 thousand mandates are engaged per year. Since 1995 total mandates are 1, 79,000. This also gives is a solution of unemployment of rural youth through agriculture. To providing an employment opportunity by farming model is a boon in rural areas. The company is engaged with these activities and continuing since 1995-96. Table 1.00 gives the detail of employment during 1995-96 to 203-14. In the year 1995-96, the company provides employment to 40 persons and it increased to 400 persons in 2013-14.

Table 1.01 gives the detail of cost of banana production per acre in 2015. Table shows that the cost of banana production in one acre was Rs. 1 lakh in the year 2015. Similarly, table 1.02 gives the idea of production and net profit of banana in one acre. Production was 400 quintal in one acre in the year 2015 and net profit in one acre was recorded at Rs. 3 lakh.

Table: 1.00 Details of Employment during 1995-96 to 2013-14

No.	Year	No. of Employed Person	Generation of Mandays/Year
1.	1995-96	40	3500
2.	1996-97	45	4000
3.	1997-98	50	4300
4.	1998-99	55	5000
5.	1999-00	65	5500
6.	2000-01	70	6000
7.	2001-02	80	7500
8.	2002-03	100	10,000
9.	2003-04	120	12,000
10.	2004-05	150	15,000
11.	2005-06	180	25,000
12.	2006-07	200	32,000
13.	2007-08	350	50,000
14.	2008-14	400	120000

Source: http://www.vermaagri.com/employment-generation

Table: 1.01 Cost of Banana Production per acre in the Year 2015

Particular	**Expenses (in Rs.)**
Land Preparation	4,000.00
Seeds	17000.00
Fertilizer	15000.00
Irrigation	14000.00
Crop Protection	2000.00
Bamboo	10,000.00
Labour Charge	30000.00
Other	8000.00
Total	**1,00,000.00**

Source: http://www.vermaagri.com

Table: 1.02 Production and Net Profit of Banana in per acre in the Year 2015

Production	400 quintal
Sales	Rs. 4,00,000
Expenses	Rs. 1,00,000
Net profit	Rs. 3,00,000

Source: http://www.vermaagri.com

CONCLUSION

Land holdings reform is one of the factors for sustainable agriculture development in India. There are two kinds of landholding patterns, which are affecting the crop production. The first category of farmers has large holdings but is unable to make efficient use of such lands for agricultural production. Among them are many absentee landholders who are afraid of leasing out for cultivation, keep their land. The other category of farmers is those having small holdings, where improved agricultural practices are not feasible. Farmers belonging to both these categories are not willing to involve others for cultivation, as the present Land Reforms Acts can entitle the tiller to own the land. Hence, there is need for relaxation in the Land Reforms and Land Ceiling Acts. Farmers interested in leasing land for short or long term may be allowed to do so on attractive terms. Corporate sector interested in agricultural development may be allowed to take crop land on lease from farmers. With such large-scale corporate farming, it will be economically viable to introduce new technologies and provide a stable market for farm produce. Hence there is an urgent need to review the present Land Ceiling Acts and adopt new model act for lease, 2016 by every state of India to encourage corporate farming, while safeguarding the interest of the farmers.

Leasing out land for a better organised private farming entity can have ultimate impact both on productivity and the income of the owner of the land. Landowners can not only earn regular rental from their leased out land but also seek employment with the leaseholder, which can earn him/her regular wages as well. Alongside this income multiplier, the expected impact of private sector intervention on the overall agronomic environment too can be of vast value.

Private management cannot just dramatically transform to the way in which the factors of production are employed in the sector, it can also leave a powerful 'demonstration effect' even on other farmers. These farmers can gain from best practices to increase their land productivity as well as become a partner in such private initiatives.

Another equally powerful outcome which can follow by private sector involvement in agriculture is sustained investment in post-harvest management and processing by corporates. This can create incremental employment opportunities to remove out the 'hidden unemployment' in rural areas. Therefore, the private sector is better placed to improve productivity through introduction of high yielding variety seeds, modern irrigation methods, research and suitable crop rotations to increase soil

productivity. Enhanced productivity and cost efficiency will reflect in increased farm incomes. Hence, corporate farming can sustain social, economic and ecological dimensions of Indian agriculture.

Government needs corporates enter into full-fledged farming, where it procures its own technology, employs both technical and non-technical staff and produce the food grains for both the use of country and rise exports, through which India will be self-sufficient attaining food security and be a part of country's growth along with service and manufacturing sectors. Through which educated youth can again be brought back to agriculture and involve back those people who have left from agriculture to service or other sectors and sustainable development of agriculture could be attained. Thus corporate farming could be a better solution to Indian agricultural sector. There is a need of a deep thinking and innovating better policies so that neither the corporates nor the farmers be at loss. Also, the role of central government and state governments needs to be defined clearly because of being a joint subject, it creates lot of confusion.

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