

SCARCE LAND:
ISSUES, EVIDENCE AND IMPACT

Sheila Bhalla



*WORKING PAPER NO.
WP 02/2014*

**Scarce Land:
Issues, Evidence and Impact**

Sheila Bhalla



**NEW DELHI
2014**

Published by:

INSTITUTE FOR HUMAN DEVELOPMENT

NIDM Building, IIPA Campus, IP Estate, New Delhi-110002

Phones: +91-11-2335 8166/ 2332 1610 • Fax: +91-11-2376 5410

E-mail: mail@ihdindia.org • Website: www.ihdindia.org

© Institute for Human Development, 2014

ISBN: 978-81-88315-38-3

Subscription Amount: ₹ 50/- /US \$ 10

SCARCE LAND: ISSUES, EVIDENCE AND IMPACT

Sheila Bhalla

Introduction: The Issues

This paper was written in response to something that happened at one session of the 2013 Cuddalore Conference of the All India Kisan Sabha (AIKS),

What happened was this.

One state level delegate after another got up to describe specific local cases of loss of good agricultural land to non-agricultural uses - for highways, for example the Yamuna Expressway project, or the purchase of village land by 'outsiders', as a speculative investment, to be held unused for a while, and sold later, for SEZs, and so on.

But after these state level presentations, the point was *not* made at the Cuddalore conference, that these instances were each a part of a much larger picture - a picture which added up to an absolute decline in both net sown area and cultivable area during two decades - 1990-91 to 2000-01 and again from 2000-01 to 2010-11.

But this was not always the case.

In India, net sown area *had* expanded from 1950-51 up to 1990-91. After that it contracted. This happened because the extension of cultivation to new areas slowed down, while simultaneously, the conversion of cultivable area to non-agricultural uses speeded up. The extension of irrigation to new areas, which might have been expected to make double cropping possible, failed to compensate for the loss of net sown area.

This was combined with the failure of post-1991 economic and social policy to generate acceptable alternative occupations for farmers whose holdings are too small to provide incomes adequate to cover actual consumption expenditures.

Further, recent analysis indicates that, in India, declining land/man ratios have had a significant negative impact on per agricultural worker productivity. As a result, two interlinked issues now confront us.

First, there is an impending long-term threat to national food security, particularly with respect to foodgrains at prices which people can afford. Secondly, the present situation is making life miserable for millions of cultivators, agricultural labourers, and others directly or indirectly dependent on agriculture for their livelihoods.

There is also an issue regarding conceptual clarity. In India, the distinction between an *agricultural* crisis and an *agrarian* crisis commonly is not made. From the point of view of what is to be done to change the situation, this distinction is important. An agricultural crisis can usually be dealt with without unduly disturbing existing power relations. An agrarian crisis, on the other hand typically requires a shift in the prevailing power equation in favour

of the weaker party. In general, land purchasers, national or international, are in a much stronger bargaining position than land sellers.

At the international level, this issue was raised in response to a spate of extensive government-backed and private corporate land purchases in Africa for *agricultural* purposes. In the wake of the food price crisis of 2007-08, the global scramble for land abroad to grow food had intensified. The Indian public was alerted to what was going on by newspaper reports inspired by the publication of a 2009 International Food Policy Research Institute (IFPRI) Policy Brief, titled "*Land Grabbing*" by *Foreign Investors in Developing Countries*.¹

IFPRI was concerned that the unequal power relations in such land acquisition deals "can put the livelihoods of the poor at risk."² The inequality in bargaining power when smallholders whose land is being acquired for foreign agricultural projects is obvious. As the 2009 IFPRI report put it: the "deals may not be made on equal terms between investors and local communities. The bargaining power in negotiating these agreements is on the side of the foreign firm, especially when its aspirations are supported by the host state or local elites."³

The same logic applies to domestic competition for land for *non-agricultural uses*. What the IFPRI report suggests is that strong local collective action institutions can correct "these power issues." They say, by "acting collectively the poor can stimulate a shift in the power relations, which ... can help preserve livelihood options. These efforts can be even more effective when civil society gets involved on behalf of the poor."⁴

In short, in the words of the IFPRI Report: "Land is an inherently political issue across the globe."⁵

The first section following this introduction seeks to bring into focus the important distinction between an *agricultural crisis* and an *agrarian crisis*, in the context of what has been described as India's lost decade for agriculture and agricultural workers.

The second section provides a data based, long run perspective on changes in land use in India since 1950-51, and a more recent period overview of the decline in land/man ratios in India since 1983.

The third section⁶ presents evidence on the impact of these changes on per agricultural worker productivity, on the size distribution of land holdings, overall and by social group, on the marginalisation of agricultural holdings and on farmer household income by source.

The fourth section, headed 'Towards a National Land Use Policy', besides giving a brief overview of official efforts to develop one, goes on to consider a possible mix of policy initiatives designed to produce a shift in the existing political power relations in favour of the working class, with special reference to agriculture.

I. India's Lost Decade for Agriculture and Agricultural Workers: An Agricultural Crisis and an Agrarian Crisis.

The decade from the mid-1990s to the mid-2000s was a lost decade, both for Indian agricultural development and for Indian agricultural workers. During the lost decade, cultivators and agricultural workers suffered the ill effects of both an agricultural crisis and an agrarian

crisis simultaneously. Unfortunately, people who wrote and spoke about the period commonly failed to distinguish between the two.

The most obvious symptom of the onset of this crisis was the slowdown in agricultural growth from the mid-1990s to the early 2000s. The slowdown occurred in all sub-sectors of agriculture, including livestock and horticulture.

Immediately behind this slowdown was the stagnation of yield growth rates, especially those of foodgrains, and the decline in public investment in rural infrastructure, from irrigation and flood control to rural electrification and roads. The share of formal institutional credit directed towards agriculture declined and input prices rose. Simultaneously, the stagnation of per capita food consumption depressed the demand for foodgrains and other agricultural commodities.

In this context, at a time when world prices of agricultural commodities were falling, India dismantled quantitative restrictions on imports and reduced tariffs. During the period 1996 to 2004, 'the burden of falling international prices fell on farmers.' The vast majority - roughly 80 percent of them - who cultivated one hectare or less, were in no position to gain from the subsequent rise in world prices.⁷

During the later high GDP growth period, agriculture continued to grow relatively slowly. This produced a set of structural changes, decidedly unfavourable to agricultural workers. The share of agriculture in GDP declined rapidly, but there was no corresponding decline in the share of the agricultural labour force. Rapid GDP growth in the formal sector combined with low or negative growth in formal employment was offset, in part, by a proliferation of low productivity self employment in the informal economy.

To top it all off, cultivators were losing their land to private and public 'development projects', often unwillingly and without appropriate compensation, at a time when the increasing marginalisation of agricultural holdings was associated with declining growth rates in per agricultural worker productivity. The result was widespread distress and the rise in suicides among farmers.

In a book about agricultural distress and farmer suicides, Radhkrishna (2009) identified two 'dimensions' of agricultural distress - an '*agricultural development crisis*, (reflected in low growth, declining profitability of agriculture), and an '*agrarian crisis* (reflected in growing landlessness and casualisation of labour in agriculture, unchecked proliferation of small and marginal holdings, fragmentation of land holdings, and widening gap between rural and urban areas'.)⁸

The agrarian crisis is described as 'structural and institutional in nature'. The agricultural crisis, 'on the other hand may be seen in terms of performance of production in relation to the problems associated with the use of inputs and realisation of returns.'⁹

Thus, India's ongoing agrarian crisis may be described as the product of institutional and structural factors which limit the range of choices available to agricultural workers. Foremost among them is the loss of access to and control over the main means of production - land - and a narrowing of the range of alternative work opportunities. Incapacity to cope with material circumstances and risk engenders the sense of hopelessness that characterises

agrarian distress in its most obvious expression, farmer suicides. The fact that 40 percent of farmers surveyed by the National Sample Survey in 2003 said that they would get out of agriculture if they could, is a milder expression of the sense of restricted choice with respect to agriculture as a means of livelihood.

What are the implications for activists?

First, note that the agricultural crisis involves mainly economic policy issues. These are amenable to change because appropriate adjustments can be made without unduly upsetting current power equations. This is in fact what the Indian government did during the period beyond 2003, when they began to recognise the economic implications of the *agricultural* crisis. They took measures to revive agricultural growth.

The issues involved in dealing with the agrarian crisis are more fundamental. As Radhakrishna (2009) put it: “There is less appreciation in policy making circles of the fact that tackling the agrarian crisis is far more difficult than reviving agricultural growth.”¹⁰ To borrow a phrase from the IFPRI Policy Brief, ‘a shift in the power relations’ would have to be involved.

II. Land Use in India: Evidence and Analysis.

Four Key Categories of Land Use:

The four key categories are: i) *cultivated land*, defined as net sown area plus current fallows; ii) *cultivable land which is not cultivated*; (This consists of land under miscellaneous tree crops and groves, culturable waste land and fallow land other than current fallows.) iii) *area under non-agricultural uses*; and iv) *forests*. The trends, from 1950-51 onwards, are illustrated in figure 1.

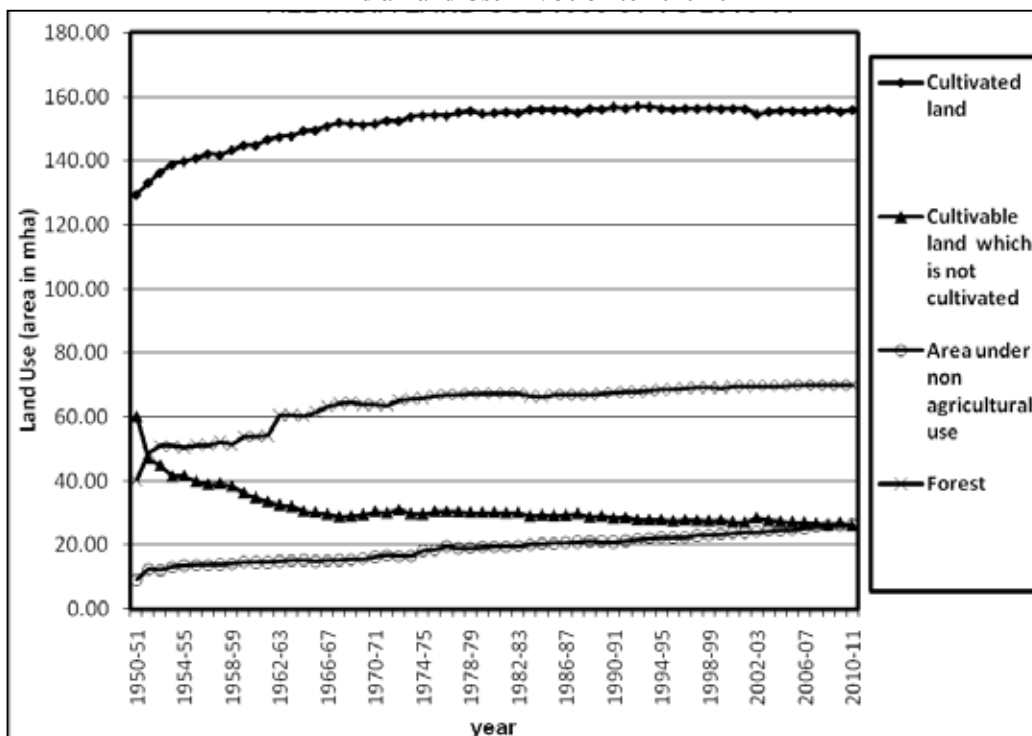
To begin with something needs to be said about what is *not* shown in figure 1.

India’s geographical area, from the start of land use statistics in 1950-51, has remained unchanged at 328.73 million hectares. However, the *reporting area* for land utilisation statistics, which is also not shown in the charts, rose significantly from 284.32 million ha to 303.76 million ha in the two decades from 1950-51 to 1970-71. Thereafter it rose very gradually, reaching 304.16 ha in 1980-81 and fluctuating between 304.16 in 1980-81 and 305.91 in 2010-11.

The early increases in reporting area have an obvious upward impact on reported area under forests and on reported cultivated area, both shown on the graph. Area under forest as a percent of reporting area rose by 8 percentage points from 14.2 percent in 1950-51 to 22.2 percent in 1980-81. Subsequent gains were more or less continuous, but small and very gradual, reaching a high of 22.9 percent or 70.01 million hectares in 2010-2011. These relatively recent small, gradual gains reflect net successful efforts at reforestation.

But the crucial variable here is cultivated area. Cultivated area, (net sown area plus current fallows), rose steadily until 1989-90, stabilised for more than a decade at about 156 million hectares, then showed symptoms of tailing off after the drought of 2002-03. Subsequently, cultivated area never recovered to the higher level of the preceding decade.

Figure 1
All India Land Use - 1950-51 to 2010-2011



The relative stability of cultivated area from 1989-90 to 2001-02 led some people to describe cultivated area in India as fixed, for all practical purposes. But this relative stability was the product of dynamic changes. Cultivable land which was not cultivated contracted, as did area classified as barren and uncultivable. This tended to push cultivated area up. At the same time, the area under non-agricultural uses rose steadily from 19.66 million ha in 1980-81 to 26.51 million ha in 2010-2011. That is, more than two million hectares per decade were shifted to non-agricultural uses during the last three decades.

In short, what appears to have happened is that the persistent shift of land to non-agricultural uses finally cancelled out, and then reversed, the positive impact of the gradual conversion of cultivable wasteland and barren land into cultivated land. Data for the period 1990-91 to 2000-01 shows that, for the first time since land use records were compiled in independent India, both net area sown and cultivated area as a whole contracted. This does not seem to be a temporary trend reversal. Both net area sown and cultivated area contracted again between 2000-01 and 2010-2011.

A pessimistic conclusion is supported by NSS 59th Round land ownership data. According to NSS Report No. 491, estimated area owned declined from 117 million hectares in 1992 to 107 million ha in 2003, a contraction of owned area in rural areas by 10 million ha in just over a decade! As the NSS Report puts it: "... there is no apparent reason for the decrease in area owned except that some rural land might have been merged in urban land due to urbanisation over the years."¹¹

Table 1 shows data for a larger number of land use categories, for triennia centred on 1950-51, 1965-66, 1980-81, 1990-91, 2000-01 and 2009-10.

The story in table 1 begins with huge reductions in the area which in 1951 was classified as i) cultivable land which is not cultivated and ii) barren and unculturable land – items 4 and 1 (ii) in table 1 respectively. Cultivated land, and its major component, net sown area, expanded rapidly between 1950-51 and 1980-81. This was the period during which most of the growth in agricultural output was attributable to increases in the area under cultivation. During the same period, there was also a substantial increase in area under non-agricultural uses, which was not much noticed at the time, perhaps because it posed no threat to the area available for cultivation. However, by the early 1980s, the possibilities of extending net sown area were beginning to get exhausted.

Subsequently, additions to cultivated area were more modest. Between 1980-81 and 1990-91, reductions in areas classified as cultivable land which was not cultivated and barren

Table 1
Changes in Area Under Specified Land Use: All-India- 1950-51 to 1967-66, 1965-66 to 1980-81, 1980-81 to 1990-91, 1990-91 to 2000-01 and 2000-01 to 2010-11 ('000 ha)

Categories	Land Use				
	1950-51 to 1965-66	1965-66 to 1980-81	1980-81 to 1990-91	1990-91 to 2000-01	2000-01 to 2010-11
1. Not available for Cultivation	238	-9412	1052	623	2211
i) Area under non-agric. Uses	4300	4305	1642	2475	2640
ii) Barren and un-culturable land	-4062	-13718	-590	-1852	-429
2. Cultivated Land	18490	5039	1501	-398	-586
i) Current fallows	380	1945	-545	873	80
ii) Net area sown	18110	3094	2046	-1270	-667
3. Cultivable Land	-4873	4989	106	-1458	-1520
i) Land under misc. tree crops, groves	-9786	-452	177	-253	-327
ii) Culturable waste land	-6435	-375	-1595	-1365	-826
iii) All fallow land	-6762	2721	-521	1430	299
a) Fallow lands except current fallows	-7142	777	24	558	219
b) Current fallows	380	1945	-545	873	80
iv) Net area sown	18110	3094	2046	-1270	-667
4. Cultivable Land Not Cultivated	-23362	-50	-1395	-1060	-933
5. Categories Not Covered Above	23988	3188	-467	1063	64
i) Forests	17099	5681	227	1733	424
ii) Permanent pastures, other grazing lands	6890	-2494	-694	-671	-359
6. Reporting Area for Land Utilisation Statistics	19354	-1238	693	232	756

Notes: i) Cultivable land which is not cultivated is derived as Cultivable land minus Cultivated land.

ii) Based on 3 year averages centred on the date given.

iii) The 2002-03 drought pulled down the 3 year average centred on 2003-04.

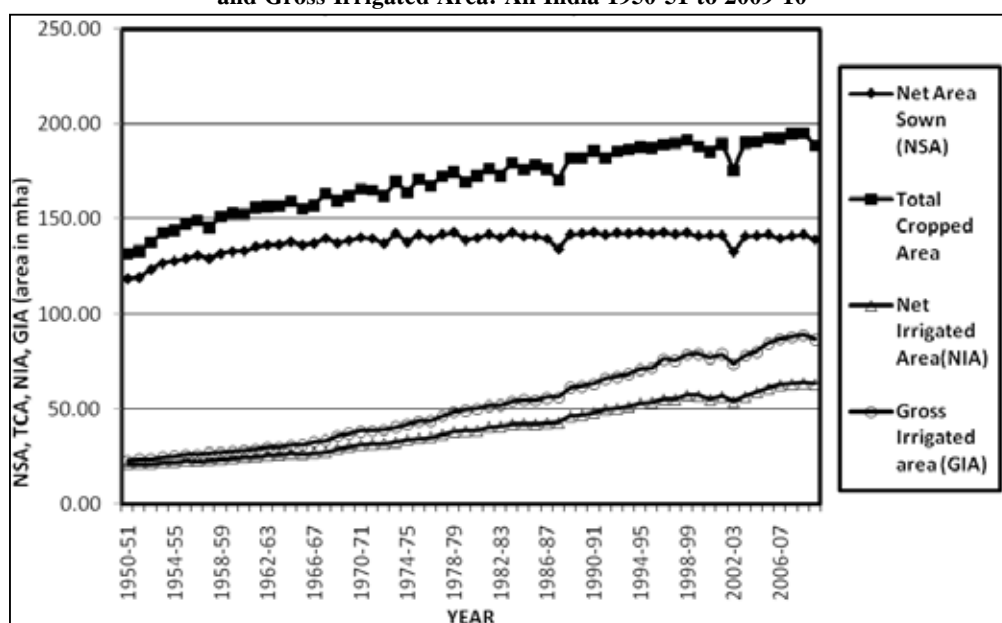
Source: Agricultural Statistics at a Glance, Directorate of Economics & Statistics, Ministry of Agriculture, various issues.

and uncultivable were less spectacular. Area shifted to non-agricultural uses was less in this decade than ever before or since.

But what is most important here is the trend reversals which took place after 1990-91. Net area sown and cultivated area contracted because there was a substantial increase in area under non-agricultural uses which could not be compensated for by reductions in barren land, land under miscellaneous tree crops and culturable wasteland. In this process, while some good quality land was lost to non-agricultural uses, cultivation was extended, increasingly, to poorer quality land.

Net area sown, however, is not everything. (See figure 2.) If irrigation can be extended to fresh areas fast enough, the growth of area which is double cropped may compensate, or even more than compensate, for any decline in net area sown. The data behind figure 2, however, shows that matters are not quite so simple. The impact of other factors is such that total cropped area may not go up much despite substantial increases in gross irrigated area. (For example, between 2000-01 and 2009-10 gross irrigated area went up by more than 10.23 million ha, but total cropped area increased by a mere 365 thousand ha. This was not enough to compensate for the decline in net sown area of 1.9 million hectares.)

Figure 2
Net Sown Area, Total Cropped Area, Net Irrigated Area
and Gross Irrigated Area: All India 1950-51 to 2009-10



Outcomes in Terms of Land/man Ratios

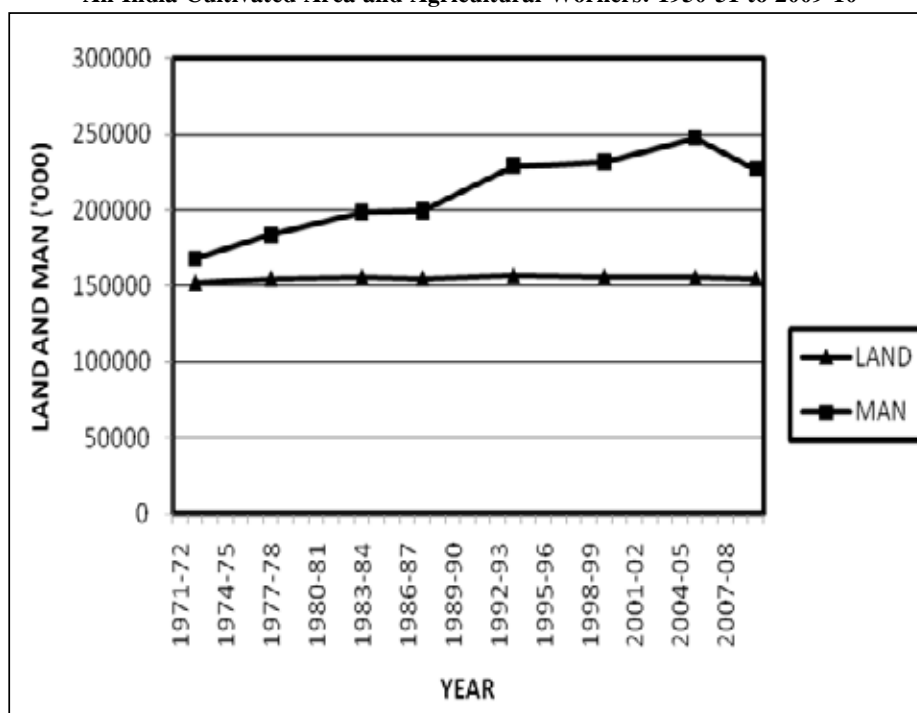
While cultivated area at the all-India level changed very little from 1972-73 to 2009-10, the number of rural agricultural workers¹² increased. In 1971-72, in India as a whole, there were roughly 168 million agricultural workers; in 2009-10, their numbers had increased

to 237 million. As a result the all-India land/man ratios fell from 0.9 ha per agricultural worker in 1972-73 to only 0.68 ha per worker in 2009-10.

The outcome has been a long term decline in land/man ratios, the most recent period being characterised by an accelerated reduction in land/man ratios, at least up to 2004-05, as shown in figure 3. The apparent contraction of the agricultural work force after 2004-04 is due to the decline in the number of female agricultural workers as reported by the National Sample Survey's 2009-10 Round. However, the corresponding figures from the 2011 Population Census, (main+marginal workers), suggest that no such decline took place. Since the Census figures are consistent with trends estimated by eminent scholars doing panel surveys during this period and the NSS estimates are not, there is some reason to be skeptical about the results of the NSS 2009-10 survey.

Figure 3

All India Cultivated Area and Agricultural Workers: 1950-51 to 2009-10

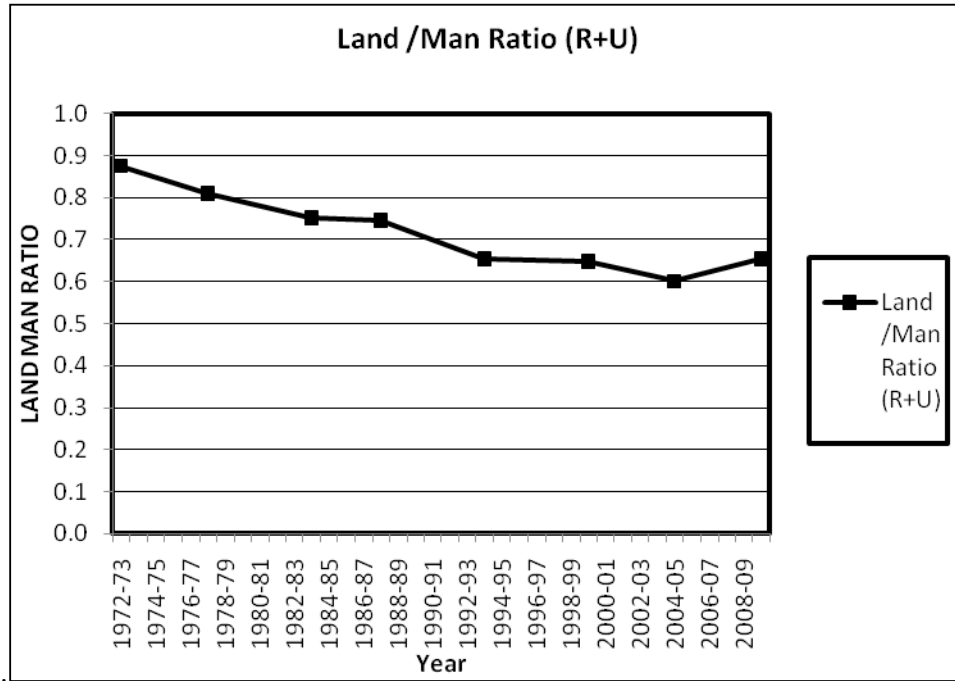


However, if the estimates derived from NSS data reflect the reality, then the land/man ratios improved as shown in Figures 4 and 5.

Table 2 below gives the land/man ratio values for recent years. It shows the upturn in 2009-10 indicated by NSS based estimates of the number of workers.

It may need to be reiterated, however, that the decline in the land/man ratio between 2004-05 and 2009-10 is due entirely to the fact that, according to the NSS, a substantial reduction in female workforce participation rates took place. The number of male agricultural workers rose. The implications of this are not yet clear.

Figure 4
Land/Man ratios (R+U), 1972-73 to 2009-10



Source: Computed from NSS UPSS Agricultural workers and land use statistics provided by the Directorate of Economics and Statistics, Ministry of Agriculture, various years.

Figure 5
Land/Man Ratios (R) 1972-73 to 2009-10

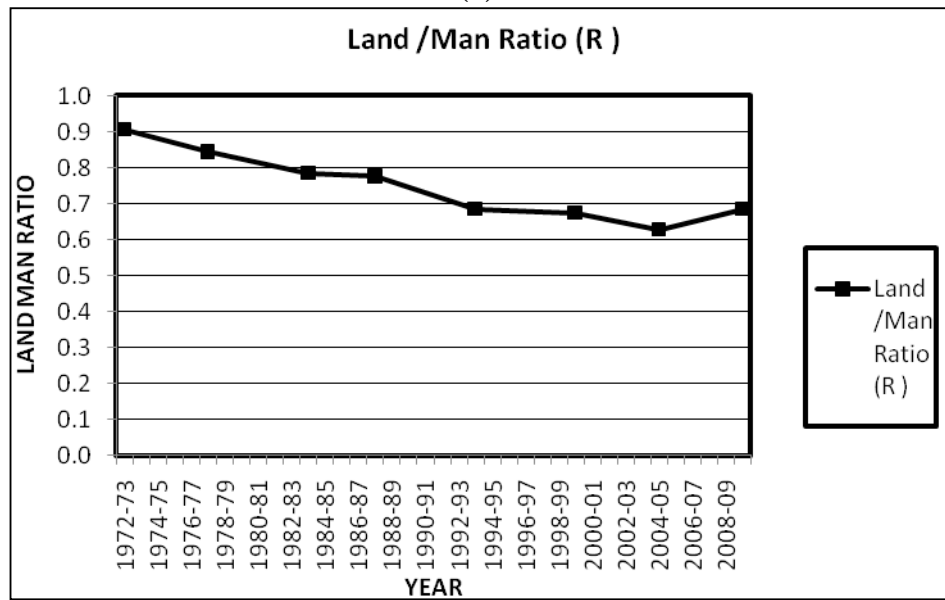


Table 2
Land/ Man Ratios: All India 1983, 1993-94, 1999-00, 2004-05 and 2009-10

<i>Year</i>	<i>Land/Man Ratios India</i>
1983	0.78
1993-94	0.68
1999-00	0.67
2004-05	0.62
2009-10	0.68

III. Impacts and Outcomes

The Impact of Declining Land/Man Ratios on per Agricultural Worker Productivity

How much land a man tills matters. Output per agricultural worker largely depends on it. Recent analysis¹⁴ of district level data for four triennia, (1970-73, 1980-83, 1990-93 and 2003-06) suggests that more than half of the inter-district variations in the gross value of output per agricultural worker was accounted for by inter-district differences in the land/man ratios.

But care needs to be taken in interpreting these results. The value of output per agricultural worker is, of course, quite different from the earnings of agricultural workers. The cultivator gets as his earnings only what is left over after deducting input costs, including the wages of hired workers, if any, marketing costs and so on. And the agricultural labourer gets his wages, in cash or kind or both. But per worker productivity in agriculture provides an upper boundary, the ultimate constraint upon potential earnings for them both.

In India, agricultural worker productivity has grown exceedingly slowly during the entire period since Independence. From the immediate pre-Green Revolution years, 1962-65, to the 2003-06 triennium, the growth rate of agricultural worker productivity was just 1.07 percent per year. This is what lies behind the widening gap between GDP per worker in agriculture and GDP per worker in non-agriculture.

This dismal all-India performance reflects the fact that while productivity growth rates decelerated in four out of seventeen major states between 1980-83 to 1990-93 as compared to the 1962-65 to 1980-83 period, the record after 1990-93 was far worse. At the state level, in this post 1991 period, characterised by the highest overall per capita GDP growth rates ever, agricultural worker productivity rates decelerated in 11 out of 17 major states, and four of these states suffered negative agricultural worker productivity growth.

The analysis by Bhalla and Singh (2010), suggests that declining land/man ratios have had a major impact on agricultural worker productivity. Two separate exercises using district wise data lead to this conclusion. In both of these cross section analyses the number of agricultural workers is assumed to be exogenously determined and per agricultural worker productivity is hypothesised to depend on per worker use of inputs.

In the first exercise, a ridge regression procedure was adopted to estimate a labour productivity function of the Cobb Douglas (restricted form) type for India as a whole. The

results indicate that the land/man ratio accounted for an increasing part of inter-district variations in agricultural worker productivity over time. The coefficient of the land/man ratio was statistically significant and its magnitude increased consistently from 0.364 in the 1970-73 triennium to 0.405 in 1980-83, 0.433 in 1990-93, and to 0.531 in the final triennium, 2003-06. In short, the results suggest that by 2003-06 more than half of the inter-district variations in gross value of output per agricultural worker at 1990-93 prices resulted from inter-district differences in the land/man ratios.

It was concluded that the increasing coefficient of the land/man ratio could be attributed to increasing population pressure on land, given circumstances such that very little shift of workers had taken place out of agriculture into non-agricultural activities.

The second, decomposition, exercise sought to account for state level differences in agricultural labour productivity between each of 16 states and Punjab, (the base state), in 2003-06, by measuring the percentage contribution of each of five sets of district level explanatory variables to the percentage difference in per agricultural worker productivity as between each of the 16 states and the base state, Punjab.

At the all-India level and in most, (9 out of 16), states the single most important factor was the land/man ratio. In the remaining seven, technology was the key factor. Altogether, the set of five factors listed in table 3 accounted for roughly 90 percent of the differences in agricultural worker productivity between Punjab and all- India (excluding Punjab).

Table 3
Percent Contribution of Specified Factors to Differences in Agricultural Worker Productivity (Punjab versus Others) : All- India Triennium
 Percent Contribution of Factors to Differences in Agricultural Worker Productivity

<i>India</i>	<i>Land/Man Ratio</i>	<i>Technology</i>	<i>Cropping Intensity</i>	<i>Infrastructure</i>	<i>Rural Literacy</i>	<i>Residual</i>
	33.62	28.54	8.68	13.16	3.47	12.53

Notes: (i) India excludes Punjab

(ii) The Land/ Man Ratio is measured as net sown area per Population Census agricultural worker (projected to 2003-06).

(iii) Technology includes fertiliser per worker, tractors per worker and tube wells per worker.

(iv) Cropping intensity is the ratio of gross cropped area to net area sown.

(v) Infrastructure includes rural roads per worker, markets per worker and irrigation per worker.

Source: Bhalla and Singh (2010) Draft

Outcomes in Terms of Average Area Owned and Size Distribution of Land Holdings

NSS data on ownership holdings¹⁴ indicates that owned area in rural areas has gone down from 129 million ha in 1961-62 to 117 million ha in 1992 and then to 107 million ha in 2003.

This was associated with a rapid decline in average area owned per household, and an increase in inequality in the distribution of owned area among households. Average owned area of those who owned some land fell from 2.01 ha per household in 1961-62 to 1.14 ha in 1992, and then to only 0.81 ha in 2003. (Average operated area of operational holdings is bigger, but the trend is the same.) Gini's coefficients for owned area, (which measure the degree of inequality in the distribution of owned area among households), and which

had remained constant at 0.71 in 1971-72, 1982 and 1992, rose to 0.74 in 2003. Table 3 gives details for all India on the characteristics of ownership holdings for four decades from 1961-62 to 2003.

Table 4
Household Ownership of Land: Rural India by NSS Rounds: 1961-62 to 2003

<i>Item</i>	<i>1961-62 17th</i>	<i>1971-72 26th</i>	<i>1982 37th</i>	<i>1992 48th</i>	<i>2003 59th</i>
1. Estimated number of households (million)	72.3	78.2	93.5	116.2	147.8
2. Estimated area owned (million ha)	128.7	119.6	119.7	117.4	107.2
3. Average area (ha) owned per household	2.01 (1.78)	1.69 (1.53)	1.44 (1.28)	1.14 (1.01)	0.81 (0.73)
4. Estimated number of landless households	8.4	7.5	10.6	13.1	14.8
5. Percentage of landless Households	11.68	9.64	11.33	11.25	10.04

Notes: i) Average area owned in item 3 excludes landless households. Figures in brackets in item 3 are average area owned per household including landless households.

ii) Report 491 did not give estimates for the total number of households including landless households, except for the 59th Round. Estimates in items 1 and 4 have been derived from those given in lines 2 and 3, and 5, respectively. .

Source: Based on NSS 59th Round Report No 491, Statement 2, page 11, and Statement 3, page 12.

However, NSS ownership holdings estimates need to be taken with a grain of salt. As Rawal (2008) has pointed out, the NSS surveys underestimate the extent of inequality in both ownership and operational holdings because owners of large holdings under report the extent of their owned land, while at the other end of the size class scale, landlessness is also seriously underreported.¹⁵ Rawal (2008) estimates that landlessness in the sense of owning no land other than a homestead was in the neighbourhood of 42 percent in 2003 in India as a whole.

There is a social group dimension to the average area owned per household figures too, which needs to be mentioned. In 2003, Scheduled Tribe households recorded a per household owned area of 0.727 ha. Members of Scheduled Caste households owned, on the average, only 0.304 ha. Other Backward Class households owned 0.758 ha. "Others", reported per household owned area of 1.003 ha.

Table 5
Average Area Owned per Household by Social Group and Share in Households of each Social Group: Rural India and Uttar Pradesh, 2003

<i>State</i>	<i>Characteristics</i>	<i>Social Group</i>				
		<i>ST</i>	<i>SC</i>	<i>OBC</i>	<i>Others</i>	<i>All</i>
Rural India	Average Area Owned (ha)	0.767	0.304	0.758	1.003	0.725
	Share in Households (%)	10.5	21.6	41.6	26.3	100

Notes: ST- Scheduled Tribe; SC Scheduled Caste; OBC-Other Backward Class.

Source: NSS 59th Round Report No 491, Statement 1R Pages A-13 and A-15.

Marginalisation of Agricultural Holdings

In India today, the extent of marginalisation of rural ownership holdings by size category is the definitive feature in the lives of agricultural workers and the conditions of

agricultural production. By 2003, in India as a whole, roughly 80 percent of all ownership holdings belonged to the marginal, (1.000 ha or less), size category. Altogether, 96 percent of households owned holdings of 4 ha or less in 2003.

The hard fact is that the typical household operating a holding of less than 4 ha cannot cover actual consumption expenditures out of the combined income from crop cultivation and animal husbandry combined. Then how do these people survive? Table 7 in the next section provides some of the answers.

Table 6
Share of Ownership Holdings by Size Category:
Rural India by NSS Rounds, 1971-72 to 2003.

Category of Holdings	Share of Ownership Holdings by Size Category			
	1971-72 26th	1982 37th	1992 48th	2003 59th
1. Marginal (1.000 ha or less)	62.62	66.64	71.88	79.60
2. Small (1.001-2.000 ha)	15.49	14.70	13.42	10.80
3. Semi-medium (2.001-4.000 ha)	11.94	10.78	9.28	6.00
4. Medium (4.001-10.000 ha)	7.83	6.45	4.54	3.00
5. Large (>10.000 ha)	2.12	1.42	0.88	0.60

Source: NSS 59th Round Report No 491, Statement 5, page 19.

Farmer Household Incomes by Source

The key to the survival of members of farm households possessing less than 4 ha lies in the fact that the typical farmer household now has only one foot in self cultivation of the operational holding. The other foot is either in the hired labour market or in some kind of non-farm activity – typically in self employment.

From table 6, it can be seen that the roughly 45 percent of farmer households who possess 0.40 ha or less rely, for the vast majority of their incomes, on wages. Income from crop cultivation and animal husbandry combined constitute a strictly secondary source of income. Non-farm business income accounts for roughly 17 percent of income. It is worth noting that these sub marginal farm households depend more on income from self employment in a non-farm business, than farmers in any other size class of land possessed. The question that arises here is: how much of this diversification into non-agricultural activities is distress diversification?

It is only when you come to size classes of 0.41 and above that the single largest income source is cultivation. The share of cultivation as an income source is directly related to the size class of land possessed, as one would expect.

In the typical case, a farm household can cover actual consumption expenditure, from cultivation, only if he possesses 4.01 hectares or more. Although these are averages which hide inter-regional and inter farm household variations, it may be noted that less than 5 percent of farmer households belong to this fortunate operational holdings group.

IV. Towards a National Land Use Policy

The future, in the normal course of the kind of unbridled capitalist development processes we have been having, will almost certainly involve further increases in area under non-

Table 7
Average Monthly Income by Source: India 2002-03

Size class of land possessed (ha)	% of Farmer HHs	Average Income by source/ Share in Sum of Incomes				Sum All Incomes by Source Rs	Sum: Cultivation + Animal Husbandry	Consumption Expenditure Rs.
		Wages Rs. (%)	Crop Cultivation Rs. (%)	Animal Husbandry Rs. (%)	Non Farm Business Rs. (%)			
<0.01	11.62	1075 (77.9)	11 (0.8)	64 (4.6)	230 (16.7)	1380	75	2297
0.01-0.40	33.96	973 (59.6)	296 (18.1)	94 (5.8)	270 (16.5)	1633	390	2390
0.41-1.00	27.59	720 (39.8)	784 (43.3)	112 (6.2)	193 (10.7)	1809	896	2672
1.01-2.00	15.08	635 (25.5)	1578 (63.3)	102 (4.1)	178 (7.1)	2493	1680	3148
2.01-4.00	7.57	637 (17.7)	2685 (74.8)	57 (1.6)	210 (5.9)	3589	2742	3685
4.01-10.00	3.33	486 (8.6)	4676 (82.3)	12 (0.2)	507 (8.9)	5681	4688	4626
>10.00	0.55	557 (5.8)	8321 (86.1)	113 (1.2)	676 (7)	9667	8434	6418

Notes: 1. A farmer is defined as one who possesses some land and is engaged in some agricultural activities on that land during the last 365 days. Agricultural labourers are excluded.
2. A farmer household is a household having at least one farmer as its member.
3. Sum of incomes excludes income from rent, interest, dividends and other sources such as pensions and remittances

Source: Situation Assessment of Farmers Report No. 497 NSS 59th Round (Jan-Dec 2003) Table 6, page A-192

agricultural uses accompanied by further reductions in cultivable area which is not cultivated. The net result will be that the annual losses in cultivated area due to increases in area under non-agricultural uses will be larger than the gains from conversion of cultivable area which is not cultivated into cultivated land.

From the point of view of long run food security, this is not a sustainable situation.

This is a situation which has been developing for three decades, ever since the first official efforts to do something about developing a national land use policy were initiated. Unfortunately, the 1991 economic crisis intervened and policy priorities underwent a sea change.

An account of what happened in the 1980s and 1990s, and of what could yet be done, follows.

Early Efforts

In the early 1980s, a National Land Use and Wasteland Development Council, chaired by the Prime Minister, was set up. It spent three years, from 1983 to 1986, in preparing policy guidelines. It is not clear what happened to these guidelines.

Then, in 1987, the Ministry of Agriculture launched an extensive research project titled *Perspective Plan for Conservation, Management and Development of Land Resources* on a zonal basis. Zonal studies were carried out, reports were produced and recommendations were made. In 1988, the Planning Commission set up Agro-climatic Regional Planning units. It appears that the recommendations of the zonal studies were never taken up for serious consideration.

A major economic policy shift was in the offing.

The Intervening Years, 1991 to 2008: Macro-economic crisis, stabilisation and structural adjustment, 'liberalisation' and globalisation.

A current account deficit crisis had been brewing since the mid-1980s and successive governments had failed to take appropriate action. By the time the Narasimha Rao government came to power in June 1991, they had to deal with a full-blown macro-economic crisis.

The macro-economic crisis of 1991 shifted the focus of economic policy away from agriculture and towards fiscal policy, trade policy and a revised approach to industrial development. Under the influence of international lenders of last resort India was launched into an era of mandatory, but relatively short term, macro-economic stabilisation and structural adjustment programmes, and a longer run 'liberalisation', privatisation and globalisation drive. There was virtually no public discussion or parliamentary consideration of this programme beforehand.

As Joshi and Little (1996) pointed out, many countries had been forced to undertake stabilisation and structural adjustment measures, but the "almost simultaneous announcement ... of a long-run programme of deregulation and liberalisation" was not common.¹⁶

The impetus for the long-run 'reform' programme came from within India's own political power structure. The "absence of any attempt to explain reforms, not even to State governments, let alone to the mass of the people" was noted by Joshi and Little (1996)¹⁷

Thus, during the 1990s, there was no further move to develop a national land use policy.

However, more than 15 years later, an expert group's report on the potential for converting wastelands and degraded land into cultivated area was followed up by a proposal to develop 36.4 million ha of degraded land during the 11th Five Year Plan.

The Potential for Converting Wastelands and Degraded Lands into Cultivable Lands.

One way to relax the constraints of 'scarce land', (without excessively disturbing the status quo), is to convert India's extensive areas of wasteland and degraded land into cultivable area.

In 2008, the expert group presented evidence that in India, accelerated conversion of wastelands and degraded lands into arable land could constitute a potentially important countervailing measure. In India, the most recent scientific estimate¹⁸ of the extent of degraded lands/wastelands that, with appropriate investment, could be brought under cultivation, is gigantic.

One hundred and four million ha of degraded arable land and 16.5 million ha of degraded open forest land with less than 40 percent canopy – a total of 120.72 million ha - were

identified by the expert group as lands most likely to respond to investment in “amendments and management”. Signatories to the expert group’s report include experts from the Indian Council of Agricultural Research, (ICAR), The National Remote Sensing Agency, (NRSA), the National Academy of Agricultural Sciences, (NAAS) and the National Rainfed Area Authority < (NRAA). Their ‘grand total’ of 120.7 million ha amounts to more than three quarters of the total area currently under cultivation and two thirds of the area identified as “cultivable land” in official land utilisation statistics.

There are, in addition, roughly 83 million hectares of rainfed area, accounting for 58 percent of net sown area.

Most of the degraded land identified by the expert group is cultivable land which has been turned into wasteland by water, (67 percent), or wind, (10 percent), erosion. Another 14.5 percent suffers from chemical degradation. This includes salt affected and acidic soils, alone or in combination with water erosion. A relatively small area – less than 1 percent – has been subject to physical degradation, attributable either to mining and industrial waste or to ‘serious’ water logging, defined as permanent surface inundation.

Degraded open forest land, with less than 40 percent canopy, accounts for an additional 13.7 percent of the estimated 120.7 million ha area which could be transformed into arable land.

All India and State level estimates of the area of degraded arable and open forest land are given in table 8. The potential area for conversion of open forest land into arable land in India as a whole 120.7 million ha. This amounts to more than 36 percent of total geographical area of the country. In addition 58.5 million ha of degraded rainfed area, could be made cultivable. The potentialities are truly gigantic!

The “amendment and management” of even a part of this area could provide significant opportunities both for increasing the productivity of agricultural land and for distribution of cultivable land to land-poor rural households.

The 11th Five Year Plan refers to the report of this expert group in its discussion of wasteland development projects. Citing the expert group’s results, they estimated that “degraded land which has the potential for development under watershed development projects amounts to 64 million ha”¹⁹ in India as a whole. Of this, 36.4 million ha was proposed to be developed during the 11th Five Year Plan. This falls far short of what is required to reclaim for cultivation the 120.7 million ha identified by the expert group.

However, the challenge of maintaining some minimum level of cultivated area in India goes far beyond what can be achieved by measures to convert wastelands and degraded lands into cultivable lands.

The Challenge of Devising a Coherent National Land Use Policy

There are at least two other elements which may need to be included in a coherent National Land Use Policy. The first one is relatively easy to achieve; the second one might be exceedingly difficult.

The first one involves providing assurance to both sellers and purchasers of agricultural land through an ‘assisted farm land sale-and-purchase’ programme. This is a programme

Table 8
State-Wise Area Statistics: Degraded Arable/Open Forest Land
(M. ha as at 2004-05)

Sl. No.	State	Open Forest land				NSA States (M ha)	Rainfed Area		
		TGA States (M ha)	Area (M ha)	% of TGA India	% of TGA States		Area (M ha)	% of NSA India	% of NSA States
1	Andhra Pradesh	27.50	9.57	2.91	34.80	10.12	6.45	4.56	63.75
2	Arunachal Pradesh	8.37	2.06	0.63	24.61	0.16	0.12	0.09	73.17
3	Assam	7.84	4.42	1.34	56.38	2.77	2.60	1.84	93.73
4	Bihar	9.41	1.46	0.44	15.52	5.72	2.28	1.61	39.90
5	Chhattisgarh	13.51	4.71	1.43	34.86	4.73	3.56	2.52	75.34
6	Delhi	0.15	0.03	0.01	20.27	0.03	0.003	0.00	11.11
7	Goa	0.37	0.10	0.03	27.03	0.14	0.11	0.08	78.01
8	Gujarat	19.60	3.07	0.93	15.66	9.62	6.46	4.57	67.14
9	Haryana	4.42	0.53	0.16	11.99	3.53	0.57	0.41	16.14
10	Himachal Pradesh	5.57	0.95	0.29	17.06	0.55	0.44	0.31	80.73
11	Jammu & Kashmir	22.22	1.87	0.57	8.42	0.75	0.45	0.31	60.24
12	Jharkhand	7.9	3.83	1.16	48.48	1.77	1.61	1.14	91.01
13	Karnataka	19.18	8.50	2.59	44.32	9.85	7.68	5.43	77.99
14	Kerala	3.89	2.76	0.84	70.95	2.19	1.76	1.25	80.37
15	Madhya Pradesh	30.82	14.00	4.26	45.43	14.95	8.93	6.32	59.75
16	Maharashtra	30.71	10.05	3.06	32.73	17.43	14.55	10.29	83.47
17	Manipur	2.23	1.82	0.55	81.61	0.22	0.18	0.13	82.95
18	Meghalaya	2.24	1.73	0.53	77.23	0.23	0.16	0.11	69.57
19	Mizoram	2.10	1.23	0.37	58.57	0.09	0.08	0.06	88.89
20	Nagaland	1.66	1.54	0.47	92.77	0.30	0.24	0.17	78.95
21	Orissa	15.60	3.74	1.14	23.97	5.76	4.43	3.13	76.96
22	Punjab	5.04	0.46	0.14	9.13	4.24	0.21	0.14	4.95
23	Rajasthan	34.22	20.46	6.23	59.79	17.94	10.67	7.55	59.49
24	Sikkim	0.71	0.03	0.01	4.23	0.11	0.10	0.07	89.29
25	Tamilnadu	13.00	3.21	0.98	24.69	4.67	2.46	1.74	52.63
26	Tripura	1.05	0.76	0.23	72.38	0.28	0.24	0.17	85.71
27	Uttar Pradesh	24.09	14.58	4.43	60.52	16.81	3.78	2.68	22.48
28	Uttarakhand	5.35	1.25	0.38	23.36	4.73	0.43	0.30	9.10
29	West Bengal	8.87	2.00	0.61	22.55	5.55	2.20	1.55	39.63
	TOTAL		120.72	36.72			82.753	58.53	

Note: TGA is Total Geographical Area, and NSA is Net Sown Area.

Source: Table 2, Anonymous (2008), NRAA, Min. of Agriculture, GOI and *Agricultural Statistics at a Glance* (2008).

which links people who want to sell their land to buyers who want to farm it. The buyers could be relatives, or total strangers.

The seller would get an annuity or a lump-sum payment – his or her choice,²⁰ In a typical case, the buyer would get a repayable, supervised, lump-sum loan plus a series of short term loans for seasonal inputs from the authority set up to manage the scheme. The

loan repayments from buyers would, more or less, cover the costs of the sellers' annuity or lump-sum payments. (There would be an element of subsidy, of course, quite aside from the costs of setting up and managing the programme.)

The programme would aim to assist small-farm operators to enlarge their holdings, tenants to become owners, and others, including agricultural university graduates who want to make a 'career' in agriculture, to get started. (Something of this kind was initiated in the Canadian province of Saskatchewan in the late 1950s. One of its aims was to enable elderly farmers to retire with dignity, without burdening their urban based children with doing something about the sale of the farm and the subsequent financial responsibility of looking after their parents.)

In the Indian case, one of its larger purposes would be to assist both buyers and sellers who would normally be on the weaker side of the bargaining table, to deal with confidence with their opposite numbers through the intermediation of the agency. The other would be to keep good agricultural land in the hands of agricultural workers, and to ease some of the difficulties associated with India's ongoing transition from a predominantly rural and agricultural economy and society to a predominantly urban and non-agricultural one.

The second one would involve disturbing prevailing political power equations.

At this stage one thing needs to be made clear.

The world food crisis of 2007-08 was not a 'one-off' event – an isolated incident in a bad crop year.

As a Brazilian paper by de Souza, Filho and Neder (2014) pointed out, it has proved to be *structural* in nature. Higher, and more volatile food prices are part of a "trend for the long term."²¹ They are not going to go away.

For countries like India and China which are too big to go to the international market for basic food supplies in years of bad harvests without pushing up international prices, an obvious option is to restrict the sale of good agricultural land for non-agricultural purposes, by setting a 'floor' below which cultivated area, at the national level, would not be permitted to fall.

This is not a new idea.

As just one part of its drive to ensure national food security, in Vietnam it was proposed to "retain" 3.81 million hectares for rice cultivation by 2020 – that is, to establish a target national minimum area below which the area devoted to rice cultivation would not be allowed to fall.²² Dr Swaminathan's proposal to create *Special Agricultural Zones (SAZs)* for conserving prime land for agriculture in India is also a proposal along these lines.²³

The implications of doing something like this are far reaching. In India, a constitutional amendment would be required.

In the case of the last, path breaking, Constitutional Amendment – the Constitution (Seventy-third Amendment) Act 1992, the Government notified the Amendment, as passed by Parliament in 1992, through the official Gazette only in April 1993, after ratification by State legislatures and after the Act was assented to by the President. In the present case a similar procedure would have to be followed.

Any amendment to regulate land use would have to have “objects and reasons” sufficiently persuasive to induce State legislatures to ratify it. It would have to be argued that the subject had assumed national importance.

Given that in India the so-called “land mafias” have gained considerable powers in many states, this may be a tall order. Any move to restrict the sale of good agricultural land for non-agricultural purpose is likely to be met with vigorous opposition. As in the case of India’s dealing constructively with the ongoing agrarian crisis, a shift in the power relations would have to be involved.

Notes

1. Von Braun, Joachim and Ruth Meinzen-Dick (2009) “*Land Grabbing*” by Foreign Investors in Developing Countries: *Risks and Opportunities*, IFPRI Policy Brief No 13, (April).
2. IFPRI Policy Brief No. 13, 2009, page 4.
3. Page 4, *ibid*.
4. Page 5, *ibid*.
5. Page 4, *ibid*.
6. This third section is grossly out of date. The data comes from two 59th Round (2003) National Sample Survey reports. One is Report 491 on *Household Ownership Holdings, 2003*; the other is Report 497, titled *Situation Assessment of Farmers*. Field surveys to update this data are currently underway. They will be completed only at the end of December 2013.
7. For the approach of this and subsequent passages, the author is heavily indebted to R. Radhakrishna, (2009), “Forward” , in D. Narasimha Reddy and Srijit Misra (eds) *Agrarian Crisis in India*, Oxford University Press.
8. Page xvii of the Forward by R. Radhakrishna in D. Narasimha Reddy and Srijit Misra (eds), *op cit*.
9. Preface, page xxvix, *ibid*.
10. Page viii, Forward, *op. cit*.
11. See NSS Report No. 491, *Household Ownership Holdings in India 2003*, page 11.
12. The number of agricultural workers is measured here in terms of the NSS *usual principal and subsidiary status* measure. Land is measured as cultivated area.
13. Bhalla, G.S. and Gurmail Singh, (2010), Draft. The book, which was published in 2012 by Sage, is titled *Economic Liberalisation and Indian Agriculture: A District Level Study*.
14. See NSS 59th Round Report 491, *Household Ownership Holdings, 2003*, table 3.2 page 16.
15. On this, see: Rawal, Vikas (2008) “Ownership Holdings of Land in Rural India: Putting the Record Straight”, in *Economic and Political Weekly*, Vol XLIII, No 10, March 8 - 14.
16. See page 2, Joshi, Vijay and IMD Little (1996), *India’s Economic Reforms 1991 – 2001*, Oxford University Press, New Delhi.
17. See page 4, Joshi and Little (1996), *op.cit*.
18. Anonymous (2008) *Harmonisation of Wastelands/Degraded lands Data Sets of India*, National Rainfed Area Authority (NRAA), Ministry of Agriculture, GOI.
19. This includes 50 million ha of water eroded land, 5 million ha of wind eroded land and 9 million ha of eroded forest. See page 28, *11th Five Year Plan, 2007-2012, Vol III, Agriculture, Rural Development, Industry, Services and Physical Infrastructure*. Planning Commission, Gov’t of India, 2008. Oxford.
20. The annuity option takes care of the elderly or sick seller who wants to stop working and needs the equivalent of a pension. The lump-sum payment provides start-up capital to some one who wants to start a non-farm business, for example.

21. See page 4 in de Souza, Sabrina de Cassia Mariano, Niemeyer Almeida Filho and Henrique Dantas Neder (2014), draft paper presented at the tenth anniversary conference of the Foundation for Agrarian Studies held in Kochi, Kerala, January 2014.
22. See page 7 of the paper by Pham Van Duc (2014), Draft paper presented at the tenth anniversary conference of the Foundation for Agrain Studies.
23. *Inaugural Address* by M.S. Swaminathan at the January 2014 tenth anniversary of the Foundation for Agrarian Studies.

**IHD WORKING PAPER SERIES
(NEW SERIES)**

<i>No.</i>	<i>Authors</i>	<i>Title</i>
WP 02/2014	Sheila Bhalla	Scarce Land: Issues, Evidence and Impact
WP 01/2014	Ajit K. Ghose	India's Services-Led Growth
WP 06/2013	Gerry Rodgers, Sunil K. Mishra and Alakh N. Sharma	Four Decades of Village Studies and Surveys in Bihar
WP 05/2013	Sumit Mazumdar Alakh N. Sharma	Poverty and Social Protection in Urban India : Targeting Efficiency and Poverty Impacts of the Targeted Public Distribution System
WP 04/2013	Dev Nathan, Govind Kelkar and Shivani Satija	Witches: Through Changing Contexts Women Remain the Target
WP 03/2013	Shivani Satija	Violence Against Women in Rural Bihar- A case of four villages
WP 02/2013	Sheila Bhalla	Behind the Post 'Challenge to The Functional Efficiency of India's Established Statistical Institutions
WP 01/2013	Preet Rustagi, Dev Nathan, Amrita Datta and Ann George	Women and Work in South Asia: Changes and Challenges
WP 05/2012	Amrita Datta, Gerry Rodgers, Janine Rodgers and B.K.N. Singh	A Tale of Two Villages: Contrasts in Development in Bihar
WP 04/12	Janine Rodgers	Labour Force Participation in Rural Bihar: A Thirty-year Perspective based on Village Surveys
WP 03/12	K.P. Kannan	How Inclusive is Inclusive Growth in India?
WP 02/12	Sheila Bhalla	Notes on Land, Long Run Food Security and the Agrarian Crisis in India
WP 01/2012	Gerry Rodgers	Understanding Unequal Economic and Social Outcomes in Rural Bihar: The Importance of Caste, Class and Landholding
WP 03/2011	Dev Nathan and Sandip Sarkar	Global Inequality, Rising Powers and Labour Standards
WP 02/2011	Preet Rustagi and Rajini Menon	Gender Asset Gaps and Land Rights in the Context of the Asia-Pacific Region
WP 01/2011	D. Narasimha Reddy	NREGS and Indian Agriculture: Opportunities and Challenges

WP 03/2010	Gerry Rodgers and Janine Rodgers	Inclusion or Exclusion on the Periphery? Rural Bihar in India's Economic Growth
WP 02/2010	R Radhakrishna, C Ravi and B Sambhi Reddy	Can We Really Measure Poverty and Identify Poor When Poverty Encompasses Multiple Deprivations?
WP 01/2010	Alakh N. Sharma	Political Economy of Poverty in Bihar: Nature, Dimensions and Linkages
WP 03/2009	Dev Nathan and Govind Kelkar	Markets, Technology and Agency: Indigenous People and Change
WP 02/2009	Aseem Prakash	Towards Understanding the Nature of Indian State and the Role of Middle Class
WP 01/2009	C Upendranadh and Rukmini Tankha	Institutional and Governance Challenges in the Social Protection: Designing Implementation Models for the Right to Work Programme in India
WP 06/2008	Dipak Mazumdar and Sandip Sarkar	The Employment Problem in India and the Phenomenon of the Missing Middle
WP 05/2008	Aseem Prakash	Social Conflict, Development and NGOs: An Ethnographic Study
WP 04/2008	Balwant Singh Mehta and Kerren Sherry	Wages and Productivity of Child Labour: A Case Study of Zardosi Industry
WP 03/2008	Sheila Bhalla	Scarce Land: The Cases of All India and West Bengal
WP 02/2008	T.S. Papola and R.P. Mamgain	Market Access to Small Primary Producers: A Study of Vegetable Growers in the Supply Chain
WP 01/2008	Preet Rustagi	Rural Child Labour Markets in India: Nature of Child Work Participation and Role of the Family
WP 03/2007	Alakh N Sharma	Flexibility, Employment and Labour Market Reforms in India
WP 02/2007	Preet Rustagi	Rural Child Work, Labour and Daily Practices: A Time Use Survey-based Analysis
WP 01/2007	R.P. Mamgain	Growth, Poverty and Employment in Uttarakhand
WP 04/2006	Sheila Bhalla	Common Issues and Common Concerns in the SAARC Region: Employment Generation and Poverty Reduction

WP 03/2006	Rajendra P. Mamgain and Balwant Singh Mehta	Employment and Earnings in Uttaranchal: Trends and Policy Issues
WP 02/2006	Preet Rustagi	Women and Poverty: Rural-Urban Dimensions
WP 01/2006	Dipak Mazumdar and Sandip Sarkar	Growth of Employment and Earnings in the Tertiary Sector, 1983-2000
WP 05/2005	Sheila Bhalla	Recent Developments in the Unorganised Rural Non-Farm Sector
WP 04/2005	Preet Rustagi	Challenges for Economic Empowerment of Women In South Asia
WP 03/2005	Alakh N Sharma	Agrarian Relations and Socio-economic Change in Bihar
WP 02/2005	Preet Rustagi	The Deprived, Discriminated and Damned Girl Child: Story of Declining Child Sex Ratios in India
WP 01/2005	Dipak Mazumdar and Sandip Sarkar	Agricultural Productivity, Off-Farm Employment and Rural Poverty: An Analysis Based on NSS Regions

The Institute for Human Development (IHD), a leading centre for studies on labour markets, livelihoods and human development, aims to contribute to the building of a society that fosters and values an inclusive social, economic and political system, free from poverty and deprivations. Towards achieving its goal, it engages in analytical and policy research, teaching and training, academic and policy debates, networking with other institutions and stakeholders, and publication and dissemination of the results of its activities. The major themes of current work of IHD are: poverty, inequality and well-being; labour markets and employment; social protection; women and children; marginalized social and economic groups and lagging regions; and governance and institutions for human development.



Institute for Human Development

NIDM Building, IIPA Campus, IP Estate, New Delhi - 110002

Phones: + 91-11-23358166/23321610 • Fax: +91-11-23765410

Email: mail@ihdindia.org • Website: www.ihdindia.org