On Agricultural Resources Sharing among the Small and Medium Scale Farmers in India

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ABSTRACT: Ever since the introduction of 'green revolution' to traditional Indian agriculture, there had been a tremendous increase in the output of agricultural produce. This increase in output had helped Indian economy to attain self-sufficiency in terms of food grains to feed its growing population. On one hand Indian agriculture is exhibiting continuous 'growth' in terms of agricultural output, while the government and non-governmental reports suggests an increasing distress among farmers, especially among the small and medium scale farmers. The available literature on Indian agriculture points to unsuccessful implementation of land reforms, which were intended to bring in structural changes in traditional Indian agriculture. However, Indian farmers could achieve significant increase in production due to the efficient utilization of available resources using diverse resource sharing mechanisms; one such mechanism is tenancy (formal/informal). The current paper emphasises the need for in-depth and micro-level studies reflecting the dynamic nature of agricultural resources sharing.

INTRODUCTION

It is a fact that since the introduction of 'green revolution' to traditional Indian agriculture, there had been a tremendous increase in the output of agricultural produce. This increase in output had helped Indian economy to attain self-sufficiency in terms of food grains to feed its growing population. On one hand agricultural produce/output has been increasing annually whereas, on the other hand National Commission for Enterprises in the Unorganised Sectors (NCEUS), 2008 report titled "*A Special Programme for Marginal and Small Farmer*" mentions that there is persistence of 'agrarian crisis' among the marginal, small and medium landholding farmers. This paradox is due to confusion in understanding what exactly is 'growth' and 'development'. Uphoff and Ilchman ('72) provides better understanding of two terms as they identify 'growth' with 'production' and 'development' with 'productivity'. Going by this exposition growth is just a quantitative term whereas development is much broader concept involving structural changes leading to increased productivity. The available literature on Indian agriculture points to unsuccessful implementation of land reforms, which were intended to bring in structural changes in traditional Indian agriculture. However, Indian farmers could achieve significant increase in production due to the efficient utilization of available resources using diverse resource sharing mechanisms; one such mechanism is tenancy (formal/informal). The persistence of various forms of tenancy through periods of socio-cultural, political, economic and technological changes is a potential area requiring attention of the discipline of anthropology (Robertson, '80: 411). The current paper emphasises the need for in-depth and

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micro-level studies reflecting the dynamic nature of agricultural resources sharing mechanisms drawing heavily from the anthropological methods and methodology.

Land Reforms

Indian agrarian system with scarcity and skewed distribution of agrarian resources (land, labour, and capital), with large rural population below poverty line, there were compelling social, economic and political arguments for structural reforms in Indian traditional agriculture system and appropriately it received priority in the policy making immediately after attaining political independence in 1947 (Maitreesh Ghatak and Sanchari Roy, 2007). Land reforms had two main objectives; first one is to increase the production of agricultural produce and second is to decimate all forms of exploitation and 'social injustice' thriving within the Indian agricultural system. In fact, the first amendment made to Indian Constitution in 1951 was to remove the legal impediments arising in form of fundamental rights for implementation of land reform measures by States and for abolition of Zamindari rights. The rationale for the equitable land distribution was further augmented after the publication of a paper titled *"An Aspect of Indian Agriculture"* by Amartya Sen on the inverse relationship between landholding size and productivity in 1962. This proposition had a profound implication on the land reform policy advocating that any reform which minimize inequality in landholding sizes will have a significant positive effect on productivity (Singh *et al*., 2002).

The introduction of 'green revolution' in the Indian agriculture had intensified the arguments for and against the negative relationship of landholding size and productivity hypothesis. Research findings supportive of Amartya Sen's include Banerjee ('85), Ghose ('79), Chaddha ('78), Bharadwaj ('74a). A relatively recent study conducted by Tadesse and Krishnamoorthy ('97) in Tamil Nadu to examine the level of technical efficiency among the small, marginal and large landholding farmers had found out that small and medium farmers cultivating paddy had attained a higher level of technical competence when compared with large landholding farmers. While antagonists of negative relationship hypothesis had argued that with increased cost of capital inputs and access to market in favour of large landholding farmers had made the inverse relationship redundant. Hanumantha Rao ('75) argues that increased application of fertilizers, capital intensive inputs and further technological change had tilted the productivity in favour of the large landholding.

In a moderate vein Deolalikar ('81) findings suggest that at the traditional level of Indian agriculture the inverse relationship holds true but when it comes to higher level of technological inputs the relation between landholding size and productivity turns positive. Insights from above mentioned empirical studies help identify multiple factors that affect the relationship between farm size and productivity such as intensity of cultivation, efficient use of available land resources, scale neutral technological inputs, soil fertility (Carter,'84; Bhalla and Roy, '88; Newell *et al*.,'97), Managerial factors involving hired labour (Rao and Chotigeat,'81), and access to irrigation facilities (Sampath,'92). The scholarly debate on negative relationship between landholding size and productivity had occupied much of the intellectual space between 1962 till the end of 1990s although no consensus had been achieved. However, in many ways the scholarly debate on farm size and productivity had brought out various issues concerning agrarian relations thus providing timely inputs for course corrections in the implementation of agrarian policies.

Tenancy

With ineffective implementation of land distribution and ever increasing demand for land coupled with limited availability of land, focus of policy maker was shifted on to the practice of tenancy. Tenancy is one of the oldest 'institutional devices' (Jodha,'81: A118) evolved for the purpose of temporary transfer of resources (land, labour, capital) for the utilization between contracting partners. In other words, tenancy "involves two or more individuals combining their privately owned resources for some mutually agreed productive purpose, the outputs being shared in mutually agreed proportions" (Robertson,'80: 411). In pre-independence epoch of Indian agriculture, tenancy is looked as the extreme form of exploitation due to the unequal position of

resources between the contracting parties. As a result, regulation of various forms of tenancy had become imperative for legislators to address equity issues in the agricultural production processes immediately after Independence. Some states had completely made practice of tenancy illegal under law while other states choose to regulate it in a manner that suits to their existing socio-economic and political settings. For example; the erstwhile state of Andhra Pradesh had two separate laws, Andhra Pradesh Land Licensed Cultivators Act, 2011, which was enacted to provide institutional credit to tenants on par with landowners through loan eligibility cards whereas, Andhra Pradesh (Telangana area) Tenancy and Agricultural Lands Act, 1950 is very specific to Telangana region, which had different terms for tenants and landowners.

The regulatory measures coupled with changing agrarian practices had altered the circumstances in which tenancy now thrive (Jodha,'81: A118). Majority of the earlier studies on tenancy by research scholars and policy makers had a common understanding that tenant is a small, ill equipped and often exploited by the landowners. This notion holds true during the existence of traditional and stagnant agrarian system (Vyas,'70). Understanding of tenancy on these lines had emphasized the regulation of various forms tenancy. However, considering popular policy of 'land to tiller' of Kerala in 1970s, C.S. Murty observes that the 'land to tiller' policy "made no distinction between those who only supervised cultivation of land and those who contributed their own and their family members' labour in cultivation while identifying true 'tiller of the land' and as a result the right of purchase of land was conferred to all[1]" (Murty, 2004:3270). Even in the case of West Bengal, under the 'Operation of Barga campaign' in 1978, it was the 'middle peasants' who have got disproportionate benefits (Ghose,'84). Any measures which intended to regulate or abolition of tenancy had pushed practice of tenancy underground and further nullified recourse to legal remedy which was available earlier in the case of exploitation. Before any further policy recommendations, researchers as well policy makers need to understand the underlying rationality (not restricted to economic theory) for the persistence of tenancy in the Indian agrarian system. Good number of macro-aggregate surveys and limited number of empirical studies have been conducted on the tenancy from the economic and political economy perspective.

Generally, the decision on the part of tenant to get into any tenancy contract is driven by two types of motives. In first case objective of the tenant perhaps is to earn a subsistence as no other livelihood opportunities exist. In second case, lands are leased into increase the size of landholding for optimum utilization of available resources. Mamata Swain, calls the first motive as a compulsive and involuntary participation in the tenancy contract as a 'survival strategy', whereas the second motive is termed as voluntary and promotes 'commercial tenancy' (Mamata Swain,'99: 2662). These two motives among the tenants had led to the different forms of tenancy in different social, economic, political and geographical settings. Common types of tenancy as observed in many studies are[2]; share cropping, fixed share cropping, fixed wage, fixed rent in kind/cash and Wage-homestead tenancy (popular among the plantations). However, broadly on the basis of rent payment tenancy contracts can be categorized as fixed rent and crop sharing contracts (Singh,'89: A88).

Transcending Marxism and Modernism

Crop sharing or sharecropping is considered to be one of the earliest forms of tenancy. From the Marxist point of view, sharecropping is an inequitable and inefficient form of tenancy that prevails in the 'pre-capitalist' or 'quasi' or 'semi-feudalistic' agrarian systems. It is often seen as a stage of transition, which disappears with modernisation (Bell,'77: 317). There is no ambiguity in accepting this point of view as the documented historical experiences reflect the extreme form of exploitation present in the feudalistic societies. However, the persistence of sharecropping even after achieving modernisation has prompted economists to reinterpret and remodel the established theories. The increased evidence based studies suggests that sharecropping may be the rational, progressive arrangement for agrarian development (Reid,'73). The macro and micro-surveys; such as the study in Gujarat by Vyas ('70), or that of Bandyopadhyay ('75) in West Bengal suggest that there exist regional variations in the forms of sharecropping. Significant variations are observed in terms and conditions of tenancy contracts based

primarily on the input cost sharing and share of produce between tenant and owner. From the studies conducted by (Jodha,'81; Verma and Mishra,'84**),** it is observed that among the agriculturally backward regions, sharecropping is the most preferred option among different types of tenancy. There is wider consensus among the researchers that due to the high levels of risk and uncertainty associated with the outcome, tenants and landowners belonging to semi-arid and agriculturally backward regions prefer sharecropping to fixed share tenancy (Singh,'89: A88). Findings from the study conducted by Huffman suggests that landowners in developing countries lease out land in small plots under the sharecropping contract to more than one tenant in order to spread the risk evenly among the tenants (Huffman, 2004:634). Whereas in agriculturally progressive areas with well-developed factor markets and irrigation facilities, tenants prefer fixed rent type of tenancy over sharecropping. In developed regions tenancy is driven by the motive of maximisation of the output with intense use of inputs.

The practice of tenancy in underdeveloped agricultural economies involves complex linkages associated with land, labour and credit transactions, these linkages to great extent determine the terms and conditions of tenancy contracts. Broadly, research on interlinkages of factor markets is conducted from two perspectives; Neoclassical and Marxist perspective (Swain,'99: 2657). For Marxists, interlinked transactions are innovative devices developed by landlords to subjugate the small tenants, who are poor, and resource constrained and to perpetuate the political and economic domination in the rural India (Swain,'99: 2657). With imperfect factors markets interlinkages are viewed as the means for perpetuation of backwardness in agriculture practices and surplus appropriation. Whereas, for Neoclassicals rural factor markets are imperfect and are often characterised by 'information asymmetry','risks','indivisibility', 'uncertainty', and 'moral hazard problems' (Swain,'99: 2657). For Neoclassicals imperfect factor markets and interlinkages associated with it are used as the means for ensuring efficient use of land owner's resources leased out to tenants resulting in 'higher social welfare'. The major drawback in the perspective of Neoclassicals is that they look at the tenant and land owner as belonging to homogeneous group of mass peasants who can be categorised as 'lessee' and 'lessor' in a taxonomic sense. But reality is that in developing country like India, most often landlords are more dominant group playing major role in decision making process of the tenants. However, as Swain ('99: 2658) observe that both Marxist and Neoclassical perspectives have not included the effects of macro economy features like increasing 'unemployment', 'slow pace of industrialisation' and 'regional inequality in development' and 'consequent migration' thus fail to explain reasons for variety of tenancy existing simultaneously in one village or a region.

Comparative Efficiency

There is plethora of evidence based literature on the comparative efficiency of tenancy. From Marxist perspective any form of tenancy, specifically sharecropping tenancy is considered as most inefficient, due to disparity in the possession of the resources between the contracting parties. Much of the comparison studies focussed on efficiency implications for organization of agriculture while comparing fixed cash/rent versus crop share contracts between small tenants and large landowner and also among the agriculturally backward and progressive regions. Cheung ('69)[3] with his studies based on China's agrarian system argues that if the landowner can oversee tenant's effort without incurring any costs, resource sharing/exchange under share cropping perhaps be equally efficient as that of an owner operator or fixed cash/rent leasing.

Among the early attempts to assess productive performances of different categories of farmers, a study conducted by Vyas in four villages of Gujarat in 1960s needs mention. Vyas ('70) found out that resource use efficiency of the tenant cultivated farms is higher than owner cultivated farms. He came to this conclusion based on resource use indicated by the high average input-output ratio among the small and medium owner and tenant farmers. A similar type of study was conducted by Rao ('71) using farm management survey data in a rice zone of Andhra Pradesh during 1957-58 and 1958-59 and his study suggests that there are not significant inefficiencies in the use of land resource under sharecropping, using

farm level data collected from five districts in three states of Punjab, Andhra Pradesh and West Bengal concluded that tenant farmers are more efficient than owner cultivators on small and marginal sized farms, but not so better when medium and large size holdings are considered for comparison. Bharadwaj ('74) comparing costs and returns among different tenancy levels in the region of Maharashtra observes that with increasing levels of tenancy efficiency in cultivation declined, suggesting that efficiency is same in both cases of large tenant and large owner cultivator. Bell ('77) conducted an interesting study comparing performance of farmers belonging to 'pure tenants' and 'owner-cum-tenant' categories. The results from Bell's study suggests that 'owner-cum-tenant' cultivators are more efficient on their own plot of land irrespective of the crops they cultivated, whereas pure tenants are less efficient on the land they leased in.

The subsequent studies conducted by Chattopadhyay ('79) and Pant ('80) suggest that owner cultivated lands are more productive than tenant cultivated lands when comparison is restricted to small and marginal landholdings and not much difference in efficiency is observed among the large tenant and owner cultivators. Tripathy ('85) using the data for crops such as paddy, wheat and maize covering several agro-climatic zones and two cropping years from 1979 and 1980 concludes that productivity is higher on the owner cultivated farms in comparison to tenants for all crops, years and zones. Shaban ('87) examining a fairly large data collected by International Crop Research Institute for Semi-Arid Tropics (ICRISAT) during the end of 1970s and early 1980s had found that effect of irrigation, plot size, and soil quality plays a vital role in determining efficiency of tenant and owner cum tenant cultivated farms. Shaban ('87) also observes that tenant sharecroppers operating in similar conditions as that of owner cum fixed rent tenants, the efficiency is higher among the later. However, for Bhaumik ('93) different crops cultivated under three types of farmers; owners, sharecropper and fixed-rent tenants, only paddy cultivating sharecropping tenants are more efficient than owner cultivator.

Contrary to findings of above mentioned studies, Chattopadhyay and Sengupta (2001) finds that the medium sized landholdings belonging to owner and tenant categories are efficient. In addition, this study suggests that irrigation facilities are best utilised by the medium sized farmers as small and marginal landholding farmers cannot bear such costs while large scale farmers are at disadvantage due to scale diseconomies[4]. From most of the above studies mentioned, the inputs in cultivation are of traditional nature such as family labour, bullocks and indigenous variety of seeds and organic manure but when dynamism is introduced in terms of technology and mechanization and high yield variety of seeds coupled with vibrant markets and policy changes at national level, certainly there would be changes in the structure and form of tenancy.

Technology and Tenancy

Iqbal Singh (Singh,'89: A86) mentions that 'technological transformation' in the agricultural practices is bound to have significant impact on the tenancy structure of the region or state. Among the scholars there are two different views regarding the "interaction of technology and tenancy structure" (Singh,'89: A86). Supporters of one view argues that considering the unequal share in the resources and consequent relations between tenants and landlords, the later tries to obstruct any 'productive investment' that improves the economic conditions of the resource constrained tenants. Landowners consciously withhold innovations to perpetuate agricultural backwardness and try to retain major share in the produce through higher rents and usury (Singh,'89). The above argument was strengthened by Bhaduri ('73), wherein he observes that interlinked sharecropping and credit agreements provide incentives for landowners to discourage innovations of tenant because increased productivity could reduce tenants' demand for credit, taking away the profits accrued through high interest rate credit from landlord. Supporters of other view observe that when the 'new technology' enhances the productivity of agriculture substantially, with the same share in the produce going to tenant, the landowners gaining more than what he/she accrue under traditional agriculture practices tends to encourage intense use of 'new technology' inputs (Bhaduri,'73). Newbery ('75) argues that if the landlord had so much power to obstruct introduction of technology he/she would

instead choose to appropriate the surplus accruing to innovation. In contrast to both above mentioned views, other researchers such as Bhalla ('97), Byres ('81) opines that with introduction of modern technology and mechanisation of agricultural operations will eventually lead to elimination of tenancy. Pearce ('83) based on his study visualizes that sharecropping as a transitory phenomenon which will become obsolete with the advent of capitalist farmers, who revolutionises the labour operations and productivity with the help of 'new technology'. For Pearce, the underlying assumption was that share tenancy is synonymous with small scale farming hence, sharecropping is incompatible with capitalist agriculture (Singh,'89: A86). In contrast to Pearce's prediction, earlier studies of Vyas ('70) and Nadkarni ('78) mentions about the rise of 'entrepreneurial tenants' who are consequence of technological intervention. These contrasting views on existence of sharecropping strengthens arguments suggesting the dynamic nature of tenancy, thus as opined by Robertson understanding of sharecropping tenancy must proceed from a recognition that it is subject to historical change and its functions in social and economic process mean that it is never 'static' and 'inflexible' (Robertson,'80: 426).

Introduction of technology in the traditional agrarian system without rectifying the tenancy laws had resulted in the rise of owner-tenants, who have greater access to capital inputs and subsidies from the government programmes. Iqbal Singh (Singh,'89) conducted a study on impact of technological change in Punjab, one of the agriculturally progressive state. He observed that with increased technological inputs there is an increase in the number of owner tenants. Some other significant findings he made include; big farmers who have capital assets like tractors had leased in land, even among the tenants having tractors had increased component of rented land and shifted from sharecropping to fixed rent tenancy with increased dependency on hired labour for cultivation. The study also mentions that most of the tenants in the agriculturally developed regions became tenants only after introduction of new technological inputs. There is a clear cut tendency that "with the introduction of new technology, 'old' landless and small owner tenants are giving way to the relatively better placed 'new' tenants" (Singh,'89: A88). In addition, new technology had reduced 'risk' and 'uncertainty' associated with output of agricultural produce, as a result tenants preferred fixed rent type of tenancy over sharecropping to increase their profits. A majority of the studies[5] which focussed on the impact of new technology on the tenancy had come up with the conclusion that tenants having large operational landholding have emerged in the lease markets, especially in agriculturally progressive regions with commercialisation of agriculture, and farm mechanisation by replacing smaller tenant cultivators (Murty, 2004:3270).

In agriculturally backward regions such as semi-arid or hilly areas, majority of the tenants are of small and landless labours leasing in lands for the purpose of subsistence production using family labour. Share cropping is the widely practiced form of tenancy as the risk and uncertainty is evenly shared with landowner. Tenants preferred to cultivate food crops as it provides cattle feed for sustaining animal husbandry and overall livestock management. With change in the cropping pattern corresponding changes are observed in the terms and conditions of tenancy contracts. Sharecropping is popular in paddy and wheat areas (if new technology inputs are used then there can be preference for fixed rent type tenancy), cash rent is popular with the oil seeds, cotton and other cash crops (Laxminarayan and Tyagi,'77).

Resources Sharing and Relevance of Anthropology

Last decade witnessed an intense debate among the political economists on the relevance of 'agrarian question' in the neoliberal era. Renowned scholars like H. Bernstein (2010), Akram-Lodhi *et al*., (2010), and T. J. Byres (2006) had commented on the rise of capitalism and its consequences on already 'differentiated peasantry'. There is evident shift in the state policies from the earlier days of 1960s, which emphasized on the domestic demand driven agricultural growth (which was expected to increase capital accumulation among the rural households and reduce poverty) to an export driven strategy as principle means of increasingcapital accumulation in rural India. In other words, state policies are working towards rapid integration of domestic agricultural

markets with global markets through the process of globalization. It is in this context Bernstein (2010) questions the relevance of 'agrarian question', where transnational transfer of capital is diminishing the role of agriculture in capital accumulation for the national economy. In contrast Akram-Lodhi *et al*. (2010) argues that with continued global subsistence crisis since the implementation of neoliberal polices and large number of small and marginal farmer having livelihoods in agriculture, the 'agrarian question' needs to be looked at from multidimensional approach rather than as a 'linear process'. From the elaborate debates on the 'agrarian question' one can infer that transnational capital with greater technical efficiency is transforming the social, economic and political relations in a predominately agrarian economy like India. The commodification of natural resources and social relations provides a potential area for micro-level research on agricultural resources sharing contracts between tenant and landowner. Tenancy as an informal or formal institution plays a dynamic role in accumulation of assets and skills by those who are historically alienated from the means of production. Tenancy institution had evolved as a response to the interlinkages in the factor markets, and over a long period of time it provides for 'individual mobility' (Bell, '90:143) for the small, marginal and landless labour.

CONCLUSION

The existence of various types of tenancy simultaneously in a single village or a region speaks of its diversity in satisfying the needs and aspirations of the farmers having different skills and resources. This diversity at micro-level calls for immediate attention of anthropologists. Even other disciplines concerned with agriculture can adopt the methods of anthropology in holistic understanding of the dynamic nature of resource sharing mechanisms. The recent protest march by farmers in the financial capital of India (Mumbai) reflects growing unrest among the farmers with resource constraints and crisis stricken small and medium scale farmers. With increasing indebtedness, the demand for loan waiver had become pan Indian phenomenon. It would be an interesting to understand impact of various developmental programmes (such as MGNREGA, SHGs, Institutional Credit Services, Extension Services etc) by states on agricultural resources sharing mechanisms at the micro-level. The recently launched *RythuBandhu* Scheme by Government of Telangana providing monetary support of ₹ 8000/- per acre for agricultural inputs is hailed as the first of its kind in Indian politics. It would be interesting study to understand the effects of direct monetary support on the mechanisms of agricultural resources sharing. As suggested by many scholars, instead of regulating or abolishing tenancy government should consider tenants on par with owner cultivators while extending the benefits under various productivity enhancing programmes. However, extending benefits for tenants require holistic understanding of socio-cultural, economic and ecological diversities at the micro level and thus anthropological understanding would be of immense help in flawless policy formulation and execution.

NOTES

[1]See Haque and Sirohi, 1986:55; Raj and Tarakan, 1984:46; and Herring 1983:183.

[2]The list is non-exhaustive as terms conditions under each type of tenancy depends on the contracting parties.

[3]See Robertson, 1980.

[4]The output remains stagnant or decline as the input costs increases.

[5]See also Laxminarayana and Tyagi, 1977:A77; Vyas, 1970; Bandopadhyay, 1975; Gill, 1989:A79-85; Rao, 1992; and Haque and Parthasarathy, 1992.

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REFERENCES CITED

Akram-Lodhi, A. Haroon and Cristobal Kay 2010. Surveying the agrarian question (Part 1): Unearthing foundations, exploring diversity. *The Journal of Peasant Studies*, 37(1): 177-202.

— 2010. Surveying the agrarian question (Part 2): Current debates and beyond. *The Journal of Peasant Studies*, 37(2): 255-284.

Bandyopadhay, N. 1975. Changing forms of agricultural enterprise in West Bengal: A note. *Economic and Political Weekly*, 10(17): 26.

Banerjee, B. N. 1985. Concepts of farm size, resource-use and productivity in agriculture-A case study. *Economic Affairs (Calcutta)*, 30(1): 17.

Bell, Clive 1977. Alternative theories of sharecropping: some tests using evidence from northeast India. *The Journal of Development Studies*, 13(4): 317-346.

— 1990. Reforming property rights in land and tenancy. *The World Bank Research Observer*, 5(2):143-166.

Bernstein, Henry 2010. *Class Dynamics of Agrarian Change*, Volume 1. Kumarian Press: Sterling, VA (USA).

Bhaduri, Amit 1973. A study in agricultural backwardness under semi-feudalism, *The Economic Journal*, 83(329):120-137.

Bhalla, Sheila 1977. Changes in acreage and tenure structure of land holdings in Haryana, 1962-72, *Economic and Political Weekly*, A2-A15.

Bhalla, Surjit S. and Prannoy Roy 1988. Mis-specification in farm productivity analysis: The role of land quality. *Oxford Economic Papers*, 40(1): 55-73.

Bharadwaj, Krishna 1974. Notes on farm size and productivity. *Economic and Political Weekly*, 9(13): A11-A24.

— 1974a. *Production Conditions in Indian Agriculture A Study Based on Farm Management Surveys*. Cambridge University Press: London.

Bhaumik, Sankar Kumar 1993. *Tenancy Relations and Agrarian Development: a Study of West Bengal*. Sage Publications: New Delhi.

Byres, Terence J. 1981. The new technology, class formation and class action in the Indian countryside. *The Journal of Peasant Studies*, 8(4):405-454.

— 2006. Differentiation of the peasantry under feudalism and the transition to capitalism: In defense of Rodney Hilton. *Journal of Agrarian Change*, 6(1):17-68.

Carter, Michael R. 1984. Identification of the inverse relationship between farm size and productivity: An empirical analysis of peasant agricultural production. *Oxford Economic Papers*, 36(1): 131-145.

Chadha, G. K. 1978. Farm size and productivity revisited: Some notes from recent experience of Punjab. *Economic and Political Weekly*, A87-A96.

Chattopadhyay, Manabendu 1979. Relative efficiency of owner and tenant cultivation: a case study. *Economic and Political Weekly*, A93-A96.

Chattopadhyay, Manabendu and Atanu Sengupta 2001. Tenancy inefficiency: A study based on West Bengal agriculture. *Economic and Political Weekly*, 497-502.

Cheung, S. 1969. *The Theory of Share Tenancy*. The University of Chicago Press: Chicago.

Deolalikar, A. B. 1981. The inverse relationship between productivity and farm size: a test using regional data from India. *American Journal of Agricultural Economics*, 63(2): 275-279.

Ghose, Ajit Kumar 1979. Farm size and land productivity in Indian agriculture: A reappraisal. *The Journal of Development Studies*, 16(1): 27-49.

— 1984. *Agrarian Reform in West Bengal, Agrarian Reform in Contemporary Developing Countries*. Select-Book Service Syndicate, New Delhi.

Gill, Sucha Singh 1989. Changing land relations in Punjab and implications for land reforms. *Economic and Political Weekly*, A79-A85.

Hanumantha Rao, C. H. 1975. Technological change and distribution of gains in Indian agriculture. Macmillan Company of India: New Delhi.

Haque,Tajamul, and Amar Singh Sirohi 1986. *Agrarian Reforms and Institutional Changes in India*. Concept Publishing Company: New Delhi.

Haque, T. and G Parthasarathy 1992. Land Reform and Rural Development: Highlights of a National Seminar. *Economic and Political Weekly*, 27(8).

Herring, Ronald J. 1983. *Land to the Tiller: The Political Economy of Agrarian Reform in South Asia*. Yale University Press: New Haven.

Huffman, Wallace E. and Richard E. Just 2004, Implications of agency theory for optimal land tenure contracts. *Economic Development and Cultural Change*, 52(3): 617-642.

Jodha, N. S. 1981. Agricultural tenancy: Fresh evidence from dry land areas in India. *Economic and Political Weekly*, A118-A128.

Laxminarayan, H. and S. S. Tyagi 1977. Inter-state variations in types of tenancy. *Economic and Political Weekly*, A77-A82.

Ghatak, Maitreesh and Sanchari Roy (2007). Land reform and agricultural productivity in India: A review of the evidence. *Oxford Review of Economic Policy*, 23(2): 251-269.

Mohanakumar, S. 2010. Agrarian crisis and National Commission for Enterprises in the unorganised sector. *Social Scientist*, 38(5-6), 62-75.

Murty, C. S. 2004. Large farmers in lease market: Are marginal farmers affected? *Economic and Political Weekly*, 3270-3279.

Nadkarni, M. V. 1976. Tenants from the dominant class: a developing contradiction in land reforms. *Economic and Political Weekly*, A137-A146.

Nadkarni, M. V. 1978. Tenants from the dominant class: A developing contradiction in land reforms. *Economic and Political Weekly*, *Review of Agriculture*, *December*, Vol. XIII.

Newbery, David M. G. 1975. The Choice of Rental Contract iIn Peasant Agriculture: *Agriculture in Development Theory*, pp. 109-137. Yale University Press: New Haven.

Newell, Andrew, Kiran Pandya and James Symons 1997. Farm size and the intensity of land use in Gujarat, *Oxford Economic Papers*, 49(2): 307-315.

Pant, Chandrasekhar 1980. Contractual Arrangements in

Agriculture: Some Theory and Empirical Evidence. *Ph. D. Dissertation*. Indian Statistical Institute: Kolkata.

Pearce, Richard 1983. Sharecropping: Towards a Marxist view. *The Journal of Peasant Studies*, 10(2-3): 42-70.

Raj, K. N., and Michael Tharakan 1984. Agrarian reform in Kerala and its impact on the rural economy – a preliminary assessment. In: *Agrarian Reform in Contemporary Developing Countries: A Study Prepared for the International Labour Office Within the Framework of the World Employment Programme*, ILO:31.

Rao, Vaman, and Tosporn Chotigeat 1981. The inverse relationship between size of land holdings and agricultural productivity. *American Journal of Agricultural Economics*, 63(3):571-574.

Rao, V. M, 1992, Land reform experiences: perspective for strategy and programmes, *Economic and Political Weekly*, A50-A64.

Rao, C. H. Hanumantha 1971. Uncertainty, entrepreneurship, and sharecropping in India. *Journal of Political Economy*, 79(3):578-595.

Reid, Joseph D. 1973. Sharecropping as an understandable market response: The post-bellum south. *The Journal of Economic History*, 33(1):106-130.

Robertson, A. F. 1980. On sharecropping. *Man, New Series*, 15(3): 411-429.

Sampath, Rajan K. 1992. Farm size and land use intensity in Indian agriculture. *Oxford Economic Papers*, 44(3): 494-501.

Sen, Amartya K. 1962. An aspect of Indian agriculture. *Economic Weekly*, 14(4-6): 243-246.

Shaban, Radwan Ali 1987. Testing between competing models of sharecropping. *Journal of Political Economy*, 95(5): 893-920.

Singh, Iqbal 1989. Reverse tenancy in Punjab agriculture: Impact of technological change. *Economic and Political Weekly*, A86-A92.

Singh, R. B., Praduman Kumar and T. Woodhead 2002. Smallholder farmers in india: food security and agricultural policy. *RAP Publication*, 3.

Swain, Mamata 1999. Agricultural tenancy and interlinked transactions: I: Neoclassical and Marxist approaches. *Economic and Political Weekly*, 34(37): 2657-2666.

Tadesse, Bedassa and S. Krishnamoorthy 1997. Technical efficiency in paddy farms of Tamil Nadu: An analysis based on farm size and ecological zone. *Agricultural Economics*, 16(3): 185-192.

Tripathy, Ram Niranjan 1985. *Tenancy & Efficiency of Farming in a Developing Economy*. Mittal Publications: New Delhi.

Uphoff, Norman T and Warren F Ilchman 1972. *The Political Economy of Development*. University of California Press: Berkeley.

Verma, B. N. and R. R. Mishra 1984. Subsistence tenancy in a backward agrarian setting: A case study of North Bihar, *Social Scientist*, 12(8): 46-54.

Vyas, V. S. 1970. Tenancy in a dynamic setting. *Economic and Political Weekly*, 5(26): A73-A80.