

DR.B.R. AMBEDKAR'S VIEWS ON FARMING SYSTEM

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ABSTRACT

Indian small and marginal farmers are facing many problems in the agriculture sector like low level of production, primitive tools and techniques, lack of technical knowledge, less bargaining power, lack of market accessibility for produce, and uncertainty of market affairs, lack of post-harvest services, poor package of produce and insufficient capital to grow a quality product, low level of investment capacity. The fundamental approach of all these constraints is that almost 80 percent farmers are small and marginal category and possessed a small size of land holding in the agriculture field in India. Consequently, their economic power is very poor and compelled to live below poverty line. Hence, unemployment, illiteracy and poverty are encompassing in all around of their lives. Some farmers are also committing suicide due to financial problems and debt trap and compelled to migrate from rural to urban areas for employment opportunity. Therefore, contract farming came in the agriculture sector as a boon to assist the needy or small and marginal farmers by providing seed, financial assistance, assured market for the produce, pre-determined price, and also help to accelerate the produce by introducing new agricultural technology in agriculture field. Contract farming is basically depending on the model of win-to-win under which both grower and purchaser are benefitted and getting low level of risk by producing high valued crops like vegetables, crops, flowers, and fruits.

The contract farming has emerged in the agriculture sector as a boon to assist the farmers particularly, small and marginal farmers by providing seed, financial assistance, assured market for the produce, pre-determined price of produce, and also help to accelerate the production by introducing new agricultural technology. Most of the states are encouraging the contract farming in different forms like written or oral, registered or unregistered. The corporate hype is created that the contract farming is really a boom for small and marginal farmers particularly dalit farmers. The U.P. is the biggest state with large number of small and marginal farmers cultivating the small piece of land with outdated methods of cultivation. Majority of the small and marginal farmers are belonging to the SC and ST community. They are not getting adequate capital and technology for cultivation. Hence Majority of the small and marginal farmers are being attracted by the multinational companies for contract farming and corporate farming in the U.P. The multinational companies are offering to the small and marginal farmers' capital, seeds, fertilizers, technology, irrigation facility and market facility for their product. These facilities are attracting the farmers towards contract farming. But state has no mechanism or institutional system for contract farming. There is no assurance/security for farmers. Hence an attempt is made to analyze the economic viability of contract farming in Uttar Pradesh. It is very significant to highlight the conditions of the contract farmers in the state.

Agriculture has played a very crucial role in the economic development of India. It provides employment to nearly 55 percent of people of the country. The agriculture is contributing 14 percent of income to the Indian Gross Domestic Product (GDP). Agriculture sector is the most important sector of the Indian economy from the perspective of poverty alleviation and employment generation. Even though the share of agriculture in national income has been declining from 54 percent in 1960-61 to 16.16 percent in 2011-12, the workforce engaged in agriculture sector has exhibited only a marginal decline. The conditions of agricultural sector have not changed much as per requirement of the country economic development.

The very high proportion of the dalits population is being engaged in the agricultural sector. Indian agriculture is still backward and characterized by low productivity and unequal distribution of land with high incidence of unemployment and poverty due to semi feudal structure. After independence several attempts were made to improve the agrarian structure by abolishing large intermediaries conferring ownership rights to tenants reducing skewed distribution of land through imposition of ceiling on land holdings and redistribution of surplus land to the landless dalits and organized small and marginal holdings along with cooperative lines and to regulate wages of agricultural laborers. These measures have not improved the agrarian structure to the desired extent. The success of agrarian reforms and institutional changes in bringing out rapid economic growth with social justice depends more or less on the right type of institutional arrangements. Hence, the policy makers to emancipate the peasants from the clutches of semi feudalism on one hand and to foster agricultural growth on the other hand initiated numerous institutional reforms. The main aim of the massive institutional reforms in the option of congress agrarian committee under the Chairmanship of kumarappa was promotion of individual peasant farming on suitable unit of cultivation under the property.

Ambedkar had observed that economic and social development could be achieved through the advancement of agriculture in rural areas dehumanized and discriminated individuals. He had examined the problems of subdivision and fragmentation of agricultural land holdings affecting agricultural production and formulated very scientific definition of economic holdings. He said that existing holdings are uneconomic, not in the sense that they are small but they are too large in relation to the existing availability of agricultural inputs. This notion is applied to all rural populace equally. So there must not be any class division among the farmers. According to him, a solution to the ills of agriculture in India is relying in the matter of increasing capital goods like agricultural implements in right proportion to the farm size. Therefore, Ambedkar agrees that the proposal of enlarging the existing holding as a remedy for the ills of our agriculture. It is shown that farms have diminished land in size while the agricultural stock as increased in amount. He argued that our bad social economy was responsible for the ills of our agriculture and scattered farms and existence of idle labor in agriculture.

After independence, a series of attempts were made to improve the agrarian structure by abolishing intermediaries, conferring ownership rights to tenants, minimizing the skewed distribution of land through imposition of ceilings on landholdings and redistribution of surplus land to landless people and organizing small and marginal holdings along with cooperative lines and regulating the wages of agricultural laborers. In 1960, almost all states imposed ceiling on landholdings which were further modified after the guidelines of National Commission on Agriculture in 1977. According to the National Commission on Agriculture 1972, semi-feudal agrarian structure is the root cause for the state chronic crisis in which Indian agrarian economy was emerged before the attainment of freedom. Consolidation of land holdings is also undertaken as an independent development program. The land reforms have been introduced in India in the post-Independence period with a view of eliminating the

intermediaries' interest in land providing security of tenure and ownership rights to tenants and reorganizing agriculture through land ceiling legislation, co-operative farming, consolidation of land holdings and poverty reduction. The progress registered was unsatisfactory.

One of the major issues of Indian agriculture is the farming system. While deliberating upon the choice of farm organization that would be appropriate in the socio-economic and culture of rural India, the Agrarian reforms committee had rejected the concept of capitalist farming as the form of agricultural organization on the ground that it would deprive the land rights and turn them into mere wage earners. It would also create the problem of displacement. Agrarian Reforms Committee has apprehended that the Peasant farming would be the most appropriate form of cultivation above the basic land holdings, but the small land holdings should be brought under the scheme of co-operative farming. Co-operative farming was generated by the Government of India to improve the conditions of small, marginal, and landless farmers. A number of recommendations were made in the first three five year plans to encourage the co-operative farming in India. The government offered a number of incentives and facilities for the development of these societies like financial assistance, subsidies, technical assistance, supply of improved seeds, fertilizers and other materials. In fact, co-operative farming was seen as a panacea for all ills of rural sector and was propounded with much enthusiasm and excitement. However, the progress was extremely slow and disappointing. So, this program had also failed to improve the socio-economic conditions of small and marginal farmers in general and dalit farmers in particular (Mallaiah, 2006). By the end of June, 1969, there were only 8,160 co-operative societies with 220,147 members and a total area of land 420,783 hectares in which only 0.38 percent of land was cultivated. Thus, this program also failed to improve the conditions of farmers and to enhance the production and productivity level of the produce in agriculture (S. K. Mishra & V.K. Puri, 2006).

The Government of India has approved National Agricultural Policy (NAP) in the year 2000. The new agricultural policy intends to seek private sector participation through contract farming by land leasing arrangements. The National Commission on Farmers (NCF) was also established in 2004 for the betterment of small and marginal farmers to increase the yield and income of farmers. In this way, the NCF prepared a draft of national policy for farmers. The GOI has approved the National Policy for Farmers in the year 2007. The NCF intends to involve the corporate sector in agriculture to accelerate the technology transfer, capital inflow and assured market for production, especially of oil seeds, cotton and Horticultural crops (S. K. Mishra & V. K. Puri, 2006). Similarly, National Commission for Farmers, 2007 initiated symbiotic contracts farming which provides benefits to both producers and purchasers for ensuring assured and remunerative marketing opportunities to the contract farmers. Contract farming is a well designed method of farming system which will be helpful to small and marginal farmers in getting good quality inputs, fair prices and prompt payment for their produce. The farmers should not be alienated from their land under the contract farming system. Therefore, a monitoring committee may be set up by the state government by involving farmers' participation to encourage a new method of contract farming which should be followed by friendly based environment. The changes in the institutional set up are made by deliberate government policies in order to accelerate the agricultural development so that income of the rural people can be enhanced. The contract farming is one of such institutional initiative that is expected to overcome the agrarian problems which is accepted by Indian farmers since a long time in the agrarian field (GOI, 2007).

Uttar Pradesh is the first state to bring out such a comprehensive policy, which focused on the betterment of small and marginal farmers. The state government accepted the model of contract farming as a major policy initiative for the rural development of the state in 2007. The view of the state government for contract farming was that the

agriculture sector should be opened to private players (multinational companies) whose role would not be limited to purchase the produce directly from the contract farmers but they will have to provide also better seeds, fertilizers and pesticides along with finance and crop insurance facility for the farmers to overcome from the hazards of crop loss. The state government introduced the model of contract farming at the first time in the state along with new policy. The new policy 'Agriculture Infrastructure and Investment Policy' (AIIP) was announced by the state government on August 3, 2007 with the aim to ensure the overall development of the state through contract farming. Large number of farmers belongs to small and marginal categories. They have possessed less than one hectare of agricultural land in the state. Thus new agriculture policy amended the Uttar Pradesh Krishi Utpadan Mandi Act, 1964 and Uttar Pradesh Krishi Utpadan Mandi Rules, 1965. The amendments have been made to protect the small and marginal farmers from the intermediaries being exploited since a long time and enable them to get competitive prices for their produce. The new policy focuses on contract farming through which investors will be given the rights to purchase the produce directly from the growers. Hence, major private players would be allowed to invest the capital under contract farming system for the economic growth of the state. The new policy of agriculture stipulates that the investors can enter into contract only for the purchase of farm produce. They will have no right on the ownership of land of the farmer. A model agreement of the contract farming would be chalked out by the prescribed committee. Therefore, contract farming would be an option for the contract farmers in case of the contracted price of the produce was lower than the existing market price. In this case, the farmer had the right to sell his crop in the open market. Under this policy, the private investors would be encouraged to invest in food processing, storage, packaging, transportation, distribution and export of goods. The state government will be a facilitator to make a different schemes, policies and infrastructural policies for the welfare of rural people. Hence, the new policy AIIP

has been framed to bring the rural areas in the mainstream of economy by ensuring far reaching changes in the agriculture field (The Hindu, 2007). But the concept of contract farming model was rejected by the constituent assembly of the state on 22 August, 2007. Even though contract farming is still prevailing indirectly since a long time in several parts of the state of Uttar Pradesh. In this context, Table 1.01 presents the existence of contract farming in Uttar Pradesh and other states like Punjab, Haryana, and Uttarakhand. The table highlights the company, type of linkage, crop/product, number of farmers and average area of land under contract farming in Uttar Pradesh and in other states too. Thus, the table shows that multinational companies like Safal, AM Todd, Satlaj agri- business, ITC, PepsiCo, PMV Malting Pvt. Ltd., and Rallis India are involving in contract farming since a long time with a different type of crops and products like vegetables, mint, organic basmati and wheat, basmati rice, barley, potato. In this way, Satlaj agri- business is covering an area of land 44 acres for cultivation of organic basmati while AM Todd 5 acres of contract land under the cultivation of mint crop and PMV Malting Pvt. Ltd. also conducting contract farming in Meerut, Uttar Pradesh with contract area of land 1132 acres along with 1250 contract farmers. Similarly, Safal (NDDB) contract company is doing contract farming of vegetables along with 18000 contract farmers whereas Rallis India company is covering an area of 19000 acres land for wheat cultivation in the state. It is clear in table that contract farming is running smoothly in Uttar Pradesh along with the other states of India. But there is no direct linkage between the contract companies and the state government. Basically, the contract is found between farmers and companies in the form of written or oral, registered or non-registered in the state. On the contrary, contract farming is not accepted by the constituent assembly of Uttar Pradesh in 2007 even though it is prevailing indirectly in the state since a long period.

There are many studies conducted at the national and international level on the various

aspects of contract farming almost in all states of the country. Some of the major studies are reviewed. Allen Harper (2009) has studied on "Hog Production Contracts: The Grower-Integrator Relationship" to know the importance of integrator-contract grower relationship in production contract arrangements. It is found in the study that hog contract production has increased nearly 40 percent in the US Swine Industry. The long term contract production gets success when the venture has benefitted for the grower and the integrator. B. K. Dileep et al. (2002) have conducted an empirical study on "Contract Farming in Tomato: An Economic Analysis". The study pointed out the effect of contract farming on the cost of production, returns and resource use of efficiency, price, production and income of contract farmers, yield disparities, marketing costs and losses to the contract farmers. It is found from the empirical study that the processing companies preferred large farmers for contract farming. The contract farmers were getting double cost of the contract crop and high yield of production as compared to non-contract farmers. The uncertainty of yield and price was much less under contract farming compared to non-contract farmers. The cause of reducing the price level of contract farmers was transportation cost which was a major component for reducing the marketing costs. Behrooz Morvaridi (1995) has studied "Contract Farming and Environmental Risk: The case of Cyprus" which examines the environmental degradation and productivity decline under contract farming in the perspective of Cyprus production in North Cyprus. The study focused on the changes of contract farming conditions of access to key resources like water, land and management. The study reveals that only large farmers are in the position to invest in an irrigation to maintain the productivity and corporate profits are made at the expense of long-term productivity for farmers. The cost of irrigation was not included. Most of the contract growers were indebted. Bharat Ramaswami et al. (2006) have pointed on "Efficiency and Distribution in Contract Farming: The Case of Indian Poultry Growers". The main motive of the study is to identify whether the contract production is more efficient than non-

contract production in the state of Andhra Pradesh. The authors found out that production of poultry under contract is more efficient than the non-contract production. Babu Singh et al. (2013) have highlighted his views on "Contract Farming of Potato Production Reduces Risk and Improves Livelihood Security of Farmers in Kannauj District, Uttar Pradesh". The authors have made an attempt to analyze the cost and returns of potato crops under contract and non-contract farming system. The study is purely based on primary data, which is collected from 50 farmers. The contract farmers have been selected from 5 villages of central district of Kannauj, Uttar Pradesh. Purposive sampling has been used to select the area of contract farming. The contract farming of potato is being undertaken by Frito-Lay (Pepsi) company in the district of Kannauj. The study finds that the total cost of production was higher in contract farming than non-contract farming. The reason of higher cost of production was due to higher investment on machine power, seeds, manure and fertilizers by contract farmers. Sukhpal Singh (2000) has studied on "Contract Farming and Agriculture Diversification in Punjab: A Study of Performance and Problems". The study focuses on the nature of contracts, studies the perceptions of both the farmer and the firm of working under contract farming and its effect. The contract farming helped farmers for the betterment and gave more reliable income, generated employment opportunity for women. A number of studies have been conducted on the different aspects of the topics. The present study is an attempt to analyze the economic viability of the contract farmers in Uttar Pradesh.

This present empirical study is analyze the economic viability of contract farming in UP in terms of production, income, revenue and loss/profit. This is a micro level study. This study purely depends on primary field survey. Two districts of the state namely Etah and Kanshiram Nagar are selected for the field data collection where contract farming is running successfully since a long time. A Purposive Sampling method is adopted to select the sample of contract farmers. The size sample of the study is 300 contract farmers of different social groups. Direct

interview method is adopted and followed the observation of the researcher during the field survey. The findings are supported by the macro level information. Some statistical tools like Gini Co-efficient, Arithmetic averages, ANOVA test, Chi-square test, Student's t test have been used to analyses the data.

The presenting figures reveal the economic status of the contract farmers with the help of specific economic variables. The income of the contract farmers obtained from the Chicory crop during 2011-12 and 2012-13 is analyzed in Table

1.02 and in Fig.1.02a. The mean income of the contract farmers of three groups is higher in the year 2012-13 compared to 2011-12. But the difference is insignificant. The value of p is more than 0.05 in all three groups. But the contract farmers are not getting expected profits from the Chicory crop. The general contract farmers are getting more income in both the years compared to the income of OBC and SC contract farmers. The OBC farmers are getting higher income than the income of the SC contract farmers. The SC contract farmers are most disadvantage group in the contract farming in both the districts.

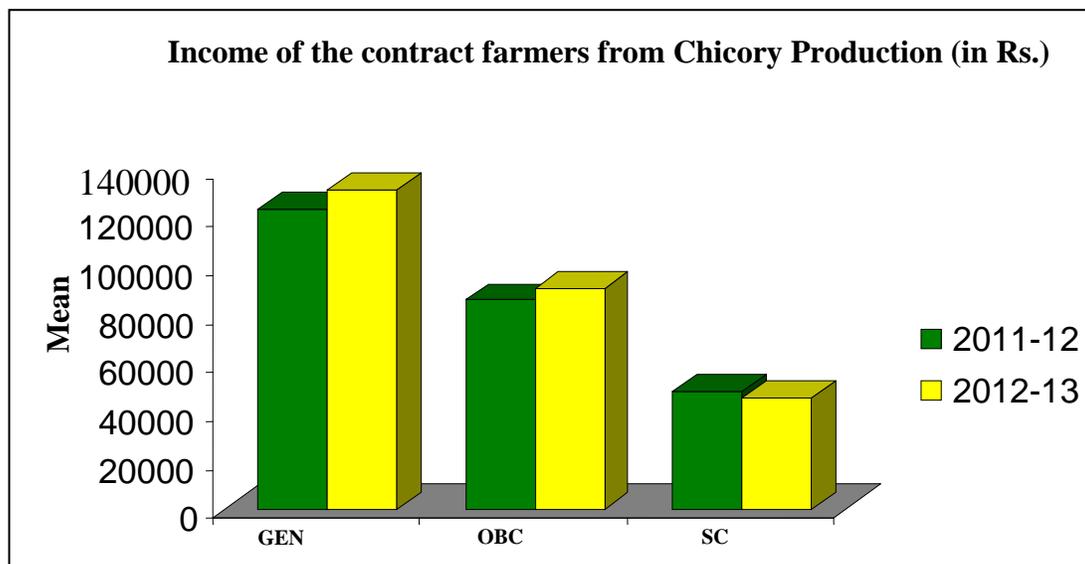


Fig.1.02a: Income by chicory of the contract farmers

The average income of the farmers from chicory in both the years reflect that General and OBC are getting more income of Rs. 7910 and Rs. 5145 respectively while SC are getting loss of Rs.3061 in 2012-13. These figures reflect that General and OBC contract farmers are getting benefit because of large size of land holding, possession of required agricultural equipments and sound socio- economic background, while the SC contract farmers are getting loss in contract farming due to small size of land holdings, lack of financial assistance, lack of technical knowledge, poor economic back ground

and lack of agricultural equipments which are major responsible factors for losses in the contract farming. However they are under contract farming due to lack of alternative works in the villages. It is clear that small and marginal contract farmers are getting losses while the Medium and Large contract farmers are benefitting through contract farming in both districts.

The income of the contract farmers from the production of other crops during 2011-12 and 2012-13 is analyzed in Table 1.03 and also shown in Fig.1.03a.

The contract farmers are also producing other crops like potato, wheat, jowar, ground nut, pulses, and garlic along with contract crop Chicory. The data reveal that all the contract farmers are getting more income from the production of non-

contract crops than the contract crop. The income of all contract farmers is increased marginally in the year 2012-13. But the difference of income among three groups is insignificant as p value is greater than 0.05.

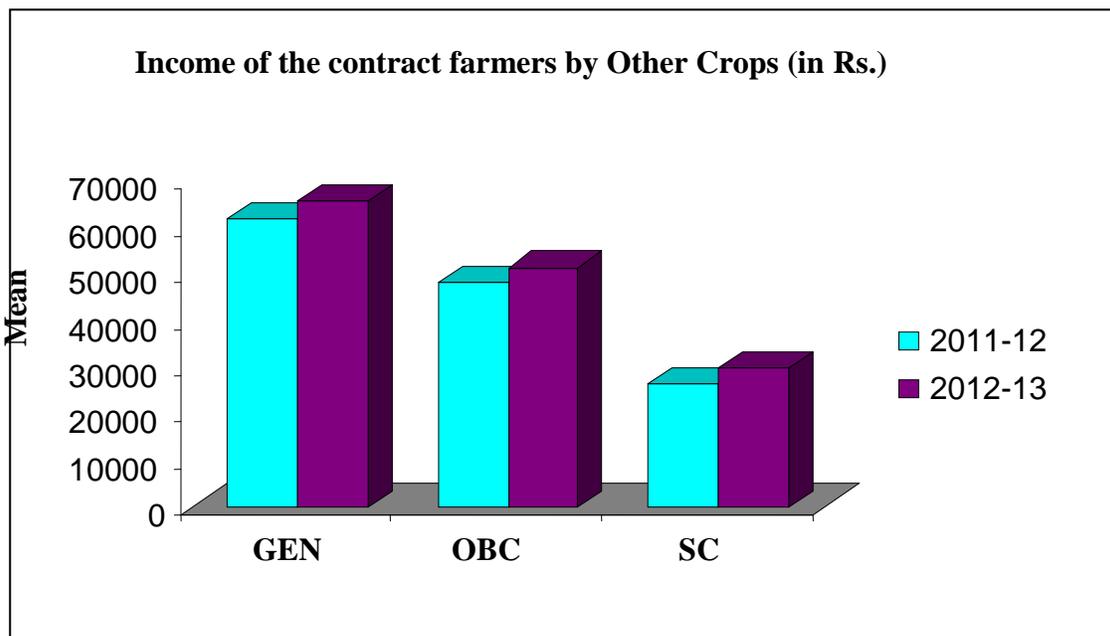


Fig.1.03a: Income by other crops of the contract farmers

The income trend of the contract farmers during 2012 -2013 shows that General and OBC contract farmers are getting more income than SC contract

farmers. The income of the General and OBC contract farmers is higher than the income of SC contract farmers.

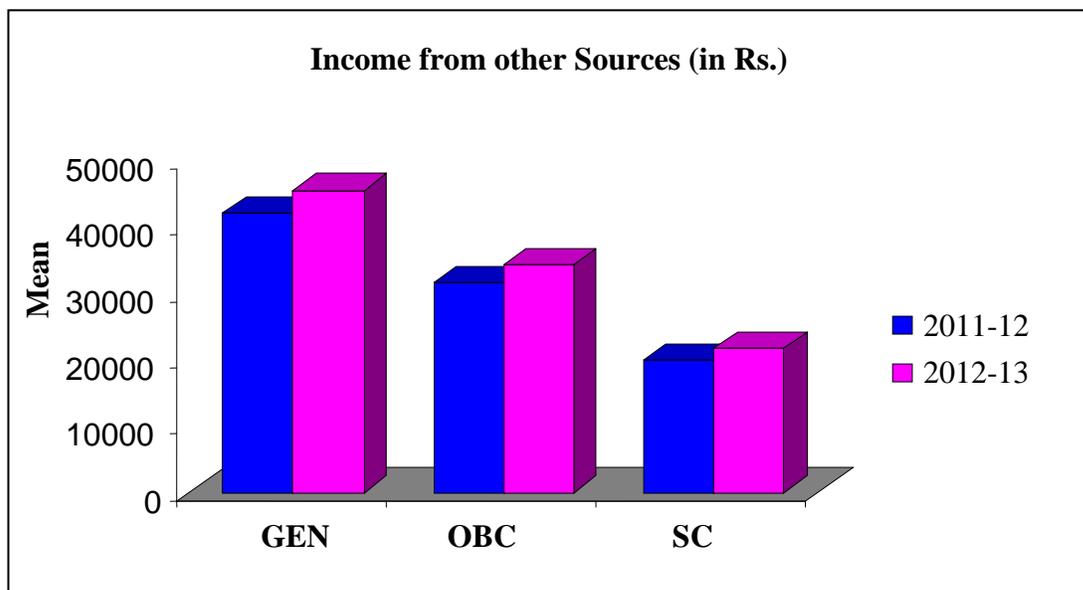


Fig.1.04a: Income by other sources of the contract farmers

The income of the contract farmers from other sources in the years 2011-12 and 2012-13 is also analyzed in Table 1.04 and Fig. 1.04a. The income from other sources is earned by the contract farmers during the contract or non-contract period by working as agricultural laborers in other fields, non-agricultural works, milk production, services, pensions, rental income from leased out land and agricultural equipment.

The average income from other sources is marginally higher in the year 2012-13 as compared to year 2011-12. The variance of income among the three types of contract farmers is insignificant. However general category contract farmers are getting more income compared to the income of OBC and SC contract farmers. The income of OBC

contract farmers from other sources is higher than the income of SC contract farmers in the year 2011-12 & 2012-13. It is clear that SC contract farmers are most disadvantage situation in this case also. It reveals that the contract farming is more beneficial to General and OBC farmers. It is not beneficial to SC small and marginal contract farmers. The income from other sources is higher than the income from the production of contract crop of Chicory.

The income of contract farmers from all the sources for the year 2011-12 and 2012-13 is analyzed in Table 1.05 and Fig.1.05a. The contract farmers are also depending on other works for income generation. Since the income from contract crop is not sufficient. They are participating in different works and getting income.

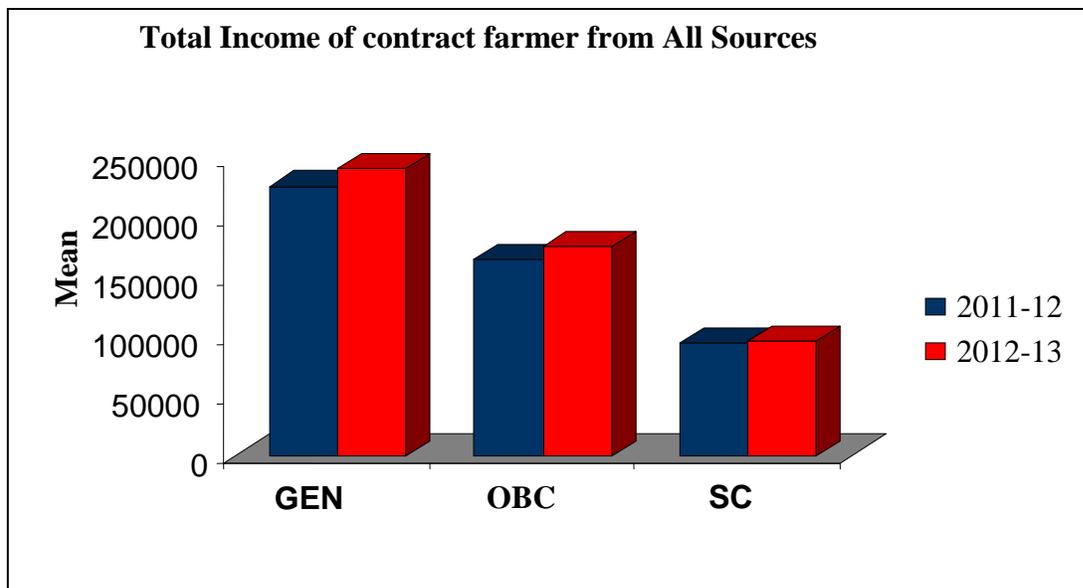


Fig.1.05a: Income by all sources of the contract farmers

The average income of contract farmers from all the sources is increased marginally in the year 2012-13 compared to 2011-12. But the variation of income among the farmers is insignificant. It is notable thing that the income of the contract farmers increased but the increasing trend is showing decreasing. It is analyzed that annual income of the all contract farmers of all social groups has increased particularly in case of General and OBC contract farmers. But in case of SC contract farmers, the growth of the income is very slow and low compared to others groups of the contract farmers.

The loss and profit of contract farmers is estimated by considering average production of chicory per acre, Price of product of chicory, Revenue of the production of chicory per acre and Cost of production of chicory per acre. The profit of the contract farming is the difference between the total cost of production of chicory and the total revenue of the production of chicory with reference to time. The Loss and Profit of the contract farmers during 2011-12 & 2012-13 is analyzed in the Table 1.06. The figures show that all social groups of

contract farmers are getting profit in the year 2011-12. The general contract farmers are getting more profit than other contract farmers. But the rate of profit is showing the declining trend. The same is proved in the year 2012-13. It is analyzed that the production of chicory crop is increased intensively along with price rate among the three groups of General, OBC and SC farmers of the both districts. But the cost of the production of the chicory is very high as compared to its previous year. As a result, all the three groups of the contract farmers are facing losses in the contract farming in the year 2013. The rate of loss of contract farming is higher in case of SC contract farmers than the General and OBC contract farmers in the year 2012-13.

The opinion of the farmers regarding satisfaction of contract farming for the year 2012-13 is analyzed by the Table 1.07 and also Fig.1.07a. Comparing the frequency distribution opinion of contract farmers of General, OBC and SC, the χ^2 test is used and the results revealed significantly difference of opinion of contract farmers during the contract period.

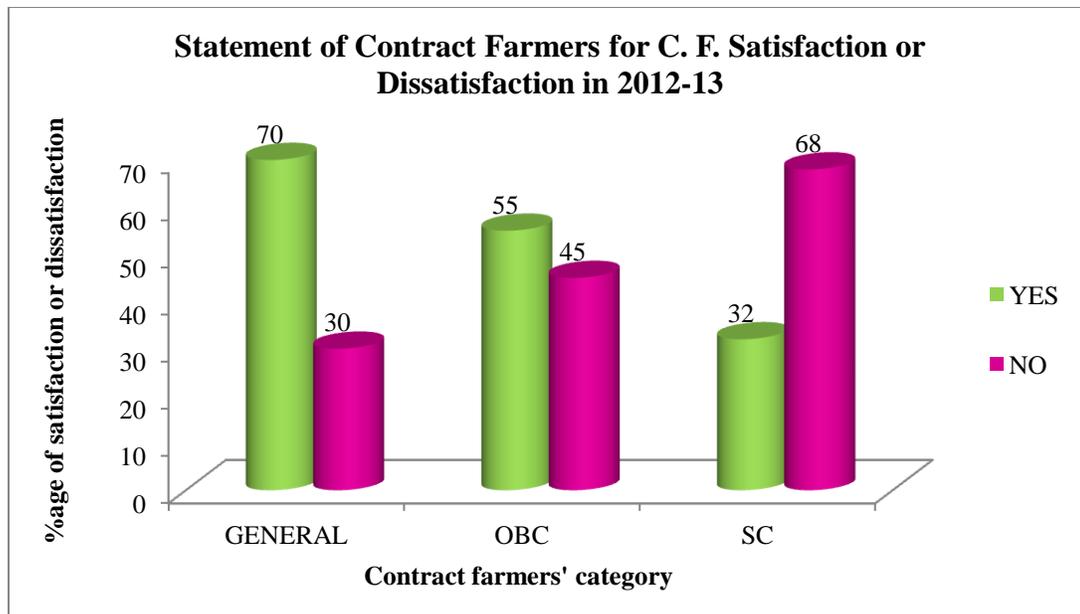


Fig.1.07a: Social category wise contract farmers' opinion for contract farming

The bar diagram shows that 70 percent General, 55 percent OBC and only 32 percent SC contract farmers have expressed satisfactory of contract farming in the both districts. On the contrary, 68 percent of SC, 45 percent of OBC and only 30 percent of General category contract farmers have expressed dissatisfaction by contract farming. The data shows that the contract farmers of SC and OBC are not happy with contract farming. The only general contract farmers are happy with the contract farming in the state.

CONCLUSION

Agricultural development is the symbol of socio-economic development of the Indian farmers. The size of the land and quantity of production has direct relation in the agriculture field. Hence the possession of land is the crucial factor for upliftment for the society. It is examined in the study that the small and marginal farmers are accepting contract farming for the sake of employment opportunity. The period of contract farming is very limited. The contract farmers are getting employment opportunity by participating in contract farming. It is

observed during the survey that in some cases, the marginal and small land holding is ill-treated by the rural society due to lack socio economic power. They adopted contract farming to overcome the economic crises. But contract farming could not be benefited to these farmers. As a result, contract farmers are compel to migrate from rural to urban area to earn and run their lives. It is also studied that the income level of the contract farmers during 2011-12 and 2012-13 reflect that mean income of the contract farmers of three groups is higher in the year 2012-13 as compared to 2011-12. But the difference is insignificant. The General and OBC contract farmers are getting more income in both the years compared to the income of SC contract farmers. The study reflects that General and OBC contract farmers are getting benefit because of large size of land holding, possession of required agricultural equipments and sound socio- economic background, while the SC contract farmers are getting loss in contract farming due to small size of land holdings, lack of financial assistance, lack of technical knowledge, poor economic back ground and lack of agricultural equipments which are major responsible factors for losses in the contract farming. However they are

under contract farming due to lack of alternative works in the villages. It is clear that small and marginal contract farmers are getting losses while the Medium and Large contract farmers are benefitting through contract farming in both districts. The study shows that the production cost of contract crop chicory is high as compared to its selling price. As a result, small and marginal contract farmers are facing more loss rather than other medium and large farmers in the study areas. Hence, small and marginal contract farmers are not satisfied

to do contract farming while medium and large farmers are interested to do in further in agriculture field. It is examined in the study that if state government should take initiation to come across the multinational companies and contract farmers so that they cannot exploit the contract farmers in agriculture field. State government should legalize contract farming by re-introducing land reform act and land ceiling act so that small and marginal farmers can also come in the main stream of the economy through contract farming.

Table: 1.01: Existence of Contract Farming in Uttar Pradesh and Other States

Company	Location	Type of linkage	Crop/Product	Farmers (No.) and acreage (acres)	Average area under contract (acres)
Safal (NDDDB)	Uttarakhand/ Uttar Pradesh	CF (through associations)	Vegetables	150 associations 18000 farmers	-
AM Todd	Punjab/Uttar Pradesh/ Uttarakhand /Haryana	Contract Farming	Mint	2000 10,000	5
Satluj Agri-business	Punjab/Haryana/ Uttar Pradesh	Contract Farming	Organic basmati	50 2200	44
PepsiCo	Punjab/ Uttarakhand/ Uttar Pradesh	Contract Farming	Potato	7000 acres	-
ITC	Uttar Pradesh/ Haryana/Punjab	Contract Farming	Potato/ Basmati rice	11000 acres	32
PMV Malting PVT.LTD.	Punjab/Uttar Pradesh/ Uttarakhand /Haryana	Contract Farming	Barley	1250 1132 acres	27
Rallis India	Uttar Pradesh	Contract Farming	Wheat	19000 acres	-

Source: Compiled from primary and secondary sources

Table-1.02: Average income of the Contract farmers through Chicory crop

Groups	Income (Rs) 2011-12	Income (Rs) 2012-13	t value	p value
GENERAL	123565	131475	0.43	0.670
OBC	86355	91500	0.49	0.623
SC	48751	45690	0.45	0.655

Source: Estimated

Table- 1.03: Average income of the Contract farmers through other Crops

Groups	Income (Rs) 2011-12	Income (Rs) 2012-13	t value	p value
GENERAL	61860	65840	0.35	0.729
OBC	48267	51425	0.41	0.684
SC	26524	29830	1.58	0.115

Source: Estimated

Table- 1.04: Average income of the farmers through other income sources

Groups	Income (RS) 2011-12	Income 2012-13	t value	p value
GENERAL	41958	45520	0.45	0.655
OBC	31635	34206	0.47	0.636
SC	19907	21637	1.10	0.274

Source: Estimated

Table-1.05: Average income of the contract farmers from all income sources

Groups	Income (Rs) 2011-12	Income (Rs) 2012-13	t value	p value
GENERAL	227383	242835	0.49	0.622
OBC	166257	177131	0.63	0.532
SC	95182	97157	0.35	0.727

Source: Estimated

Table-1.06: Average Production of chicory, Revenue, Cost of production and Profit/Loss of the contract farming in 2011-12 & 2012-13

Economic Variable Category	Production of chicory (in qtl.) 2011-12	Contract Price in 2011-12	Cost of production (per acre) (in Rs.) in 2011-12	Revenue per acre (in Rs.) in 2011-12	Profit/Loss (in Rs.) in 2011-12
GEN	112	275.00	29242.00	30800.00	1558.00
OBC	113	275.00	29881.00	31075.00	1194.00
SC	109	275.00	28673.00	29975.00	1302.00
Economic Variables Category	Production of chicory (in qtl.) 2012-13	Contract Price in 2012-13	Cost of production (per acre) (in Rs.) in 2012-13	Revenue per acre (in Rs.) in 2012-13	Profit/Loss (in Rs.) 2012-13
GEN	132	300.00	41498.00	39600.00	-1898.00
OBC	134	300.00	42488.00	40200.00	-2288.00
SC	128	300.00	40950.00	38400.00	-2550.00

Source: Estimated

Table-1.07: Social category wise contract farmers Satisfy or Dissatisfy by**Contract Farming**

Satisfy or dissatisfy	GENERAL	OBC	SC	χ^2 value	p value
	(n=50) (%)	(n=100) (%)	(n=150) (%)		
Yes	35 (70.0)	55 (55.0)	48 (32.0)	26.69	<0.001
No	15 (30.0)	45 (45.0)	102 (68.0)		

Source: Estimated

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