

What Census 2011 Reveals about Our Growers and Their Land

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The change in the number of cultivators and agricultural labourers, as recently provided by Census 2011, is a major indicator of a state's treatment of its crop-growing communities and its approach to land use. The difficulties in finding long-term trends in economic activity, in particular that of agriculture and food production, in the districts are eased to an extent by reading the census data together with other data – in particular land use and major crops. These should help us recognise the growing impacts on food security caused by rampant urbanisation and the steady erosion of the population of cultivators.

To gain a better understanding of the changes in the numbers of cultivators and agricultural labour (marginal or main), it is useful to read them with the change in the number of agricultural holdings in India over the same ten years, and this is provided, over exactly the same decade, by the Agricultural Census. The last complete Agricultural Census is for the year 2005-06 (albeit with several yawning gaps in data, the most worrisome of which is the absence of Maharashtra and Bihar from the tables at district and block level). The next is for 2010-11, and 'All India Report on Number and Area of Operational Holdings (provisional)', Department of Agriculture and Cooperation, Ministry of Agriculture (2012), from which we have the national and state level provisional data.

This tells us that the number of 'operational holdings' in India rose over a ten year period from 119.9 million to 137.7 million (up 14.8%). Whereas in three categories of the size of holdings (large, medium and semi-medium) the number of operational holdings dropped, in the categories of small and marginal the number rose (by 8.8% and 22.4% respectively). The rise in total operational holdings of 17.8 million is due mainly to the increase in the number of marginal holdings, that is, below one hectare, and these account for more than 95% of the all holdings added to the total in this ten-year period.

At a national level, the addition of such a large number of small holdings has not expanded the total acreage under cultivation. Rather, all cultivated land - in all size categories - has very slightly shrunk (by 0.16%) to 159.1 million hectares. However, the total masks both one large deficit and one large addition - a 17.5% decrease in the total operating area of large holdings (10-20 hectares, and above 20 hectares), and a 18.7% increase in the total operating area of marginal holdings (below one hectare). The total area operated as marginal holdings has risen from 29.8 million hectares in 2000-01 to 35.4 million hectares in 2010-11.

This provides some of the background about the change in land use that accompanies the disturbing top-level indication given to us by Census 2011 about India's farmers. There are now 95.8 million cultivators for whom farming is their main occupation, reported P Sainath, which is less than 8 per cent of the population, down from 103 million in 2001 and 110 million in 1991.

[\[http://www.thehindu.com/opinion/columns/sainath/over-2000-fewer-farmers-every-day/article4674190.ece\]](http://www.thehindu.com/opinion/columns/sainath/over-2000-fewer-farmers-every-day/article4674190.ece)

It is with these readings - in the change in number of and type of farm plots - that the change in the numbers of cultivator and agricultural labour gives us a fuller picture. Considering the four categories of occupation under the Census enumeration which pertain to cultivation and agriculture, we have main or marginal cultivators or agricultural labourers, and data for the changes seen in these categories between the two Censuses (2001 and 2011). The changes for the 20 large states reveal the following:

- The variation in the number of marginal agricultural labourers ranges from 170% more in Jammu and Kashmir, 100% more in Bihar and 83% more in Himachal Pradesh to 32% less in Kerala, 23% less in Maharashtra and 16% less in Karnataka.
- The variation in the number of marginal cultivators ranges from 47% more in Jharkhand, 31% more in Himachal Pradesh and 25% more in Bihar to 35% less in Gujarat, 34% less in Haryana and 33% less in Maharashtra.
- The variation in the number of main agricultural labourers ranges from 117% more in Rajasthan, 89% more in Himachal Pradesh and 73% more in Uttaranchal to 10% less in Kerala, 5% more in Bihar and 10% more in Punjab.
- The variation in the number of main cultivators ranges from 17% more in Assam, 12% more in Maharashtra and 2% more in Rajasthan to 40% less in Jammu and Kashmir, 24% less in Jharkhand and 20% less in Bihar.

Table 1: Per cent change in the numbers, in the four occupation categories related to agriculture, for the 20 major states- Censuses 2001 and 2011,

Main cultivators		Main agri labourers		Marginal cultivators		Marginal agri labourers	
Assam	17.11	Rajasthan	117.70	Jharkhand	47.00	Jammu & Kashmir	170.83
Maharashtra	12.73	Himachal Pradesh	89.92	Himachal Pradesh	31.94	Bihar	100.30
Rajasthan	2.75	Uttaranchal	73.36	Bihar	25.25	Himachal Pradesh	83.35
Gujarat	0.76	Madhya Pradesh	70.86	Chhattisgarh	17.54	Rajasthan	81.11
Uttaranchal	-2.06	Uttar Pradesh	63.68	Uttaranchal	6.42	Jharkhand	77.73
Karnataka	-2.40	Chhattisgarh	61.46	Rajasthan	6.06	Chhattisgarh	67.99
Orissa	-4.52	Jammu & Kashmir	54.74	Jammu & Kashmir	5.58	Madhya Pradesh	58.01
Punjab	-4.76	Gujarat	47.33	Tamil Nadu	4.20	West Bengal	52.09
Kerala	-7.07	Haryana	46.62	Orissa	1.44	Assam	50.20
West Bengal	-7.73	Maharashtra	44.86	Uttar Pradesh	-5.59	Orissa	48.90
Madhya Pradesh	-7.82	Assam	41.95	Kerala	-9.05	Uttar Pradesh	36.87
Haryana	-11.75	Karnataka	35.31	Assam	-12.15	Uttaranchal	33.30
Chhattisgarh	-12.92	Andhra Pradesh	34.40	Andhra Pradesh	-12.54	Gujarat	11.11
Himachal Pradesh	-15.55	West Bengal	29.77	West Bengal	-16.85	Punjab	-2.73
Uttar Pradesh	-15.71	Tamil Nadu	19.32	Karnataka	-22.18	Haryana	-5.08
Andhra Pradesh	-17.71	Jharkhand	17.72	Madhya Pradesh	-23.36	Andhra Pradesh	-6.06
Tamil Nadu	-18.64	Orissa	15.37	Punjab	-23.62	Tamil Nadu	-7.86
Bihar	-20.04	Punjab	10.44	Maharashtra	-33.11	Karnataka	-16.66
Jharkhand	-24.64	Bihar	5.73	Haryana	-34.77	Maharashtra	-23.84
Jammu & Kashmir	-40.28	Kerala	-10.03	Gujarat	-35.82	Kerala	-32.63

Note: The spreadsheet that contains this table and table 3 is available online at [https://dl.dropboxusercontent.com/u/8248462/RG India CL AL 2001-11 census.xlsx](https://dl.dropboxusercontent.com/u/8248462/RG_India_CL_AL_2001-11_census.xlsx)

Maharashtra is at the top of the five states that account for two-thirds of all farm suicides in India, as NCRB data show – Maharashtra, Andhra Pradesh, Karnataka, Madhya Pradesh and Chhattisgarh.

[<http://www.thehindu.com/opinion/columns/sainath/farmers-suicide-rates-soar-above-the-rest/article4725101.ece>] However, while four of these states have far fewer farmers than they did a decade ago, only Maharashtra reports an increase in their number.

A closer examination of the data for Maharashtra shows that over ten years between the two census enumerations, 2001 and 2011, the population of Maharashtra grew by 15.5 million to reach 112.3 million, the 5.7 million added to the rural population being far outstripped by the 9.7 million added to the state's urban population. At this rate of growth in both rural and urban populations, Maharashtra's urban population will be larger than its rural population in around 2030-31. Already the consequences of migration away from the state's rural districts to its urban centres can be seen from

the Census 2011 data. In the recently released primary census abstracts for the states (they are available at the district level), the rate of growth in the category of total workers in urban Maharashtra is far more rapid than the corresponding rate of growth in rural Maharashtra, a rise of 35% compared with 12.4% (while 3.38 million were added to the total workers in rural Maharashtra, the urban addition was 4.86 million). Thus while the 2001 census counted 27.2 million total workers in rural and 13.9 million in urban Maharashtra, the 2011 figures respectively were 30.5 million and 18.7 million.

Table 2: Data from the 'All India Report on Number and Area of Operational Holdings' (provisional)

Number of holdings				
	2000-01	2010-11	difference	in %
Marginal	75,408,000	92,356,000	16,948,000	22.48
Small	22,695,000	24,705,000	2,010,000	8.86
Semi-Medium	14,021,000	13,840,000	-181,000	-1.29
Medium	6,577,000	5,856,000	-721,000	-10.96
Large	1,230,000	1,000,000	-230,000	-18.70
All Sizes	119,931,000	137,757,000	17,826,000	14.86
Operated area (hectares)				
	2000-01	2010-11	difference	in %
Marginal	29,814,000	35,410,000	5,596,000	18.77
Small	32,139,000	35,136,000	2,997,000	9.33
Semi-Medium	38,193,000	37,547,000	-646,000	-1.69
Medium	38,217,000	33,709,000	-4,508,000	-11.80
Large	21,072,000	17,379,000	-3,693,000	-17.53
All Sizes	159,436,000	159,180,000	-256,000	-0.16

'Source: The Department of Agriculture and Cooperation, Ministry of Agriculture (2012).

How much of the addition to the state's working population has been in agriculture? From the Census 2011 evidence, the working population counted as cultivators and agricultural labour has increased from 22.62 million to 26.05 million (this combines the category of 'main' workers, and the two new divisions within the 'marginal' category, which are 0 to 3 months and 3 to 6 months).

Whether main or marginal, the census classifies workers into one of four categories of economic activity: cultivator, agricultural labourer, worker in household industry and other worker. For the census enumerator, if a person has pursued more than one economic activity during the reference period, the economic activity in which that person was engaged during the major part of the period determines the classification assigned.

During the census, enumerators were advised that if a person is engaged in an economic activity but simultaneously attends to household chores or attends a school or college, that person is treated as a worker. But finer distinctions - which have a

considerable bearing on our understanding of the number of people actually engaged in agriculture (and allied activities, as the national accounting system calls the sector) - abound. To illustrate, for the census, those who may be cultivating solely for domestic consumption or rearing animals for milk for their own use will be treated as workers.

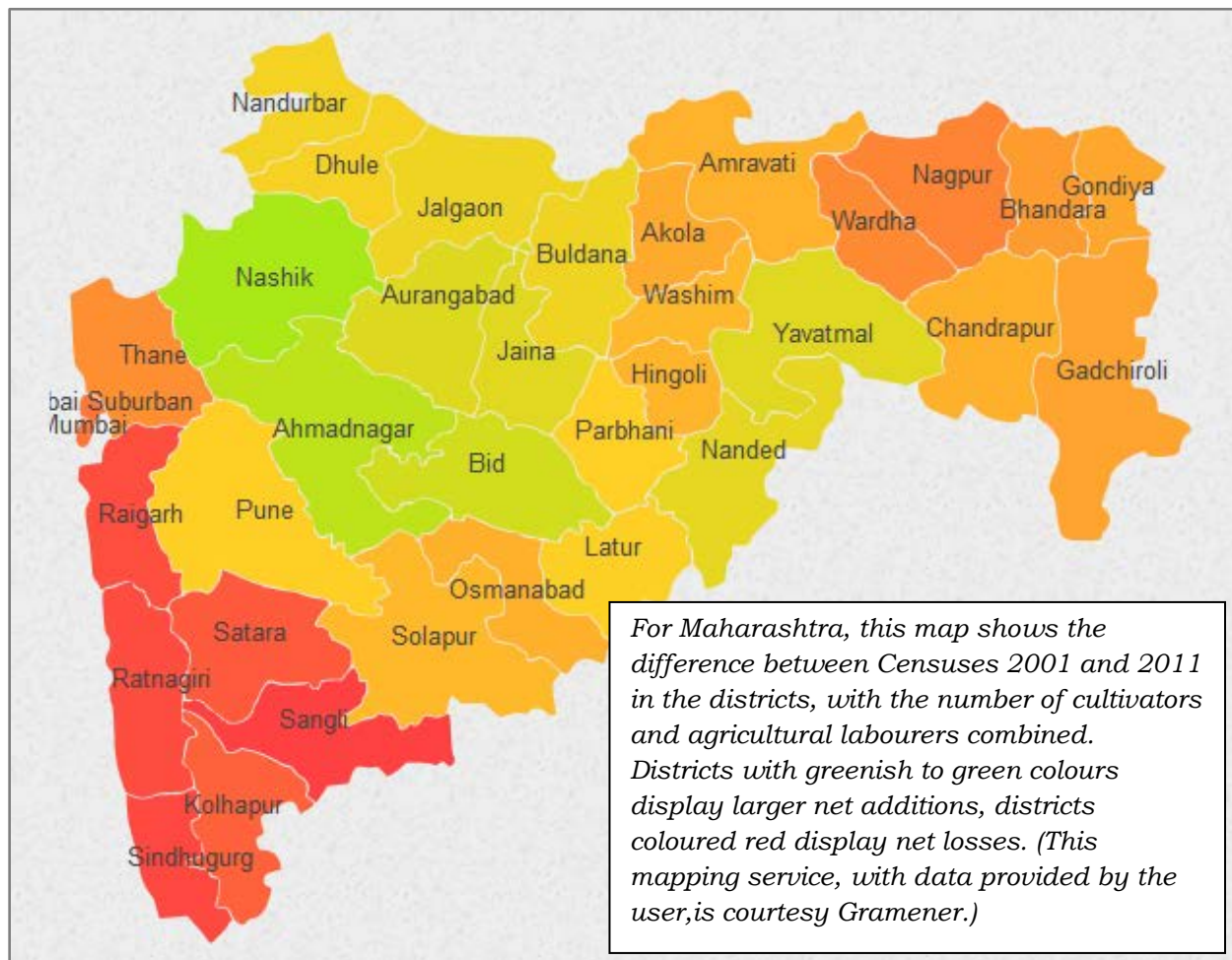
Moreover, there are several sub-sectors of agriculture that are not included in the definition given to cultivator and agricultural labour. All plantation work (that is, tea, coffee, rubber and areca nut) is not included, nor is 'livestock maintenance and production' (the rearing of cattle, goats, sheep, poultry farms, bee-keeping, the production of silk, eggs and honey). Fisheries and aquaculture is not included, and nor is forestry and logging (which includes forest produce including fodder).

Table 3: The differences in populations in the four occupation categories related to agriculture, for the 20 major states- Censuses 2001 and 2011,

Main cultivators		Main agri labourers		Marginal cultivators		Marginal agri labourers	
Uttar Pradesh	-2,903,450	Kerala	-102,423	Maharashtra	-540,269	Maharashtra	-756,831
Bihar	-1,356,892	Himachal Pradesh	32,512	Madhya Pradesh	-496,619	Karnataka	-407,048
Andhra Pradesh	-1,310,081	Jammu & Kashmir	56,430	Gujarat	-391,043	Andhra Pradesh	-243,123
Tamil Nadu	-883,444	Uttaranchal	104,632	Haryana	-275,882	Tamil Nadu	-202,398
Madhya Pradesh	-696,848	Punjab	110,399	Uttar Pradesh	-206,224	Kerala	-195,578
Jharkhand	-654,461	Jharkhand	186,449	West Bengal	-184,975	Haryana	-34,090
Chhattisgarh	-450,578	Assam	266,943	Karnataka	-154,584	Punjab	-11,805
Jammu & Kashmir	-382,065	Haryana	283,402	Assam	-127,608	Uttaranchal	38,986
West Bengal	-352,259	Orissa	322,382	Andhra Pradesh	-57,931	Himachal Pradesh	48,355
Haryana	-261,331	Bihar	517,267	Punjab	-40,392	Gujarat	234,719
Himachal Pradesh	-169,338	Chhattisgarh	953,916	Kerala	-12,474	Jammu & Kashmir	244,854
Orissa	-155,401	Tamil Nadu	1,171,315	Orissa	11,729	Assam	314,871
Karnataka	-148,623	Rajasthan	1,186,887	Tamil Nadu	15,862	Chhattisgarh	1,046,608
Punjab	-90,164	Karnataka	1,336,069	Uttaranchal	32,280	Rajasthan	1,229,058
Kerala	-41,428	West Bengal	1,346,564	Jammu & Kashmir	35,867	Jharkhand	1,398,306
Uttaranchal	-21,973	Gujarat	1,443,038	Chhattisgarh	144,243	Orissa	1,418,507
Gujarat	35,862	Madhya Pradesh	2,749,916	Rajasthan	215,480	West Bengal	1,479,321
Rajasthan	263,324	Andhra Pradesh	3,378,725	Himachal Pradesh	276,530	Madhya Pradesh	2,041,681
Assam	458,462	Maharashtra	3,427,709	Bihar	359,497	Uttar Pradesh	2,744,944
Maharashtra	1,296,367	Uttar Pradesh	3,793,368	Jharkhand	579,787	Bihar	4,410,638

That is why, without finer grading of the 'other worker' category and the data pertaining to their economic occupations, it is not possible to distinguish between a working population engaged in most forms of activity that contribute to agricultural GDP (or SDP). Indeed, the growth in the number of those classified as 'other worker' has been greater, at 26.8%, than the growth in those classified broadly as farmers (cultivators and agricultural labour taken together) which is 15.1%.

A clue to the scale of change comes from examining the rural and urban components of these changes. Disregarding the distinction between main and marginal, the largest addition in the number of workers in Maharashtra is in the 'other' 'urban' category, an addition of 4.31 million. Next is 'farmer' (that is, cultivators and agricultural labour taken together) 'rural' with 3.05 million.



How significant are these differences, between duration of work categories (main, marginal 0-3 and marginal 3-6), between location (rural and urban), and between major occupational groups? The census recognises that a large number of farm and non-farm activities are family based. Members of the cultivating households, irrespective of their age, work in the peak season of ploughing, sowing, harvesting and collection of farm produce. Some of them - particularly women, children and the aged - withdraw from the labour force in the slack season or pursue other economic activities (but may be classified as workers after the activity to which they give the most time) and yet not all are enumerated as workers during the census.

There is moreover the aspect of migration, which perhaps later in 2013 with the next major data release of Census 2011 will help grade the difference between the two new categories of marginal worker introduced in the Census 2011 primary census abstract. Employment data (NSS 66th round) show that in 2009-2010, there were an estimated

91.4 million casual workers in agriculture and 58.6 million casual workers in non-agriculture (of the latter, 32 million were employed in the construction industry alone). Estimates by the authors of the Workshop Compendium of the National Workshop on Internal Migration and Human Development in India (UNESCO and UNICEF, October 2012), show that about 35-40 million labourers – almost half the number of casual labourers outside agriculture – and 10% of agricultural labourers (about 9 million) could be seasonal migrants.

This is relevant when considering the district-level data, especially for a state like Maharashtra. The greatest addition of workers in Maharashtra has been in the districts of Thane (1.31 million added), Pune (1.09m), Mumbai Suburban (0.58m), Nashik (0.57m) and Aurangabad (0.39m). These five districts account for almost half the number of all workers added in the state. In which districts have there been the greatest addition of the broad 'farmer' (cultivators and agricultural labour taken together) category? Ahmednagar (0.17 million added), Nashik (0.17m), Beed (0.15m), Aurangabad (0.12m) and Jalna (0.1m). On the other hand Ratnagiri has lost 0.17 million farmers, Thane 0.17m, Raigad 0.16m, Sangli 0.16m, Satara 0.15m, Kolhapur 0.14m and Sindhudurg 0.14m - among the 14 districts in which the number of cultivators and agricultural labour has dropped.

Maharashtra has 0.75 million fewer marginal agricultural labourers and 0.54 million fewer marginal cultivators, as per the Census 2011 data. On the other hand, Census 2011 records 1.29 million more main cultivators and 3.42 million more main agricultural labourers in Maharashtra. The inference is that all these districts have sent rural workers into Mumbai, Thane and Pune.

How can we begin to interpret all these suggestions given by reading complementary data? It helps to examine the changes in all main workers and all marginal workers too, in relation to the changes in the cultivators and agricultural labourers. Taking Kerala, in which marginal agricultural labour has dropped by 32.6% and main agricultural labour has dropped by 10%, the number of all marginal workers has risen by 11.8% and of all main workers by 13.2%. The shift away from cultivation in Kerala is, when illustrated with these comparisons, well indicated. Bihar presents a different case, with marginal agricultural labourers having risen by 100.3% and marginal cultivators having risen 25.2%, the rise in Bihar's marginal worker category having been 93%.

However, main agricultural labourers in Bihar have risen 5.7% (the 19th out of 20 major states) which is above the rise (of 1.4%) for all main workers. The number of main cultivators in Bihar however has dropped by 20%. In numbers, there are 4.41 million more marginal agricultural labourers, 0.51 million more main agricultural labourers and 0.35 million more marginal cultivators in Bihar. Balanced against these census gains is the loss in Bihar of 1.35 million main cultivators.

These losses and Census gains have much to do with the great urbanisation taking place in the major states. There is a continuing trend of an increase in holdings smaller in size (which must, from an agricultural productivity point of view, not automatically be considered a liability), which is a factor in the redistribution of cultivating communities of the food-producing districts. The consequences to the capacities of

these districts for sustaining a minimum level of food production for their own consumption are yet to be recognised and understood.