

SMALL, MARGINAL AND WOMEN FARMERS IN UTTAR PRADESH: LAND RIGHTS AND CREDIT FLOWS

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Abstract

Indian agriculture is characterized by millions of small and marginal farmers with uneconomical landholdings facing myriad of difficulties to sustain their livelihood. In India 85 percent of the farmers are marginal or small, operating less than two acres. In fact 66 percent operates less than one acre each and hence most of these farms are not viable. Land is one of the most critical resources for the rural poor dependent on farming for their livelihood and the foremost base for economic development and poverty alleviation. Peasant population occupies the margins of the modern world economy, have rarely been prosperous, often precarious and poorest people in the world. Farmers can be defined as those which have an access to the resource of land as the basis of their livelihood. If we split this group of farmers gender wise, amazing fact is that women contribution is greater or equal to men. Women are equally involved in agriculture in all phases. Despite, women play a significant role in the agriculture production system, most often they are neither legally nor socially recognized as farmers. Government of India's current definition of "farmer" recognizes only those as farmers who have legal ownership over land and hence, their valuable contribution is ignored. Land ownership in general and women land ownership in particular play a major role in their credit worthiness. The problems of farmers are very large, but the main problem is regarding their land ownership, security of tenure and land quality in case where landownership is assured which limits their livelihood options. They are unable to

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apply technology, inputs, credit and various agricultural services and hence, restricts them from reaping the avenues of agricultural growth. Land is not only the most important factor for small and marginal farmers, but it is also the root cause of their problems as they are being thrown out of their holdings. Government distributes land in the name of poor and dalit farmers but the process of entitlement and possession is not so easy.

Uttar Pradesh is predominantly a small landholding state with large regional variations in average farm size, and land and labour productivity. About 92 percent holdings are small occupying 63 percent cultivated area in the state. Across regions, the number of small farm holdings is highest in the Eastern region, about 95 percent cultivating 72 percent of land. The average size of landholding in Uttar Pradesh is 0.80 ha and for small farm category, it is only 0.55 ha causes large regional variations in agricultural growth. Uttar Pradesh is predominantly a land of poor peasant surviving on marginal and uneconomical holdings.

In light of the above, the focus of the paper is to review the present situation of land rights among small, marginal and women farmers in Uttar Pradesh and its relationship with other critical factors of agricultural growth specially institutional credit. Also, to focus on factors this can change their deprived position and help in achieving large scale poverty reduction.

Keywords: Small Farmers; Marginal Farmers; Land Rights; Credit; Agriculture.

1. Introduction:

Agriculture is the primary source of employment, income and rural livelihood, not only in India but in all the developing countries or in any part of the world at their initial stages of economic development. It is not merely an occupation but a broad base for economic growth and is the most critical and inclusive growth sector of Indian economy. A vast majority of population virtually rely on agriculture for their livelihood as more than 70 percent of rural population depends on the agricultural sector. While agriculture no longer dominates the Indian economy in terms of GDP, it is still predominant in terms of employment and food security. Due to large population, we have low per capita income. Indian economy is trapped in dualism. There is a great difference between growth rates of different sectors, regions and people which

restricted the positive structural transformation of India. India has now accounted in the international growth ranking as a growing super power but the reality is that real benefits of growth and development shared by all sections of population have not taken place.

Around three quarters of the world's farmers cultivate small plots of land; India is the land of marginal and small farmers constituting more than 80 percent. According to Agricultural census 2011, the small and marginal holdings taken together (below 2.00 ha.) constitute 84.97 percent in 2010-11 against 83.29 percent in 2005-06. With the marginal and small farmers constituting the majority of farmers in the country, their status can only be changed by increasing agricultural productivity in a sustainable way which can only be done through giving rights over productive resources like land and credit etc. As they are the largest contributor to agricultural productivity, future of sustainable agriculture depends on their performance. Both are highly interdependent, growth in one pushes growth in other, so a rapid force is needed to promote perpetuation of development in small holdings agriculture.

Small and marginal farmers are the people for whom farming is a major livelihood activity, they feed the whole country but are still hungry. They face insecurity of tenure, threats of land alienation, growing forces of urbanization and industrialization and constraints in the process of cultivations in the growing agricultural value chain. They owned tiny parts of lands as mostly unirrigated, fragmented which can be termed as unviable economical land holdings as it is noticed that the zeal and enthusiasm among the farmers are reducing as they don't want to be a farmer if given an opportunity elsewhere but unfortunately there is no scope to flourish in other sectors because they lack all types of resources whether land, capital and skills which is highly demanded in other sectors of the economy.

In the mid 1960s, Indian farmers began to experience a revolutionary agricultural transformation but this revolutionary step that is called green revolution, had a mixed impacts which were noticed only in limited areas, often on irrigated lands which can only be practiced mostly by big farmers and no any gains in drier or unirrigated regions. So, in areas where growth occurred, small farms often were bypassed as green revolution had a size, scale and capital bias which small and marginal farmers couldn't fulfill. Farmer's suicides due to increased costs of cultivations trapped them in higher indebtedness which has been widespread in the past several years and most of them were small and marginal farmers. They often face problems regarding easy and timely availability and quality of various inputs and most importantly knowledge to

handle that input in the right quantity. They always gets a very low prices for their produce because of their economic vulnerability and weak bargaining capacity and always exploited by the moneylenders whereas large farmers always gets from cheap sources. Small and marginal farmers are still in the clutches of poverty and indebtedness.

Farmers, as a group, could be best differentiated by size of land holding and their prosperity level can be identified by their distribution patterns. As focusing on the agrarian society is baseless without going deep into the land distribution structure because relationship between asset ownership especially land and poverty is highly prominent. Access to land is of great important for rural India. In an agrarian economy, arable land is the most valued form of property, a productive resource and a security against poverty and landless and marginal farmers with insecure tenure rights happens to be the poorest and most vulnerable group of any country. Land is not an economic resource but a matter of power, status, social and cultural identity. It plays a dual role in rural India as apart from valuable productive asset, its ownership acts as collateral in the rural financial institutions. So, agriculture growth can be defined as an adequate mixture of three important resources i.e. land, farmer's labour and credit.

Table.1
Distribution of Number of Holdings and Area Operated in India

Sl. No.	Size Group	Number of Holdings (in millions)	Area operated (in million ha.)	Average operated area per holding (ha.)	Percentage of holdings to total holdings	Percentage of area operated to total area
1	Marginal (Below 1.00 ha.)	92.4	35.4	0.38	67.04	22.25
2	Small (1.00-2.00 ha.)	24.7	35.1	1.42	17.93	22.07
3	Semi-Medium (2.00-4.00 ha.)	13.8	37.5	2.72	10.05	23.59
4	Medium (4.00-10.00 ha.)	5.9	33.7	5.76	4.25	21.18
5	Large (Above 10.00 ha.)	1.0	17.4	17.38	0.73	10.92
	All Holdings	137.8	159.2	1.16	100.00	100.00

Source: Agricultural Census 2011-12

According to agricultural census 2011-12, 84.97 percent of small and marginal farmers taken together operated only 44.32 percent of land, 14.30 percent of semi-medium and medium farmers operated 44.77 percent of land and 0.73 percent of large farmers operated 10.92 percent of land. Hence, this unequal picture of land distribution can express in itself the vulnerabilities of peasants in India. Landlessness is a strong indicator of rural poverty in the country. Assured possession and equitable distribution of land is a main source for peace and prosperity and will pave the way for economic and social justice in India.

The land administration is plagued by many infirmities. Unclear titles, informal tenancy arrangements, and other related problems have not only affected productivity of agriculture, they have also forced migration of people, both landless and marginal farmers, in search of employment to urban areas as well as of the landed gentry, giving rise to absentee landlordism, who don't lease out land for fear of losing the land titles. Therefore, an efficient and corruption free land administration, coupled with a dynamically adaptive land policy, has vital role in increasing agricultural growth and poverty reduction (11th Five Year Plan, Planning Commission, GOI).

Uttar Pradesh (U.P) is the most populous state of India. As per the population census 2011, Uttar Pradesh with its 19.98 crore strong population accounted for 16.49 percent of the total population of India. It is the second largest state economy and contributes about 8 percent in country's GDP. Uttar Pradesh is primarily an agrarian economy covering a sizeable part of the highly fertile upper gangetic plain, with more than 80 percent of population lives in the rural areas and more than 70 percent of the total workforce involved directly or indirectly in farming which accounts for 27 percent of state's GDP. Uttar Pradesh is predominantly a land of poor peasants surviving on marginal and uneconomical holdings with large regional variations in an average farm size and labour's productivity. In a total of 137.76 million operational holdings in the country, the highest number belonged to Uttar Pradesh (22.93 million) and out of 159.18 million hectares of operated areas in the country in 2010-11, UP contributed 17.09 million hectares (Agricultural Census 2010-11). During the last decade, average size of holdings has come down from 0.97 ha to 0.83 ha causing increase in the number of small and marginal farmers every year.

Table 2

Distribution of Number of Holdings and Area Operated in Uttar Pradesh

Category	Number of Holdings (in lakh)	Area operated (in lakh ha.)	Average operated area per holding (ha.)	Percentage of holdings to total holdings	Percentage of area operated to total area
Marginal farmers(>1 ha)	166.59	66.48	0.40	76.88	36.97
Small farmers(1-2 ha)	31.37	43.66	1.81	14.25	24.28
Semi medium(2-4 ha)	14.27	39.05	2.74	6.58	21.71
Medium (4-10 ha)	4.63	25.80	5.57	2.14	14.35
Large(<10 ha)	0.32	4.84	15.07	0.15	2.69
Total	216.68	179.83	0.83	100	100

Source: Department Of Land Development and Water Resources, Government of U.P. (2009-2027)

Table 2 shows that 91.13 percent of small and marginal farmers taken together operated only 61.25 percent of land, 8.72 percent of semi medium and medium farmers operated 36.03 percent of land and 0.15 percent of large farmers operated 2.69 percent of area. It is clear from the table that semi-medium and medium farmers dominated over more than half of the area with respect to the areas operated by small and marginal farmers against their small quantity in comparison with small and marginal farmers. Secure land rights is the basic foundation for the realization of the human rights and for poverty reduction. Land is the most significant factor for small and marginal farmers, but it is also the main reason of their problems. The common

problems among small and landless farmers are related to land lease and consolidation of their holdings. They always faced an anti farmer land policies of the state and hence struggling for their existence and survival.

Government distributes land in the name of poor and dalits under some of its development projects, but normally such distributed lands are situated at distant places, which are useless and lack basic facilities. The farmers have to run from one place to another place for the transfer of title and physical possession. Normally, the allotted lands were held by local influentials with the supports of local administration. This problem is common in the entire State but it is more severe in tribal areas especially in Sonbhadra, Chandauli and some districts of Bundelkhand. The tribes of Sonbhadra are displaced from time to time at the name of development schemes which causes regular harassment to them (Mehrotra V.K. *et al.*) Apart from small and marginal farmers in general, women farmers land rights in particular is also a very critical issue in India. Land ownership is a forbidden dream for many women in India, where they do most of the agricultural work. Land rights is not just a matter of a piece of paper awarding them ownership rights, it is about power, security, equality and opportunity. Without land titles in their names, women have no proof of residency and can't access institutional credit and hence can't take the advantages of various agricultural extension programmes. It is the sweat and hardship of Indian farmers which has contributed indispensably to the transformation of Indian agriculture to a resilient production state of food security. But their conditions were still pathetic; the declining size of their landholdings restricted them from moving towards commercial farming, non-farm opportunities and reduced access to institutional sources of credit, extension, insurance and market. Secure land rights promotes increased agricultural production, investments in property improvements and increase in family annual income. So, it is imperative to review the land reforms, constraints due to unequal rights and opportunities which have the ability to uplift the small, marginal and women farmers and also make agriculture a viable profession and sector.

2. Review of Literature:

A study on tribal farmers given land rights under the Forest Rights Act, 2006, in Dahot and Vadodara district points out that the income of tribal farmers, who were given land rights in these districts, has increased by 85 percent. It brought a sense of ownership amongst the tribal farmers and they become more willing to invest in land and started to move ahead towards

the dairy farming and growing fodders causes their income to increase significantly. According to TOI, at a time when the government is pushing for credit coverage for the entire farming community, only 50 percent of the total farmer households in India are under agricultural credit net and due to lack of banking penetrations in remote areas, farmers especially dependent on money lenders for credit against collaterals. The government's agricultural credit schemes are far from their reach making them vulnerable to higher cost of credit. In a recent study on farm credit, ASSOCHAM has found that inspite of doubling of the agricultural credit from Rs 475000 crores to Rs 8 crores from 2011-12 to 2012-13, there is a great imbalance in quality of credit in relation to size of the farm and crop they raise and a virtual exclusion of small and marginal farmers from institutional credit. Hence, by excluding the small and marginal farmers which forms nearly 80 percent of the agricultural workforce, the government actually failed to reach the benefits to those who need it more. A project conducted by ICAR (NAIP-3), has proved that small land holding farmers are facing severe poverty and low productivity of main staple crops but when they linked with livestock based farming system, was proved to lead their livelihood scenario in a Barabanki district of Uttar Pradesh. According to ICAR, a poorest village of Raebareli district of Uttar Pradesh which was reported by Times of India as on the verge of famines. This village was constrained with regular floods and draught in lowlands and poor productivity in the uplands. Most of the farmers were resistant to change from rice-wheat system and expressed that already they were at the verge of poverty they don't want to take any risk, but on the basis guidance of ICAR/NAIP, they were moved to diversification towards vegetables and fruits cultivation and fisheries in an integrated manner using the only farm labours causes them to came out of the poverty cycle with their small land holdings.

The ASSOCHAM recent study on "Agriculture credit in India" reveals that poor awareness about existing crop loans has deprived small and marginal farmers including tenant farmers and share croppers. Chadha, *et al* has explained that on the basis of NSS data on different categories of holdings and area owned by them, the proportion of households owning no land increased by varying degree in a majority of the states from 1971-72 to 1991-92. All the states recorded a varying degree of decline of large holdings and the area owned by them and the changes in distribution of different categories of holdings and area owned by them largely benefitted medium, small and marginal holdings. Chadha et al, found that changes in the concentration of land or the huge proliferation in the tiny holdings is not marked by any

significant increase in the proportion of area accounted for by them. The Indian farmers were still confronted with ever shrinking and extremely limited land base making it difficult to derive livelihood from land.

3. Objectives:

The study entitled “Small, Marginal and Women Farmers in Uttar Pradesh: Land Rights and Credit Flows” has following objectives:

1. To overview the existing patterns of land ownership especially from the point of view of accessibility by the small, marginal and women farmers in India in general and Uttar Pradesh in particular.
2. To review the trends in operational holdings over the different sizes of the farms.
3. To identify the major policy bottlenecks for improving the rural poor access to secure sustainable land rights; and
4. To focus on the opportunities for increasing the economic viability and sustainability of small farm holders and agricultural sector.

4. History of Land Rights in India:

“Land reforms is the most crucial test which our political system must pass in order to survive”- Indira Gandhi

Prior to independence, the system of tenancy cultivation was generally considered to be an integral part of the feudal agrarian structure. The land rights were concentrated in the hands of a small group of large landowners including absentee landlords while a vast majority of actual cultivators did have either no right or had only limited rights as tenants and sub tenants. It was mainly the poor who leased-in land for subsistence (Haque, T). Three broad and exploitive types of land revenue system were introduced in India by Britishers. At first, the Britishers coined the term zamindar as land owner and evolved a theory that gave the zamindars the privileges and rights of ownership of the land. They applied their English concept of property which was not appropriate for the Indian society. This new class of zamindars which were developed after Cornwallis permanent settlement system in 1793 is totally diverted from the management of the farming operations causes disintegration of rural India. Under the zamindari system, feudal lords were declared proprietors of the land on condition of fixed revenue payments to the Britishers. The peasants were reduced to the status of tenants and rents were

collected by intermediaries. This system was prevailed in most of the parts of North and east India like Uttar Pradesh (except Avadh and Agra), Bihar, West Bengal, Odisha, Rajasthan (except Jaipur and Jodhpur) and covered around 51 percent of the total cultivated area.

Another major system was the ryotwari system introduced in the beginning of 19th century resulting in varieties of tenancies, subjecting them to feudal possession. Their tenure of land was secure so long as revenue payments were made directly to the colonial administration. This system was prevailed over most of the states of South India and accounted for 38 percent of the total cultivated areas. And the third one is the mahalwari system, accounted for the 5 percent of the cultivated area, was introduced between 1820 and 1840 in most of the parts of west India i.e. Madhya Pradesh, Odisha and Avadh and Agra in UP. There existed large discrepancies between the ownership and operation of land causes decaying of the rural base of subsistence. After independence, the congress party considered the system of cultivation by tenants as highly unproductive and exploitive, as when zamindars doesn't have any kind of concern with agricultural problems then rationality doesn't allow them to collect the revenue. Thus, in every state the policy of abolishing all intermediary interests and giving land to the recorded tenants was adopted soon after independence which aimed at abolition of intermediaries, tenancy reform to regulate fair rent and provide security to tenure, ceilings on holdings and distribution of surplus land among the landlords, consolidation of holdings and prevention of their further fragmentation and development of cooperative farming. By 1972, laws had been passed in all the states to abolish intermediaries with varying degree of effectiveness. By conferring the ownership of land to the tiller, the government provided an incentive to improve cultivation causes increase in efficiency and yield. The ultimate aim is to confer the rights of ownership to the larger possible extent. But unfortunately, the banning of tenancy and other lease restrictions has only veiled the phenomena underground, rendering the tenants position even more precarious in the system of corrupt bureaucracy.

There are also widespread complaints that lands allotted to the rural poor under the ceiling laws are not in their possession. In some cases, it has also been alleged that pattas were issued to the beneficiaries but possession was not delivered in respect of the lands shown in the pattas or corresponding changes in the records of rights were not made. It has also been the experience that rural poor allottees of ceiling surplus land are dragged into litigation by the erstwhile land owners and against which the allottees are unable to defend themselves. Besides, a

number of benami and clandestine transactions have resulted in illegal possession of significant amounts of lands above ceiling limits. For all these reasons the results of implementation of the ceiling laws are far from satisfactory reduction (11th Five Year Plan, Planning Commission, GOI).

4.1. Land Rights in Uttar Pradesh:

The U.P. Zamindari Abolition and Land Reform Act, 1950, were passed with the express motive of abolishing the “Zamindari System” in the province. The chief aim of this act was to transfer title of land from absentee landowners to the actual cultivators, thus, eliminating the complicated structure of intermediaries between the cultivators and the state. Except for land under personal cultivation, the rights in land of intermediaries are vested in the state. The wide varieties of different rights in land in pre-abolition period were reduced to four. Two of these classes of land rights i.e. Bhumihari and sirdari are ownership rights which involve more than 80 percent of the total cultivated area are subjected to the payment of land revenue. The third class, Asami was the only form of tenure permanently recognized and applies only to certain types of unstable tracts of land where giving clear titles was not possible and the peasant owner were unable to carry on cultivation permanently. The fourth class, Adhivasi, was a transitional class possessed temporary tenancy rights which was abolished by amendment in 1954.

The Zamindari Abolition Act was often criticized for its failure to deal with the problems of landless laborers. Tenants formally liable to different rents are still liable to the payment of different rates of land revenue, so that was the basic inequalities among cultivators continue to exist after abolition. There was very little redistribution of land among cultivators. Solutions for the landless laborer problem were tried by Bhoodan yajna movement sponsored by Acharya Vinoba Bhave with the aim to secure gifts of land for distribution to the landless. The statistics of rent, revenue and compensation showed that 90 percent of all zamindars faced only minor reduction in income following abolition, while the small number of zamindars who held huge holdings suffered considerable loss. The act recognized the need to pay compensation to former owners for rights which was being acquired by the state and specifies the conditions which will govern the payment of such compensation. Former tenants would acquire full proprietary rights over the land they are cultivating by paying 10 times their current annual rent to the state. Hence, initially there was no possibility of reducing the burden of charges on the cultivators. The basic weakness of the land system is unfavourable ratio of rural population to

cultivable land. The smaller size of landholdings and existing tenure laws are restricting investments and leading to inefficiencies in agriculture.

4.2. Gender and Land Rights:

With regard to women's land rights, there is a large gender inequality in providing legal rights to women on land which is the most important productive asset in the rural India. The constitution of India guarantees the fundamental rights to all citizens for equal treatment under Article 14 and non-discrimination on the grounds of sex in Article 15. Before 1956, devolution of both acquired and inherited property governed by the personal laws of the community. Although, equal rights were granted to women in acquired property through Hindu Succession Act of 1956, rights in inherited agricultural land were specifically exempted from the act and were made subject to tenancy and land laws of the state. In India, agrarian reforms through the 1950's took place at a time when gender equality was marginal to the policy agenda. Hence, in most land reform programmes and land transfers, women land rights remained a neglected issue. From the 1980's onward, gender equality was taken seriously but restricted only to land distributed by the government. The plan called for titles to spouses in productive assets and houses and directed state governments to register government surplus lands in joint names but remained silent on inequalities in devolution laws. As the cultivable and waste land has already been allotted, hence the main source of land titles in years to come is not through distribution of government land but only can be done through inheritance. Finally after fifty years, the government addressed some persisting gender inequalities in the Hindu Succession Act by bringing in the Hindu Succession (Amendment) Act, 2005 which provided all agricultural land on par with other property and makes hindu women's inheritance rights in land legally equal to men across states. This can benefit millions of women depending on agriculture for survival.

The status of rights of women in agricultural land in the largest state of the country, i.e. Uttar Pradesh is very much unsatisfactory. The state has special provisions in the U.P. Zamindari Abolition and Land Reforms Act 1950 in which Section 171 holds that "general order of succession- subject to the provisions of Section 169, when a bhumidhar or asami being a male dies, his interest in holding shall devolve in accordance with the order of succession in which the male lineal descendants in the male line of descents inherits an equal shares. The widow comes only after them, along with the widowed mother and widow of a predeceased male lineal descendant in the male line of descend only if she doesn't remarried. The widow, mother or a

daughter if inheriting the holding, they doesn't get an absolute right as on her death the devolution of the property will not be transferred to her heirs but to the heirs of the last male bhumidar. This provision has strong gender bias as daughters have no right of inheritance when sons are alive. A man's own daughter and son's daughter have been excluded. The law has thus inequality and maintained male hegemony in production relations and causes perpetuation of patriarchal production relations in Uttar Pradesh. When women are economically and socially empowered, they can become a potent force for change, the myriad of inequalities make it difficult for women to reach their full potential.

5. Small, Marginal and Women Farmers: Progress of Land Reforms

Land is the base for economic development and poverty alleviation of a country. It is the most important asset among rural households. Landlessness, near-landlessness, small size of land, gender and caste based practices are in itself is a major disadvantage since it reduces the farmers ability to invest in lumpy inputs, gains from economies of scale, bargaining power in market and considerably directly proportional to incidence of poverty. Marginalization of holdings has been showing a rising trend due to increasing pressure of population on land and pattern of land reform process. This high level of landlessness and marginalization of landholdings poses a threat to livelihood security of millions of rural poor. In such a present situations, it is imperative to analyze the existing patterns of ownership and utilization of land in rural India in general and U.P. in particular as well as to identify the major policy bottlenecks to improving the rural poor access to secure sustainable land rights.

Table 3
Group-Wise Distribution of Average Holdings in India

(Area in hectares)

Sl.No.	Size Groups	1970-71	1976-77	1980-81	1985-86	1990-91	1995-96	2000-01	2005-06	2010-11
1	Marginal (>1 ha)	0.40	0.39	0.39	0.39	0.39	0.40	0.40	0.38	0.38
2	Small (1-2 ha)	1.44	1.42	1.44	1.43	1.43	1.42	1.42	1.38	1.42

3	Semi-Medium(2-4 ha)	2.81	2.78	2.78	2.77	2.76	2.73	2.72	2.68	2.71
4	Medium (4-10 ha)	6.08	6.04	6.02	5.96	5.90	5.84	5.81	5.74	5.76
5	Large (<10 ha)	18.1	17.57	17.41	17.21	17.33	17.21	17.12	17.08	17.38
Total	All Size Classes	2.28	2.00	1.81	1.69	1.55	1.41	1.33	1.23	1.16

Source: Agricultural Census, 2010-11

Table 3 shows that the average size of holdings for all operational classes i.e. small and marginal, medium and large have declined over the years and for all the classes if put together, it has come down to 1.16 hectare in 2010-11 from 2.82 hectare in 1970-71. In table 4, comparing the state wise percentage distribution of number of operational holdings for all size groups, among different land owning categories, all the fifteen major states recorded a varying degree of decline of the large holdings except Gujarat and Maharashtra and holdings of marginal and small farmers increase in all states except Bihar, Orissa, Kerela, Maharashtra, Tamil Nadu, Uttar Pradesh and West Bengal.

Uttar Pradesh stands after Kerela, Bihar and West Bengal in terms of small and marginal farm holdings in both 2005-06 and 2010-11.

Table 4

State-wise Percentage Distribution of Number of Operational Holdings for all Size Groups

States	Agricultural Census 2005-06					Agricultural Census 2010-11				
	Marginal	Small	Semi-Medium	Medium	Large	Marginal	Small	Semi-Medium	Medium	Large
AndhraPradesh	61.59	21.91	11.99	4.05	0.47	63.94	22.15	10.62	3.02	0.27

Assam	63.7 4	21.5 1	11.56	3.02	0.18	67.3 1	18.2 5	11.1 6	3.12	0.15
Bihar	89.6 4	6.68	2.99	0.67	0.02	91.0 6	5.86	2.56	0.50	0.02
Gujarat	34.0 1	28.8 6	23.18	12.4 9	1.45	36.8 9	29.1 2	22.0 0	10.48	1.51
Haryana	47.6 7	19.4 2	17.64	12.2 3	3.04	48.1 1	19.4 7	17.5 5	12.04	2.83
Karnataka	48.2 3	26.5 6	16.86	7.31	1.05	49.1 4	27.3 0	16.1 7	6.52	0.86
Kerala	95.6 3	3.11	1.01	0.22	0.04	96.3 2	2.64	0.83	0.18	0.03
Madhya Pradesh	40.4 5	27.1 6	19.18	10.9 8	1.60	43.8 6	27.6 0	18.6 5	8.89	1.00
Maharashtra	44.6 1	30.2 6	17.87	6.74	0.51	48.9 8	29.5 6	15.7 5	5.18	0.53
Orissa	59.6 2	26.5 4	10.84	2.74	0.26	72.1 7	19.6 8	6.67	1.36	0.12
Punjab	13.4 2	18.2 2	31.85	29.4 4	7.06	15.6 2	18.5 7	30.8 3	28.35	6.62
Rajasthan	33.5 1	21.3 6	20.37	17.8 3	6.93	36.9 6	21.9 4	19.3 8	16.36	5.86
Tamil Nadu	76.0 1	15.0 6	6.62	2.07	0.24	77.1 9	14.5 6	6.19	1.85	0.21
Uttar Pradesh	77.9 6	13.8 2	6.20	1.91	0.12	79.2 3	13.1 4	5.79	1.73	0.11
West Bengal	81.1 7	14.3 8	4.04	0.40	0.01	82.1 6	13.7 6	3.75	0.32	0.01
India	64.7 7	18.5 2	10.93	4.93	0.85	67.0 4	17.9 3	10.0 5	4.25	0.73

Source: Agricultural Census 2010-11

In U.P, the growing concern is on declining holding size, increasing fragments of land and rising number of small and marginal farmers. U.P. is predominantly a small landholding state with large regional variations in average farm size and land. In table 5, across the regions, the number of small farm holdings is highest in the Eastern region i.e. about 95 percent cultivating 72 percent of land areas and lowest 77.80 percent in Bundelkhand region cultivating 38,14 percent of land. The average size of landholding in Uttar Pradesh is 0.80 ha and for small farm category, it is only 0.55 ha. Across regions, the average size of farm holding is lowest in Eastern region and highest in Bundelkhand region i.e. 0.64 ha and 1.49 ha respectively.

Table 5

Region-Wise Distribution of Land Holdings in Uttar Pradesh

Region	Small farm holdings		Average holding size	
	Number (%) 2005- 06	Area (%) 2005-06	Small farms(ha) 2005-06	All farms (ha) 2005-06
Western				
Central	89.21	59.06	0.61	0.92
Bundelkhand	93.18	69.55	0.56	0.76
Eastern	77.80	38.14	0.73	1.49
Uttar Pradesh	94.81	72.13	0.48	0.64
	9177	63.18	0.55	0.80

Source: Pandey and Reddy, 2012

According to Agricultural Census, 2010-11, the percentage share of female operational holders has increased from 11.70 in 2005-06 to 12.79 in 2010-11 with the corresponding operated area of 9.33 and 10.36.

Table 6

Percentage of Women among All Cultivators by Land Size Class in Uttar Pradesh (2010-11)

(Number & Area in '000)

Land Class	Land Holdings	Area Cultivated
Marginal	1368	481
Small	160	220
Semi-Medium	60	160
Medium	14	73
Large	1	8
All Size Group	1602	942

Source: Agricultural Census, 2010-11)

Table 6 shows that women constitute 95.38 percent of small and marginal farmers in U.P and cultivating area of about 74.41 percent of land while 4.61 percent of semi medium and medium women farmers cultivating an area of 24.73 percent whereas their male counterpart accounted for 92.17 percent of small and marginal holdings cultivating about 63.39 percent of land. This picture clears that there occurs an increasing feminization of agriculture in Uttar Pradesh. So, there is a great need to focus on gender issues in agricultural policies.

Status of Schedule Caste and Schedule Tribes in the State:

The scheduled castes and scheduled tribes (SCs & STs) in India are considered to be the most marginalized and vulnerable sections of the society. So, it is very important to overview the land holding status of these groups. According to 2010-11 Agricultural Census, the percentage shares of SCs & STs operational holdings in total holdings is 12.4 percent and 8.71 percent and area operated by them are 8.60 and 11.49 percents.

Table 7

Percentage Distribution of Number of Holdings and Area Operated by Operational Holdings for SCs and STs in Uttar Pradesh

Land Class	SCs (2005-06)		SCs (2010-11)		STs (2005-06)		STs(2010-11)	
	Number	Area	Number	Area	Number	Area	Number	Area
Marginal	88.28	58.98	88.68	59.12	61.69	20.04	66.84	23.98
Small	8.95	23.92	8.60	23.75	21.38	24.46	19.20	24.33
Semi-Medium	2.37	12.37	2.31	12.49	11.27	24.43	9.15	22.39
Medium	0.40	4.24	0.38	4.21	5.02	22.99	4.22	21.40
Large	0.02	6.49	0.01	0.44	0.65	8.07	0.59	7.90

Source: Agricultural Census 2010-11

In table 7, SCs and STs accounted for 97.28 and 90.82 percents of small and marginal farmers in operational land holdings in 2010-11 against 97.23 and 83.07 percents in 2005-06. Hence, there is an increase in number of small and marginal farmer's operational holdings. The area operated by SCs and STs accounted for 82.87 and 44.5 percents in 2010-11

against 82.9 and 44.5 percents in 2005-06. The operational holdings show an increasing trend whereas area operated by them shows more or less same trends. Tribal economy has traditionally centered on land which is not only a source of livelihood for them but they have a strong emotional and cultured bond with the land. Sonbhadra, the southern most district of U.P, earlier part of Mirzapur district, was a scheduled district under the provisions of the Scheduled District Act, 1874, which dealt with the administration of areas of tribal concentration and backward tracts in British India. Nearly half of its dwellers are tribals and SCs. Projects on the rihand reservoir in late 1950s along with the constructions of cement factories, thermal plants causes massive displacement from the region.

Land alienation and other forms of exploitations such as debt bondage, money lending at exorbitant rates of interests are causing tribal unrests and naxal movements. Being unable to repay the loans, their land was captured by the moneylenders and they were reduced to that of landless categories. Moreover, the tribal's who sell their land are reluctant to reveal their identity for the fear of economic intimidation, since the sale of land to non tribal's would be illegal as per the Uttar Pradesh Zamindari Abolition and Land Rules Act, 1950 (amendment in 1969) which restricts the transfer of lands from STs to non-STs by ways of sale and leasing and thus deprived of benefits from their land resources.

6. Viability of Small Farm Agriculture:

At the time of independence, there was a controversy among landlords and political elites that the turning of lands and their management to uneducated peasants were proved to be a road to disaster as peasants with small lands will produce only for their own needs, food prices will increase and economic growth would decline. But these speculations were not considered and land reforms were implemented. The main argument for land reforms was that small farm is inversely related with farm productivity.

There is an increasing concern from around the world that agricultural productivity is inversely related to farm productivity on the basis of that small farms using family labour have significant advantages in reducing labour costs and achieving higher intensity of work efforts per hectare. As per hectare value of output from small farms is not less than large farms. But there is a paradox with this situation in Indian agriculture as policies in India have led to biases towards large farmers in infrastructure development, support services, markets for credits and complementary inputs and hence disguising the underlying relative efficiencies of small versus

large farms. Many holdings in India are simply too small to be economically viable in the existing policy environment and given indivisible inputs like family labour etc. Green revolution destroyed the inverse relationship between farm-size and productivity in rural India. According to Schultz, “traditional farmers are efficient but poor”. Considering the reduction of unequal distribution of land holdings and redistribution of lands will lead to a positive effect on farm productivity, there is a need for holistic approach towards small farmers through effective land reforms.

Some of the economists believed that inverse relationship is only valid for traditional agriculture but could be rejected at a higher level of agricultural technology. Rapid technological changes and expansion of commercial farming have changed the perception of efficiency towards small farms. In current situations of high rates of population growth, there is little scope for augmenting the amount of land per farm. So, increasing the intensity of production on a small farm is essential for peasant’s sustainability, higher income and food security which can only be increased through increased modernized inputs via institutional credits.

7. Land Rights and Credit Flows:

The relationship between land rights and credit has year’s long relationship as their combination resulted into an efficient farm production. But in past centuries, their combinations were very exploitive in nature. Large landlords had only the ownership rights on land on the one hand, that was the primary cause for landlessness and poverty and moneylenders on the other hand exploited the poor peasants. But this exploitive relationship was broken by land reforms process and financing of agriculture through multi-agency approach. But still, small, marginal and women farmers lack both of the rights.

Small, marginal and women farmer households need credit to meet both the consumption needs to meet the subsistence levels as well as for production purposes to carry out the increasing costs of cultivations and to make more productive use of resources so as to shift the production function in upward directions. Small farm agriculture requires a fundamental transformation of farming process that is a shift from traditional to market oriented farming which fully depends on sustained infusion of capital. Small farmers need more capital than they can afford to generate through their savings. But the quantity and quality of land owned by these

socially deprived groups affected their access to credit as they suffer from discriminations in the delivery of credit services. They typically do not have collaterals, they have no fixed collateral or only have a small acres of land that most often cannot be mortgaged. Identification of alternative collaterals is ought to be very costly and cumbersome. Large farmers mostly benefitted from financial institutions apart from their own large saved capital due to rights to large amounts of land areas. Collaterals can only provide securities to land owners only when they possess proper titles to their assets as supply side mechanism of formal credits demands security of their contracts and legal system rationally allowed it. Hence, if a farmer has no land titles, this situation perpetuates into landlessness as lack of land or small holdings causes demands for more capital to make small farm holding viable but due to no land as collaterals diverted them from formal to informal sources of credit and future takeover of land by exploitive moneylenders in default cases.

Table 8**Prevalence Rate of Indebtedness by Farm Size, All India (%) 2003**

Land Size	Formal	Informal	Both	Total
<=0.40	12.7	30.3	3.5	46.5
0.41-1.00	18.8	21.7	4.6	45.0
1.01-2.00	25.9	17.9	7.0	50.8
>2.00	34.7	14.4	8.6	57.8
Total	20.4	23.0	5.3	48.6

Source: NSS 59th Round on Situational Assessment Survey of Farmers, 2003

Table 8, it is clear that small and marginal farmers depended on informal credit than medium and large farmers have better access to formal sources as they are better endowed with land and other assets to offer as collateral for loans than the marginal and small farmers. Indebtedness is the basic reason for farmers suicides as most of the victims are being from small and marginal categories.

According to 59th NSS Reports, Uttar Pradesh accounted for 73.6 percent of the proportion of rural household availing banking services. The level of indebtedness is very higher for marginal farmers i.e. 71.3 percent, 17.4 for small, 7.8 for semi-medium, 3.4 for medium and 0.3 percent for the large farmers. Among women, there is a lack of identity problems especially the recognition of women as farmers. Indian farming is fragmenting and the bottom is swelling

which raises questions regarding the survival of small holdings in it or in the influence of globalization. We can take the example of China, as despite of its small holding size as about half of India but has accounted for double productions than India. Small may not be a constraint, we can increase the value of output by diversifying into higher value products as well as higher staples productivities. Hence, India can flourish despite of its small holdings if we can get a few things in right directions, especially institutions of land and credit.

8. Viable Small Holding Agriculture:

Apart from the issues of land rights, there is another problem of land acquisition as there is a great need for the diversion of land for increasing urbanizations and industrialization which is also very important in the present era. So, the only way to keep out small farmers from poverty is only through increasing the crop intensity which is only possible through technological mixture of inputs via credit access on the one hand, on the other hand there are large and increasing number of opportunities like government initiated group and collective and cooperative farming, contract farming by diversifying towards the vast opportunities of agro-processing unit etc and diverting the small farms towards nonfarm rural sectors. There is an increasing focus toward the reform of the lease in and lease out market. In the era of globalization and technological revolution, there is a need to liberalize and free leasing in and leasing out of land by the landless and marginal farmers either from small or big farmers for increasing the size of the holdings by making legal provisions. There are speculations toward increasing importance of contract farming which is a system of cultivation and supply of agricultural goods that is based on forward contracts between producers and buyers as advocates of contract farming associates viability and higher productivity with large farms and with the infusion of capital and small land owners who operates small uneconomic holdings would gets the opportunities to legally lease out land to other farmers with the assurance of being able to resume possession at the end of the stated period of tenancy but this will needs an elaborate emphasis on it by considering the equity, productivity and sustainability considerations that tenancy should be legalized in a limited manner as this was against the norms of land and tenancy reforms. Hence, before that purpose virtualization of small farmers land rights become necessary. For this purpose, farmers are made to believe that rights to the land that is so dear to them will still rest with them either in the form of direct possession or in the form of shares even after the actual transfer of the land to the company management along with the surety that they

will continue to be involved in farming operations with assured income and profitability depending on the extent of land and labour contributed by them on the farm. But in practice, when small farmers enters into contract with the company, the rights shifted to the company as there are large number of cases of fraudulent practices by the companies. Marginal farmers who constitute more than 80 percent of farm households will be the most affected by contract farming as they lack power, sometimes they gives land to companies or to big farmers below market rises under their threat. Contract farming can work if there will be a collectivization of small farmers i.e. 10 to 15 farmers get together and form a group by signing a group contract as it links the marginal farmers groups to banks causes adequate flow of institutional credit , also reduces the transaction costs, gives them better bargaining power as it also aware them to involved and understand the terms and conditions of the company and they must be more involved in agricultural process which gives them higher yields and fixed prices and reduces their vulnerability.

Hence, the most potent vehicle that can empower the poor is group action. There large number of cases of success of group farming especially among the women through various government special schemes and programmes which make a significant impact on the agricultural outcomes for marginal, small and women farmers by enabling them to access credit and other productive resources, improves their skill base in both agricultural and non agricultural activities along with providing them income earning opportunities in the nonfarm activities and hence improves their income prospects from agricultural sector and strengthen their livelihood security. Hence, group farming helps the farmers to overcome economies of small size and access to credit, inputs and markets.

Women in the Campierganj district of U.P. have formed small farming communes under which they were growing various crops and reap benefits to run their households effectively. The investments are also collective and the profits are shared among the women whom they use for the families and especially for their children's. So, it is essential to shift from individual based approach to group based approach to transform the situations of small holder's agriculture (One India News). Small farmers have the potential to raise their income by switching from staple based production system to high value agriculture but there are large number of problems with small farm holders as they lacks marketable surplus, their lands were situated in remote areas with poorly developed infrastructure facilities. According to Brithal and

Joshi (2007), diversification is one of the channels which help to reduce poverty of small farmers as they have the benefit of larger labour pools. They can diversify them towards horticulture, livestock, fisheries etc. In U.P, diversification became important when excess production of rice and wheat glutted the market and profit margins for small farmers declined. Livestock sector is an important option for diversification, it is very important for the livelihood of small holders as this sector is growing impressively in U.P, but still the potential has not yet been fully capitalized. Uttar Pradesh is the second largest state next to west Bengal in terms of vegetables production, but this trend is very dissimilar across regions like in the eastern regions as they mostly depends on staples production due to food security reasons. Sugarcane and wheat is the most prevalent crop in the western parts of U.P, sugarcane mostly grown by the medium and large farmers. So, these types of regional diversities must be reduced.

So, as a whole the thing which must be focused in the present era to make sustainable livelihood of small farmers are correct and updated land records to review the land reforms and make amendments according to the present order of opportunities.

9. Conclusion:

In an era of multiple problems associated with land rights, it demands holistic balances between land rights of small, marginal and women farmer's sustainability and land acquisitions for industrialization impulses. Land relations are extremely complicated and this complexity has contributed significantly to the problems facing actual cultivators. Unregistered cultivators, tenants, and tribal cultivators all face difficulties in accessing institutional credit and other facilities available to farmers with land titles. In face of liberalization, when it is being increasingly argued that since land ceilings is a politically more sensitive issue, the earliest way to reform agrarian structure lies in legalizing leasing in and leasing out. Indian farming is fragmenting and its bottom part is swelling which raises questions regarding the survival of small farmers. Small may not be a constraints, we can take the example of China as despite of its small holdings almost half of ours but production is near double than India. Hence, land rights, credit and farm technology packages have been proved to be very important to increase crop intensity of small farms along with increasing opportunities in non-farm sector, diversifications, increasing group farming. Agriculture and small farmer's sustainability in general and U.P. in particular can be intensified by removing all the bottlenecks in way of productivity.

References:

1. *Business Standard*, "Farm Credit Flow Highest in South India, Lowest in North East: ASSOCHAM, Capital Market, Nov.8, 2013.
2. Brithal *et al.* (2007), "Diversification in Indian Agriculture towards High-Value Crops" *International Food Policy Research Institute*, Discussion Paper 00727.
3. Chadha *et al.* (2004), "State of the Indian Farmer" Ministry of Agriculture, Government of India, Vol. II, Academic Foundations, New Delhi.
4. ET Bureau (2012), "Only 50 % of Farmers under Agricultural Credit Net", *The Economic Times*, April. 5.
5. Government of India (2008), "Eleventh Five Year Plan 2007-2012", *Planning Commission*, Vol. III, New Delhi.
6. Government of India (2009), "The Challenge of Employment in India", *National Commission for Enterprises in the Unorganised Sector*, Main Report, New Delhi.
7. Haque, T (2001), "Impact of Tenancy Reforms on Productivity Improvements and Socio Economic Status of Poor Tenants" *National Centre for Agricultural Economics and Policy Research (NCAP)*, Policy Paper 13, New Delhi, p.1.
8. Mehrotra, V.K. *et al.* (2001), "Food Security of U.P. Small Farmers Threatened", *Food Security Situation of Marginal Farmers and Agricultural Labors*, Delhi.
9. Moore and Freydidg (1955), "Land Tenure Legislation in Uttar Pradesh", *South Asia Studies*, Berkeley.
10. *One India News*, "Women Benefitting from Group Farming in Uttar Pradesh" Lucknow, Sep 6 (ANI), <http://news.oneindia.in/2009/09/06/womenbenefiting-from-group-farming-in-uttar-pradesh.html>.
11. R.B. Roy, "Livelihood Security Through Livestock Based Farming System for Small Land Holders in Barabanki Districts of Uttar Pradesh, *Indian Council of Agricultural Research*, <http://www.icar.org.in/en/node/2274>.
12. R.B.Roy, "Livelihood Generation for Marginal and Small Farmers through Integrated Interventions of Vegetable at Tera Village of Raebareli, *Indian Council of Agricultural Research*, <http://www.icar.org.in/en/node/2279>.
13. Sharma, Sachin (2013), "Land Rights Helps to Increase Tribal Farmers Income", *The Times of India*, Aug.11.
14. Sharma, Devinder (2012), "Small Farmers in India Get Less than 6 Percent of Farm Credit-No wonder, Farmer Suicides Shows No Signs of Ending, *Ground Reality*, Oct.24.