Growth of Indian Agriculture:
A District Level Study

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Growth of Indian Agriculture: A District Level Study

Introduction

Information and knowledge on the level of agricultural development below the state level is prerequisite to design policy measures for development of backward regions. The available study on agricultural development at the district level analysis by Bhalla and Singh (2001) covers the period from 1962/5 to 1990/3 only. Almost a decade has passed since than. A number of significant developments have occurred since then. Numerous policies and programs have been initiated in Indian economy under the ongoing processes of liberalization and globalization (under the GATT/WTO agreement). The main aim of the proposed study is to assemble district level evidence for a broader assessment of development and growth in Indian agriculture for the latest period 2001/2-2003/4, the period for which the latest district level data is available. More specifically, the main objectives of the study are:

(i) To examine the level and growth of aggregate crop output and yield at the district level for all the districts in India during 1990-93 to 1999-2002.

(ii) To calculate the changes in per worker output during 1990-93 to 1999-2002.

(iii) To identify the policy initiatives for development of the districts lagging behind in agricultural development.

However, before embarking on to examine the performance of agriculture growth across districts in India it would be worthwhile to have a macro overall view of the Indian agriculture. A broad overview of emerging trends and tendencies in wake of the recent developments following the processes of liberalization and globalization of Indian economy since early 1990s, expected to equip us in better understanding of the emerging district level spatial pattern and dynamics in the Indian agriculture.

2. Agricultural Performance: An overview

After recording unprecedented high growth of 4.7 per cent a year during the period of Eighth Five Year Plan (1992-1997), growth of the agriculture and allied sectors decelerated to 2.1 per cent during the Ninth Plan (1997-2002) (GOI, 2005). It further dipped to 1.0 per cent during the first three years (2002-05) of the Tenth Plan against the targeted growth of 4 per cent per annum. Moreover, deceleration cut across almost all the sub-sectors and every crop sector (GOI, 2005). Still worse, the farm income declined more than the output and marked by increased yearly variations. By now it is well accepted that the serious setback to

agriculture during the Ninth Plan and the Tenth Plan is not entirely related with short term fluctuations induced by the erratic monsoons but also has its origin in deeper problems related with agricultural strategy of the post reform period (GOI, 2005).

The post reform performance of agriculture is contrary to earlier expectations. In fact a great hope was raised when economic reforms were initiated in India in the early 1990s. Most of the reforms, at least in the earlier phase, were mainly focused on industry, foreign trade and investment, tax and financial sectors. But these were expected to create favourable policy framework for agricultural development (Bhalla, 1995, and Singh, 1995). The rationale for such macro economic reforms benefiting agriculture can be traced in a number of studies during eighties and nineties showing anti agriculture bias in the development strategy followed in most of the developing countries. It was argued that the overvalued exchange rates, excessive protection to industries, regulation of agricultural prices and keeping terms of trade unfavourable to agriculture (to extract surplus for promoting industrialisation), high import taxes and export duties on agricultural commodities were part of instruments of agricultural policies in the developing countries(see, Kruger, Schuff and Veldas, 1991). Therefore, it was expected that economic polices in the form of devaluation of rupees, delicensing and dis-protection of industries, liberalisation of financial markets and liberalisation of foreign trade alongwith with favourable agricultural prices would remove the distortions, create a more profitable agriculture that would facilitate its modernisation and expansion of agriculture sector (Singh 1995). Furthermore agriculture was also expected to benefit from the delicensing and decontrol on food- and agro-processing industries. Such measures, it was hoped, would facilitate the entry of experienced domestic and foreign firms, which alongwith upgradation of infrastructure will lead to their rapid development and harnessing of the enormous potentials in this sector (GOI, 2004). Some others, however, expressed scepticism of such gains to Indian agriculture from the reforms that have not actually targeted the agricultural sector (Balakrishnan 2000).

Furthermore, a hope was also raised from the agreement on agriculture under world trade organisation (WTO). It was expected that though most of the Indian agricultural products enjoy comparative and competitive advantage, signing of WTO would further improve competitive edge on India in international market (GOI, 1994). Institutions like WTO were considered essential for providing a level playing field to developing countries in international market (Rao, 2001). Reduction of production and export subsidies and rolling

back of non-tariff barriers by the developed countries in compliance to the WTO requirements would provide welcome stimulus to agricultural exports from India, specifically exports of high value labour intensive allied agricultural products (GOI, 1994, Bhalla 1995). Integration of domestic markets with the international markets was expected to improve the domestic terms of trade in favour of agriculture, reduce the distortions of domestic prices and inefficiency in allocation of resources. Consequently, it would boost production and productivity of Indian agriculture (Rao 1994, and Singh 1995). On the contrary, some scholars feared that liberalisation of trade could destabilise the domestic prices. Serious doubts were also raised regarding the capabilities of the resource poor, subsistence and unorganised farmers to withstand the competitive environment of the modern markets dominated by the powerful organised groups (Rao 1994).

Recent serious slow down in Indian agriculture is contrary to hopes and expectations from the liberalisation and globalisation of the Indian economy. Mid-term appraisal of the Tenth Five Year Plan cites number of reasons in this context. These includes declining public investment in agriculture, unabated degradation of natural resources, weakened support systems resulting from feeble financial positions of state governments, unresponsive research system and near breakdown of the agricultural extension services. Furthermore, deceleration in Indian agriculture coincided with the downturn in the world prices of agricultural commodities adversely affecting the domestic prices due to greater openness (GOI, 2005).

The slow down in agricultural growth not only retards the overall growth in the economy but is likely to be seriously affecting the well-being of the rural population as almost 60 per cent of them still depend on agriculture for their livelihood. Moreover agriculture slow down may seriously impede the employment generation and poverty alleviation in India as there is almost one to one correspondence in agricultural growth and reduction of rural poverty (Mellor, 2000, and Singh, 2003). There is almost unanimity among scholars and policy makers and the development experience of India and other fast growing economies in the world suggests that for a country to achieve a sustained economic growth around 7 per cent or higher, its agriculture has to grow around 4 per cent (Acharya 2003, Singh 2005, and Ahluwalia 2005). Revival of agricultural sector is not only the question of growth and prosperity of the nation alone, but is also intimately related with livelihood and well being of the majority of the Indian population.

. The overall agricultural scenario notwithstanding, the disparities in agriculture continue to persist in Indian agriculture. It is alleged that in free the play of market forces, skill and infrastructure become guiding principal for private investment and both are generally concentrated in developed regions. In a federal state like India, persistence disparities beyound a threshold, pose potential danger to the peace and harmony in the country as the lagging regions may consider their deprivation as manifestation of regional injustice. Origin of many violent anti-constitutional movements and demands for smaller states can be traced to regional disparities. Most of the studies examining development and disparities are based on the comparison of the level and growth of per capita income across the Indian states. However, state level development masks substantial intra-state disparities and provides misleading picture on homogeneity for all its regions. Such information may slacken effectiveness of any regional policy for development of the lagging regions. Similar disparities were also observed within each state. For example, workers productivity in Ganganagar district in Rajasthan is comparable with any prosperous district of the most developed state of Punjab whereas production per workers in Barmer district of the same state (Rajasthan) is no better than any backward district in the least developed state of Bihar. This implies that any state level analysis of agricultural development, tends to masks such wide inter-district differences in the level of development. Therefore only district level analysis can provide deeper insight into the dynamics of regional disparities both at the broader country level as well as for individual states.

Indian development strategy recognised the need of regional policy right from its inception in early fifties. To enable the lagging regions to share in the benefits of faster national growth, various special assistance programmes like 'Desert Development Programme', 'Drought Prone Area Programme', special plans for *Hill and Western Ghat* regions, KBK districts of Orissa, Backward District initiative and *Rashtrya Sam Vikas Yojana* (RSVY) and recently announced 'Mahtama Gandhi Backward Region Development Fund' to redress regional imbalance were initiated from time to time. Besides the direct interventionist strategy, there is a built in mechanism in favour of poor states in the Gadgil-Mukherjee formula for devolution of resources from the central pool to states. Despite all these affirmative actions, gap continues to persist between developed and backward regions in India. Recognising the urgent need to develop the backward regions, Central Government announced a package of Rupees 25000 crores in the Union Budget 2004-04 for development of the poor states. Besides the special package, the current budget also announced the

concentration of poverty alleviating employment generation programmes in the 150 most backward districts in the country. First and foremost requirement in formulation and implementation of such affirmative plans and programmes is the availability of most update and reliable information on the level of development at the lowest possible level of dis-aggregation in each state/union territory. The district can be the most appropriate unit in this context as most of the information on India agricultural below state level is compiled and made available only at the district level. District level indices of development can also be fruitfully utilised in decentralised planning as most of the development programmes and policies below state level are mainly implemented and managed at the district level.

The study is structured in the following order. Succeeding section presents an overview of the actual realisation and earlier expectation of Indian agriculture under the reforms. Section 3 describes the data and methodology. Section 4 analyses the spatial pattern of agricultural development in 581 districts in India during 2001-04 on the basis of land and labour productivity scales. Chronically underdeveloped districts are identified. Section 5 looks at the spatial pattern of district level agriculture growth during the pre- and post- reform periods. Role of area and yield as sources of agricultural growth is examined in section 6. Section 7 deals with examination of the observed district level pattern of development and the use of modern inputs Indian agriculture. The results are summarised in the concluding section of the study.

3. Data and Methodology:

(i) Data Sources:

Directorate of Economics and Statistics, Ministry of Agriculture (MOA), New Delhi, compile information on area, production and productivity of various crops both at the state and district levels. Though the state wise information is made available without much delay, the district wise information is published with considerable time lag. Moreover, information is rarely published for all the districts, for all years and for all crops. However besides the MOA, a number of other commodity boards like 'Horticulture Board', 'Tea and Coffee Board', and 'Condiments and Spices Board', and some crop directorates like Directorates of wheat, rice, sugarcane, and millets development also compile and publish district wise information on area, production and productivity of various crops. Similarly in almost all states, Directorates of land records, Departments of Agriculture, and Economic and Statistical Organisations of almost all major states also compile and publish district- and crop-wise

information for their respective districts. For the North-East states, the North East Region Development Council (NEDC) compile district level information on various socio-economic aspects of states in this region. Information available on data bank web site of the NEDC was also used to estimate district level agricultural output in these states. In the present study, we supplemented the MOA data with information generated by these sources for maximum coverage of all districts and crops including major condiments and spices, and fruits and vegetables crops. Utilising information from these sources, finally we were able to compile year wise information for 45 crops for all the districts included in our study. The present study, therefore, extended the crop coverage from 35 in the early study (Bhalla and Singh (2001)) to 45. Consequently the present study is much wider and comprehensive in crop coverage than earlier ones. A list of crops covered in the study is appended in Appendix -1.

To estimate the level and growth of labour productivity across districts, we ulitilsed the district level information on employment of workers in the agriculture sector collected during the population census of India, 1991 and 2001. Unlike the earlier district level studies, total number of the main workers for present study includes both male and female workers, whereas the earlier studies were based on the information for male workers only. The study therefore is an improvement over the earlier ones as the male-female labour ratios not only vary across different districts/states in India but it also captures the dynamics, if any, in the changing facets of male-female workforce in Indian agriculture. The study however does not include the marginal workers due to many aggregation problems of marginal and main workers together, which are beyond its scope.

Information on various correlates of district level growth and productivity is complied from various web sites and publications brought out by the Directorate of Economics and Statistics-Ministry of Agriculture[land use pattern and irrigation], the Department of Animal Husbandry, Dairying and Fisheries (DAHD&F) [agricultural implements and machinery], Ministry of Home Affairs[drought and flood affected districts], Reserve Bank of India[agriculture credit supply by the scheduled commercial banks], Fertiliser Association of India[fertiliser consumption], International Institute for Population Sciences[IIPS, 2006a & b for composite indices of district wise health status-based of 10 RCH and 13 socio-economic indicators], Director General, Census of India[agricultural workers and literacy], and Statistical Abstracts of various States and Union Territories.

(ii) Prices and value output:

In the present study, to convert the physical production into monetary term, first the implicit year wise prices for each crop were derived using the physical output information compiled by the Ministry of Agriculture and crop wise value estimates compiled by the Central Statistical Organisation and published in National Account Statistics. To overcome the yearly fluctuations, a weighted average of three year prices for 2001-2, 2002-3 and 2003-4 was used to estimate the value output for each crop for the triennium 2001-04. The three-year average price has been employed mainly to overcome any major fluctuations in prices, which are much common in the case of agricultural commodities. The crop wise value output in each 45 crops in a district has been aggregated to obtain the value of output for the 45 crop sector in each district. However, the 45 crop sector does not cover all the crops in a sector. For estimating the value output for whole of the area under cultivation in a district, we assumed that per hectare output of the left over area was same as the per hectare average value output of the 45 crops sector covered in the study. Consequently, to estimate the value out for all crops in a district, first of all the area under the left over crops was estimated as the differences between the gross cropped area in the district in a particular year and area under the 45 crop sector. Then the value output for whole of the area in a particular district was estimated as under:

Total value output = Value output of 45 crops + [(Gross cropped area-Area under 45 crops)* per hectare value output of area covered)]

The total value output so derived has been used for subsequent analysis of growth and productivity across at the district level. Crop wise prices so estimated during the triennium 2001-04 are provided in Appendix-1.

(iii) Districts Covered:

The study covers 581 districts falling in 33 states and union territories of India. The states included are; Andhra Pradesh, Arunachal Pradesh, Assam, Bihar, Chattisgarh, Goa, Gujarat, Haryana, Himachal Pradesh, Jammu and Kashmir, Jharkhand, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Manipur, Maghalalya, Mizoram, Nagaland, Orissa, Punjab, Rajasthan, Sikkim, Tamil Nadu, Tripura, Uttar Pradesh, Uttaranchal and West Bengal. Besides these, we also included the districts falling in the Union Territory (UT) of Pondicherry. However, due to their small size, the union territories of Andeman and Nicobar

Islands, Dadar and Nagar Haveli, Daman and Diu, and Lakshadweep were treated as single districts. Only Union Territory of Chandigarh and Delhi state are left out of the study because they are virtually urban centres. Besides these two UTs, the study also excludes major metropolitan and urban/suburban districts for obvious reasons. These are: Hyderabad district in Andhra Pradesh, Banglore in Karnataka, Mumbai, and suburban-Mumbai districts in Maharashtra, Chennai in Tamil Nadu, and Calcutta metropolitan district in West Bengal state. Therefore in unlike the earlier district level study (Bhalla and Singh, 2001), which covered districts falling in 17 major states in India, the present study expanded universal coverage of all districts in the country so for as its agriculture (crop) economy is concerned.

To trace out any regional pattern in agricultural performance, the districts were further grouped into the following five broad regions:

Region	**Districts falling in the states**
Northern Region:	Haryana, Himachal Pradesh, Jammu and Kashmir, Punjab, Uttar Pradesh, and Uttaranchal.
Eastern Region:	Bihar, Jharkhand, Orissa, and West Bengal.
North-Eastern Region:	Arunachal Pradesh, Assam, Manipur, Maghalalya, Mizoram, Nagaland, Sikkim, and Tripura
Western-Central Region:	Goa, Gujarat, Madhya Pradesh, Chattisgarh, Maharashtra Rajasthan, Dadr and Nagar Haveli, and Daman and Diu.
Southern Region:	Andhra Pradesh, Karnataka, Kerala, Pondicherry, Tamil Nadu, Andeman and Nicobar Islands, and Lakshadweep

Data for the 581 districts included in the study is available only for the end period, that is 2001-04. With exception of districts in Assam, consistent information on crop wise area and production for the districts of other states of the North-Eastern Region is also not available for the 1990-3 triennium. Similar data problem encountered for many new districts created between 1990-93 and 2001-04 period. Generating backward information for these newly created districts is neither feasible nor available from any published source. For the triennium ending 1990-93 comparable district wise information on area and production of crops and other related indicators is available for only 416 district units falling in the 20 major states in the country. Therefore in order to study the growth in agricultural production at the district level, we have merged the information on area and production for 105 newly created districts with their respective original district(s) from which these were separated out.

Methodology adopted in merging the newly created districts and formation of comparable units for trienniums ending 1990-93 and 2001-04, along with the state wise list of the included districts is provided in Appendix 2.

4. Agricultural Development: Spatial Pattern

Generally the level of agricultural development in a particular region is measured in terms of the output per unit of fixed factors of production. Land and workers employed in agricultural production are two such factors. The choice between these two generally depends upon their relative scarcity. In developing countries burdened with excess population pressure, land productivity is preferred as a measure of agricultural development. On the contrary, labour being scare to land, labour productivity is preferable measure for development in developed countries. However for better insights, besides land productivity, labour productivity is also measured in developing countries as it broadly indicates how rewarding the agriculture is in a particular region. This is mainly due to close association of labour productivity as determinant of returns to the farmers, wages of agricultural workers and overall well-being of the peoples employed in the sector. Therefore, role of agricultural development in many important issues like over all well-being, poverty, deprivation and employment, and the requisite policy initiatives in these contexts, can be better examined from employing the labour productivity based information. For example, for concentrated policy initiatives to alleviate rural poverty in India under 'Rural Labour Employment Grantee Programme' initiated during the10th Five Year Plan in India, 150 most backward districts were identified by employing labour productivity of agricultural workers as one of the key indicators. However, land productivity provides more useful insights into the status of agriculture development and also helps to identify potentials and constraints on development and growth of agriculture. Both these indices of productivity are employed to measure the level of agricultural development across districts in the present study.

Land productivity in the present study is measured as value output of the all crops per hectare of the net sown area in the district. Net sown area is preferred over the gross cropped area as the later sometimes could lead to erroneous conclusions in the case if cropping pattern varies across districts. This is mainly because of variations in maturity period across different crops and even of its variation across different varieties of the same crop. Both the cropping patterns and crop varieties are known to vary considerably across districts in India because of varying agro-climatic conditions across regions in India. For example, perennial crops like

tea, rubber and coffee predominates the crop sector in many districts in the Southern and Eastern regions whereas foodgrain crops having 3-6 months as the maturity period predominates in majority of the districts in the Northern region. Similarly, many districts in West Bengal grow three crops of rice a year whereas only two crops predominates many highly irrigated districts in the North-western region. Similarly, even in the same environment, maturity period of rice varieties varies considerably.

Levels of agricultural development in a region can also be measured by employing Total or Multi Factor Productivity (TFP), which is the third measure of productivity. This measure is mainly used to compare the level and changes in production technology employed in a particular region. Though TFP and TFPG provides many useful insights into various dynamics of production, but at the same time it is too complex. Data employed to measure TFP, particularly the capital stock, is generally not available from published sources. Moreover, use of TFP is beyond the scope of the present study.

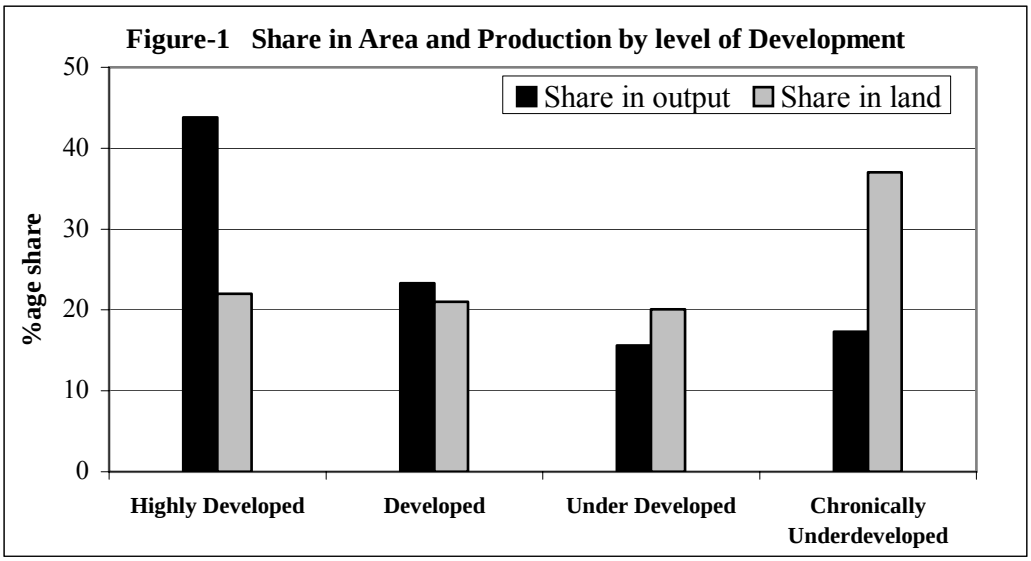
I. Land Productivity:

To study variations in level of development across districts, we first estimated the per hectare value output of net sown area for all the 581 districts during the triennium ending 2001-04. On the basis of their land productivity these districts were than ranked in descending order of their productivity (comprehensive ranking of districts along with other information is provided in Appendix-2 and 3). Rather than adopting any arbitrary cut off levels to differentiate districts by their level of development, we divided the districts so ranked into four quartiles. The top quartile of 145 districts has been categorised as the most developed, followed by second quartile of 145 developed districts. The third quartile has been labelled as the underdeveloped districts whereas the lowest quartile is categorised as the chronically underdeveloped districts.

Information on the average land productivity, share of respective quartile in land, labour and production is provided in Table-1 and Figure-1 indicates wide district level variations in level of agricultural development in India. It may be seen that the average land productivity (Rs. 41576) in the group of most developed districts is more than four fold of the average productivity (Rs. 9767) of the chronically underdeveloped districts. The difference between the top and the bottom quartiles is so wide that with about 40 per cent less area,

Table –1
Share of Districts in Production, land and Labour by Levels of Development, 2001-4

Level of Development (by Land productivity)	Level of Productivity (Rs per Hectare)	Number of Districts	Per Cent share in Total		
			Production (Crops output)	Land (Net Sown Area)	Labour (Agricultural Workers)
Highly Developed	41576	145	43.8	22.0	23.8
Developed	23145	145	23.3	21.0	25.9
Under Developed	16159	145	15.6	20.0	22.5
Chronically Underdeveloped	9767	146	17.3	37.0	27.9
Overall	20845	581	100.0	100.0	100.0



the most developed top quartile of the districts contributed 255 per cent more to agricultural production compared with the chronically underdeveloped quartile of districts. The most developed districts contribute twice to agricultural production than their share in land area. On the contrary chronically underdeveloped group's share in production is half of their share in land area. Furthermore, even in case of the top three quartiles of the districts having almost equal share in land area and agricultural workers, their respective share in agricultural production declines substantially form 43.8 per cent for first to 23.3 for second and to 15.6 per cent for the third quartile of districts.

(i) Variations Across Regions

Spatial distribution of the districts across states and regions by their level of development detailed in Table-2 reveals interesting geographical pattern of agricultural development across regions and states in India. About a half (47.5 per cent) of the most developed districts in India are located in the Northern region alone. Another 27.6 per cent of the most developed are happens to be in the Southern region. Taken together, three fourth (75.2 per cent) of the most developed group of districts are from the northern and Southern regions. Only 5.5 per cent of the highly developed districts happen to be from the western-central region, which area wise is the biggest of all regions (Table-2a). Geographical location of the chronically under-developed districts is a mirror image of the location of the most developed districts in India. 62 per cent of the chronically under-developed districts are located in the Western-Central region whereas the North-Eastern, Northern, Southern and Eastern regions accounts for just 5, 10, 10 and 14 per cents respectively. Further clubbing the districts in the top two and bottom two quartiles reveals another interesting pattern. While, 38 per cent of the developed districts in India (in the top quartiles) are located in the Northern region, whereas Western-Central region accounts for 42 percent of the underdeveloped districts (in the bottom two quartiles) in India. This implies that the Northern and Western-Central regions are diagonally placed opposite on the scale of agriculture development in India.

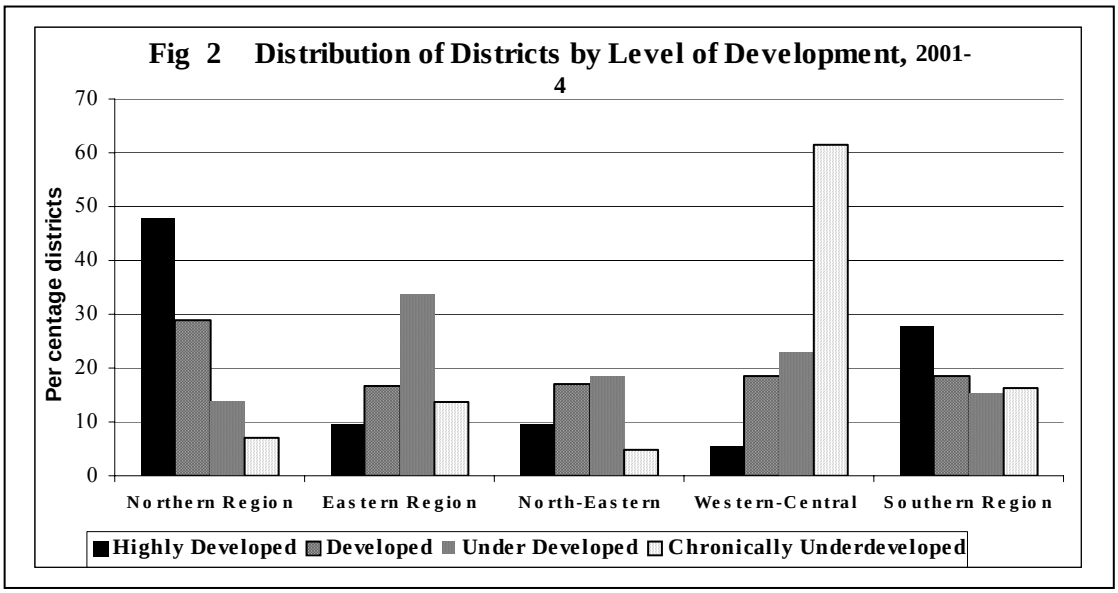


Table-2a. Inter State Distribution of Districts by the Level of Land Productivity, 2001-04

Sr No	Region / State/UTs	Number of Districts					%age of Districts				
		I	II	III	IV	All	I	II	III	IV	All
	North- Western Region										
1	Haryana	18	1	0	0	19	12.4	0.7	0.0	0.0	3.3
2	Himachal Pradesh	1	5	5	1	12	0.7	3.4	3.4	0.7	2.1
3	Jammu & Kashmir	0	2	5	7	14	0.0	1.4	3.4	4.7	2.4
4	Punjab	17	0	0	0	17	11.7	0.0	0.0	0.0	2.9
5	Uttar Pradesh	30	33	4	3	70	20.7	22.8	2.9	2.1	12.0
6	Uttaranchal	3	1	6	3	13	2.1	0.7	4.1	2.1	2.2
	Region	**69**	**42**	**20**	**14**	**145**	**47.6**	**29.0**	**13.8**	**9.6**	**25.0**
	Eastern Region										
7	Bihar	0	12	20	5	37	0.0	8.3	13.8	3.4	6.4
8	Jharkhand	0	2	12	8	22	0.0	1.4	8.3	5.5	3.8
9	Orissa	0	7	16	7	30	0.0	4.8	11.0	4.8	5.2
10	West Bengal	14	3	1	0	18	9.6	2.1	0.7	0.0	3.1
	Region	**14**	**24**	**49**	**20**	**107**	**9.6**	**16.6**	**33.8**	**13.7**	**18.5**
	North-Eastern Region										
11	Arunachal Pradesh	1	3	5	4	13	0.7	2.1	3.4	2.7	2.2
12	Assam	10	8	5	0	23	6.9	5.5	3.4	0.0	4.0
13	Manipur	0	4	4	1	9	0.0	2.7	2.9	0.7	1.5
14	Meghalaya	1	4	2	0	7	0.7	2.7	1.4	0.0	1.2
15	Mizoram	0	0	5	1	6	0.0	0.0	3.4	0.7	1.0
16	Nagaland	0	1	5	1	7	0.0	0.7	3.4	0.7	1.2
17	Sikkim	0	3	1	0	4	0.0	2.1	0.7	0.0	0.7
18	Tripura	2	2	0	0	4	1.4	1.4	0.0	0.0	0.7
	Region	**14**	**25**	**27**	**7**	**73**	**9.7**	**17.2**	**18.6**	**4.8**	**12.5**
	Western-Central Region										
19	Chattisgarh	0	0	1	15	16	0.0	0.0	0.7	10.3	2.8
20	Goa	2	0	0	0	2	1.4	0.0	0.0	0.0	0.3
21	Gujarat	4	11	3	7	25	2.7	7.6	2.1	4.8	4.3
22	Madhya Pradesh	0	6	12	30	48	0.0	4.1	8.3	20.5	8.3
23	Maharashtra	2	3	9	19	33	1.4	2.1	6.2	13.0	5.7
24	Rajasthan	0	6	8	18	32	0.0	4.1	5.5	12.3	5.5
25	Dadra & Nagar Haveli	0	0	0	1	1	0.0	0.0	0.0	0.7	0.2
26	Daman & Diu	0	1	0	0	1	0.0	0.7	0.0	0.0	0.2
	Region	**8**	**27**	**33**	**90**	**158**	**5.5**	**18.6**	**22.8**	**61.6**	**27.3**
	Southern-Region										
27	Andhra Pradesh	6	8	6	2	22	4.1	5.5	4.1	1.4	3.7
28	Karnataka	1	7	6	13	27	0.7	4.8	4.1	8.9	4.5
29	Kerala	14	0	0	0	14	9.7	0.0	0.0	0.0	2.4
30	Pondicherry	3	1	0	0	4	2.1	0.7	0.0	0.0	0.7
31	Tamil Nadu	15	10	4	0	29	10.3	6.9	2.8	0.0	5.0
32	Andeman & Nicobar Island	0	1	0	0	1	0.0	0.7	0.0	0.0	0.2
33	Lakshadweep	1	0	0	0	1	0.7	0.0	0.0	0.0	0.2
	Region	**40**	**27**	**16**	**15**	**98**	**27.6**	**18.6**	**11.0**	**10.3**	**16.7**
	All India	**145**	**145**	**145**	**146**	**581**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

Note:

Level of Development	**Average Productivity**
I – Highly Developed	41576 (Rs per hectare)
II – Developed	23145
III – Underdeveloped	15159
IV – Chronically Underdeveloped	9767

Table-2b Intra-State Distribution (%) of Districts by the Level of Land Productivity, 2001-04

Sr No	Region / State	Distribution(%) of Districts by Level of Development				All
		Highly-Developed	Developed	Under - Developed	Chronically-Underdeveloped	
	North- Western Region					
1	Haryana	94.7	5.3	0.0	0.0	100.0
2	Himachal Pradesh	8.3	41.7	41.7	8.3	100.0
3	Jammu & Kashmir	0.0	14.3	36.7	50.0	100.0
4	Punjab	100.0	0.0	0.0	0.0	100.0
5	Uttar Pradesh	42.9	47.1	5.7	4.3	100.0
6	Uttaranchal	23.1	7.7	46.1	23.1	100.0
	Region	**47.5**	**29.0**	**13.8**	**9.7**	100.0
	Eastern Region					
7	Bihar	0.0	32.4	54.1	13.5	100.0
8	Jharkhand	0.0	9.1	54.5	36.4	100.0
9	Orissa	0.0	23.3	53.4	23.3	100.0
10	West Bengal	77.8	16.7	5.5	0.0	100.0
	Region	**13.1**	**22.4**	**45.8**	**18.7**	100.0
	North-Eastern Region					
11	Arunachal Pradesh	7.7	23.1	38.5	30.7	100.0
12	Assam	43.5	34.8	21.7	0.0	100.0
13	Manipur	0.0	44.4	44.4	11.2	100.0
14	Meghalaya	14.3	57.2	28.5	0.0	100.0
15	Mizoram	0.0	0.0	83.3	16.7	100.0
16	Nagaland	0.0	14.3	71.4	14.3	100.0
17	Sikkim	0.0	75.0	25.0	0.0	100.0
18	Tripura	50.0	50.0	0.0	0.0	100.0
	Region	**19.2**	**34.2**	**37.0**	**9.6**	100.0
	Western-Central Region					
19	Chattisgarh	0.0	0.0	6.3	93.7	100.0
20	Goa	100.0	0.0	0.0	0.0	100.0
21	Gujarat	16.0	44.0	12.0	28.0	100.0
22	Madhya Pradesh	0.0	12.5	25.0	62.5	100.0
23	Maharashtra	6.1	9.1	27.2	57.6	100.0
24	Rajasthan	0.0	18.8	25.0	56.2	100.0
25	Dadra & Nagar Haveli	0.0	0.0	0.0	100.0	100.0
26	Daman & Diu	0.0	100.0	0.0	0.0	100.0
	Region	**5.0**	**17.1**	**20.9**	**57.0**	100.0
	Southern-Region					
27	Andhra Pradesh	27.3	36.4	27.3	9.0	100.0
28	Karnataka	3.7	25.9	22.2	48.2	100.0
29	Kerala	100.0	0.0	0.0	0.0	100.0
30	Pondicherry	75.0	25.0	0.0	0.0	100.0
31	Tamil Nadu	51.7	34.5	13.8	0.0	100.0
32	Andeman & Nicobar Island	0.0	100.0	0.0	0.0	100.0
33	Lakshadweep	100.0	0.0	0.0	0.0	100.0
	Region	**40.8**	**27.6**	**16.3**	**15.3**	100.0
	All India	**25.0**	**25.0**	**25.0**	**25.0**	**100.0**

Like the inter-regional distribution of districts by the level of development, similar pattern is evident from the intra-regional distribution of districts across levels of

development. 48 per cent of the districts in the Northern region are agriculturally highly developed whereas only 5 per cent of the districts in the Western-Central qualify in this top highly developed category (Table-2 and Figure 2). Contrary to it, only 10 per cent of the Northern region districts fall in the chronically underdeveloped category whereas the proportion of these districts in the Western-central region is as high as 57 per cent. Only about one-sixth of the districts in the Eastern and Southern regions happen to be in the chronically underdeveloped category of districts. The most interesting and lesser known is the case of district level development in the North-eastern region. Comparatively, this region is at middle level of development with half of its districts fall in the developed and other half in the underdeveloped bottom two quartiles. Interestingly, only 9.6 per cent of its districts in this region fall in the bottom quartile of the chronically underdeveloped category. On the whole and comparatively, Western-central region seems to be synonymous with chronically underdevelopment whereas majority of the districts in the Northern and the Southern regions have reached a fairly high level of development.

Concentration of the most developed and chronically underdeveloped districts in specific regions, however, is a known phenomenon in Indian agriculture. This is evident from the information provided in Table-3 on state and region wise distribution of districts across levels of development during 1990-93. It is evident that even during 1990-93, 59 per cent the chronically under developed districts in India were located in the Western-central regions. Comparison of the distributions of districts across various levels of development during 1990-93 and 2001-04 is almost same except for the districts in the southern region. Comparatively many districts in this region slipped on all-India ranking. Probably it might be due to adverse weather conditions during the later period prevailing in this region. Dynamics of inter-regional pattern would be clearer by examining the distribution of districts across state.

The inter-regional variations notwithstanding, information detailed in Table-2 also indicate considerable intra-regional variations in levels of agricultural development in India. For example, all districts of Punjab fall in the top quartile of highly developed group of districts whereas 50 per cent of the districts in Jammu and Kashmir in the same region fall in the chronically under developed category. Similarly, all districts of Kerala are in most developed top quartile whereas almost half (46 per cent) of the districts in Karnataka, another state in the same Southern region, are in the least developed quartile of chronically under

developed category of districts. Same is more or less true about the Eastern region. Western-central region seems to be the exception in this context as most of the districts in almost all states in this region are in the bottom two categories of the under developed districts. Only very small, consisting on only two districts each, States/Union Territories of Goa, Dadra and Nagar Haveli, and Daman and Diu are exception to this pattern.

(ii) Variations Across States

Information presented in Table-2 brings out that the inter-regional variations in level of development are more severe across states in India. On the one extreme, we have the state of Punjab having all its districts in the top most developed quartile, whereas on the other is Chattisgarh with none of its districts figuring even in the top two quartiles of developed districts in India. Similarly, besides some single district Union Territories, there are 10 other states- namely, Bihar, Jammu & Kashmir, Jharkhand, Orissa, Madhya Pradesh, Manipur, Mizoram, Nagaland, Rajasthan and Sikkim- having none of their districts in the top most developed quartile of districts. On the contrary besides Punjab and some single district Union Territories, there we have 9 other states- namely Assam, Goa, Haryana, Kerala, Meghalaya, Pondicherry, Sikkim, Tripura, Tamil Nadu, and West Bengal, with none of their districts in the bottom quartile of the chronically underdeveloped category of districts.

Comparatively, besides Punjab, Goa, Haryana, and Kerala are other three states having all their districts attained a fairly reasonable level of development. Almost all their districts figure among top quartile of the most developed districts in India. These four states are followed by other six states, namely Assam, Pondicherry, Tamil Nadu, Tripura, Uttar Pradesh, and West Bengal having more than 80 per cent of their districts in the top two quartiles of developed districts. These states are located in all regions with only exception of the Western-central region. With only exception of very small state Goa, none of its major states having such a high proportion of its districts in top two most developed quartiles. In fact with exception of Gujarat having 60 per cent of its districts in the top two quartiles, all other state in this region have more than 80 per cent of their districts in the bottom two most underdeveloped category of districts in India. Besides these Western-central states, Jharkhand and Orissa are other two states in the Eastern region that also have about 80 per cent of their districts in the bottom two quartiles of the underdeveloped categories of districts in the country.

Whether or not the observed phenomenon of concentration of high developed and underdeveloped districts in some regions or state is due to the adverse weather conditions in some parts of the country? This is an obvious question as the drought conditions in many parts of the country during 2002 adversely affected agricultural production in many semi-arid regions having low proportion of their area under assured irrigation. We explored into the issue by grouping the districts in four quartiles based on the ranking the districts arranged in descending order of their productivity during triennium ending 1990-93. Available comparable district level information in this context is presented in Table-3. Comparison of the proportion of districts in different quartiles in various states during 1990-93 and 2001-04 reveals a mixed picture. Relatively, position of many districts in the states of Jammu and Kashmir, Orissa, Chattisgarh and Karnataka slipped down the productivity scale during 2001-04 compared with their earlier position during early nineties. The phenomenon may be due to adverse whether conditions hitting hard many regions in these states or might have resulted from comparatively slow technological changes in these states. Contrary to these states, relative position of districts in the states of Haryana, Jharkhand, West Bengal, Gujarat and Maharashtra improved on the productivity scale. However no significant change in the relative position of districts in the states of Himachal Pradesh, Punjab, Uttar Pradesh, Uttaranchal, Assam, Bihar, Madhya Pradesh, Rajasthan, Andhra Pradesh, Kerala and Tamil Nadu has occurred over the 1993-3 to 2001-4 period. It may be noted that many of these states, particularly Bihar, Rajasthan, and Tamil Nadu, have suffered from the worst drought conditions during 2002. This implies that the role of many factors, other than rainfall, were at work as determinants of dynamics of agricultural development at the district level during the post reform India.

Intra-regional analysis of the movement of districts across states reveals that most of the districts in plain region states, Punjab, Haryana, and Uttar Pradesh, in the Northern region, have attained quite a reasonable level of development, but most of the districts in the remaining three hill region states: Himachal Pradesh, Jammu and Kashmir, and Uttaranchal, are still ranking quite low on the productivity scale. In fact the structure of agriculture in these hill region states differs considerably from other states in the same region. Recent state level analysis of agricultural development in India, however brings out that the level of land productivity in these states is almost comparable with the other states (Singh, 2006).

Table- 3 (a) Percent Distribution of State- and Region- wise Districts by Level of Land Productivity, 2001-4

Level of Development	Northern Region							Eastern Region						Western-Central Region						Southern Region					All
	HR	HP	JK	PB	UP	Ur	All	AS	BH	JH	OR	WB	All	GJ	MP	CH	MH	RJ	All	AP	KT	KL	TN	All	
Highly Developed	84	8	0	100	41	23	45	29	0	0	0	79	18	16	0	0	6	0	4	27	4	93	52	38	25
Developed	16	42	14	0	49	8	30	39	32	9	23	16	24	44	13	0	9	19	18	37	26	7	34	31	25
Underdeveloped	0	42	36	0	7	46	18	22	57	55	57	5	43	12	31	6	30	25	22	27	22	0	14	15	25
Chronically Underdeveloped	0	8	50	0	3	23	7	0	11	36	20	0	15	28	56	94	55	56	56	9	48	0	0	16	25
All	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

Table 3(b) Percent Distribution of State- and Region- wise Districts by Level of Land Productivity, 1990-3

Lelvels of Development	Northern Region							Eastern Region						Western-Central Region						Southern Region					All
	HR	HP	JK	PB	UP	Ur	All	AS	BH	JH	OR	WB	All	GJ	MP	CH	MH	RJ	All	AP	KT	KL	TN	All	
Highly Developed	69	8	36	100	34	30	43	22	3	0	23	47	18	16	0	0	3	0	3	27	16	100	62	48	25
Developed	31	34	43	0	49	10	37	52	20	0	18	47	29	16	8	0	10	10	10	41	32	0	33	29	25
Underdeveloped	0	50	21	0	9	50	15	26	73	0	47	6	37	32	29	43	10	40	28	18	26	0	5	13	25
Chronically Underdeveloped	0	8	0	0	8	10	5	0	4	100	12	0	16	37	63	57	76	50	59	14	26	0	0	10	25
All	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

Therefore low level of agricultural development in many districts in these states may be due to partial coverage of some important crops in some districts. For example apple is known to predominate plantation in Shimla and Kinnaur districts of Himachal Pradesh and Srinagar district of Jammu and Kashmir. Consequently, findings on district level development in these three states need to be interpreted accordingly.

II. Labour Productivity:

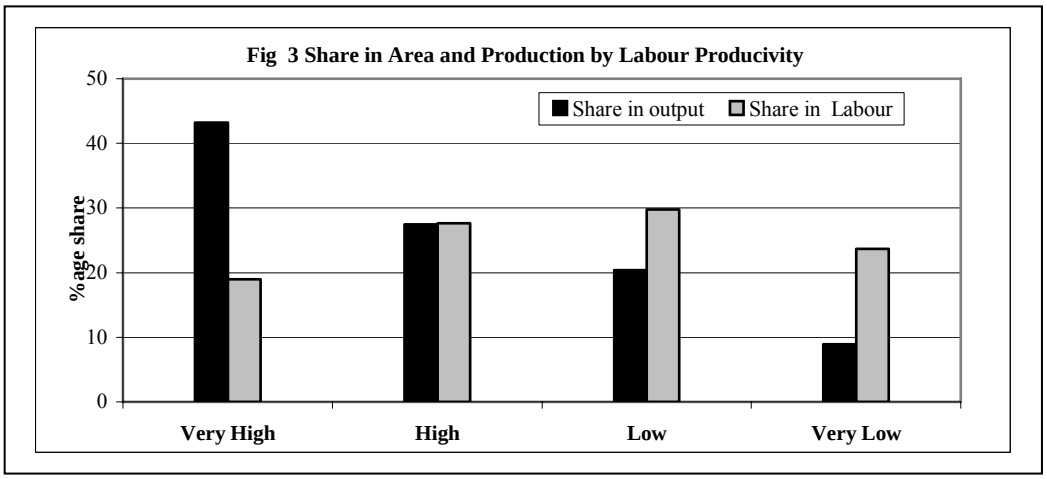
Like land productivity, we have also ranked the districts in descending order of their labour productivity during the triennium ending 2001-04 (Appendix-5). The districts so ranked have been divided into four quartiles. Information on average labour productivity and share of each quartile in overall land, labour and production is presented in Table-4 and Figure-3. Like the land productivity, considerable variations between and across districts in different regions or states is evident in the case of variations in labour productivity. In the top most quartile of the most productive districts with 19.0 per cent of total workers contributes more than twice (43.2 per cent) of their share to agricultural production. On the contrary, the bottom quartile of the districts with 23.7 per cent of the total workers contributes just 8.9 per cent to total agricultural production. There are wide inter-quartile differences in the level of labour productivity. The average worker productivity (Rs. 27789) in the top most productive quartile is more than six times of the workers productivity (Rs. 4608) in the bottom quartile. This indicates prevalence of vast inter-district differences in the levels of labour productivity in Indian agriculture. As already mentioned, labour productivity is an indicator of the returns of workers employed in the agriculture sector. Very low level of labour productivity in a substantial number of districts in India indicates the poor plight of the population depending on agriculture in these districts. Information also suggests the existence of vast un-exploited potentials for modernisation of agriculture in many of these districts and also for improvement in plight of rural masses trapped in low level of development and poverty. Poverty alleviating impact of higher labour productivity is well known. Micro level empirical evidence based on about 60,000 rural households in India during 1990-2000 suggests that the probability of a poor household escaping poverty improves by one per cent with one per cent per annum increase in labour productivity of workers employed in agriculture sector where household happens to be located (Singh, 2005). That is, there is one to one relationship between labour productivity and incidence of rural poverty in rural India. The study also brings out a high concentration of mass poverty in many rural areas with very low level of

Table –4

Share of Districts in Production, land and Labour by Level of Development, 2001-4

(Based on Labour Productivity)

Level of Development (by **Labour Productivity**)	Level of Productivity (Rs per Agr worker)	Number of Districts	Per Cent share in Total		
			Production (Crops output)	Land (Net Sown Area)	Labour (Agricultural Workers)
Highly Developed	27789	145	43.2	26.3	19.0
Developed	12192	145	27.5	28.9	27.5
Under Developed	8391	145	20.4	28.3	29.8
Chronically Underdeveloped	4608	146	8.9	16.5	23.7
Overall	12232	581	100.0	100.0	100.0

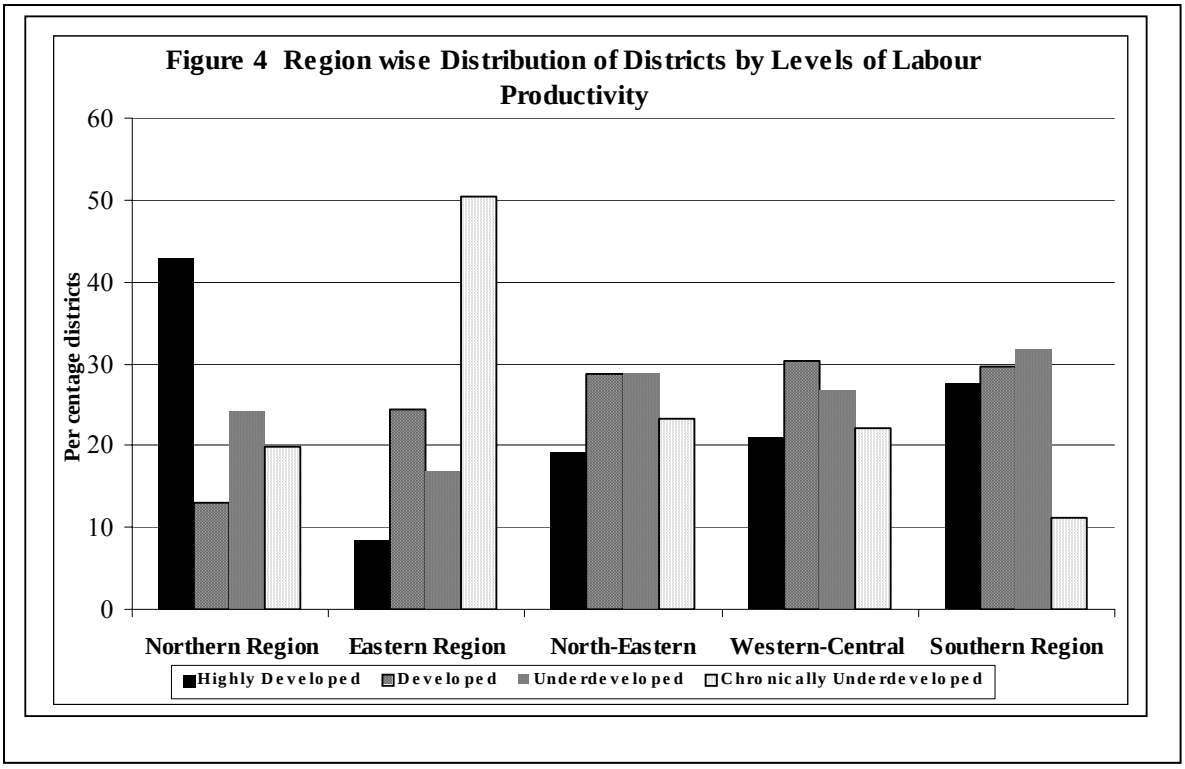


agricultural development. On the contrary rural poverty is virtually being completely wiped out in rural areas having very high level of agricultural development (Singh, 2005). The most cost effective and sustained solution to poverty, therefore, lies in improvement of productivity of agricultural workers in the identified chronically underdeveloped quartile districts in India. This however requires concentrated efforts to break the vicious circle of underdevelopment and poverty in many of these districts. The pre-requisite for designing and implementation of effective polices for development of agriculture and hence for upliftment of people living therein, requires the identification of area specific potentials and constraints in development of agriculture in these backward districts.

(i)Variations Across Regions

Distribution of districts across four broad regions and states by the levels of labour productivities presented in Tables-5a & b and Figure-4 shows slightly different geographical pattern than observed earlier in the case of distribution of districts on basis of their land productivity. Since labour productivity is measured as output per worker. The deviation in two pattern is but natural in case employment intensity per unit of land varies across regions

as a matter of pure arithmetic (Labour Productivity ≈ Land Productivity x Number of Workers per Hectare). This is so as the ratio of share of labour to that of land doubles from 0.7 to 1.4 as we move from the top quartile of most productive districts to the chronically underdeveloped bottom quartile of districts (Table 4). That is, a higher labour intensity of agricultural workers in the chronically under developed districts and vice versa. The most significant change in ranking of districts has occurred in the case of the most and the least densely populated Eastern and Western-central regions respectively. Compared with 62 per cent of the districts in the Western-central region falling in the chronically underdeveloped quartile on the basis of land productivity, only 24 per cent districts in this region fall in this category when districts are ranked on the basis of labour productivity. Similarly while only 14 per cent of the least developed category of districts located in the Eastern region on basis of land productivity whereas 37 per cent on the least developed districts happened to be located in this region while distributing them on the basis of labour productivity. Actually location of as many as 37 per cent of the least productive districts in the Eastern region alone, squares well with the well-known phenomenon of excessive population pressure, low rural wages, and widespread rural poverty and deprivation among the rural masses in the states falling in this region.



Besides the changes in the inter-regional distributions, the intra-regional distribution of districts across various level of development also underwent a significant change when compared on the basis of labour (rather than land) productivity. For example, proportion of districts in the least developed category doubled from 10 to 20 per cent in the Northern region when compared on the basis of labour productivity than on land productivity. The phenomenon is true for Eastern and Southern regions as well. However, the pattern is just opposite for the distribution of districts in the Western-central region. Compared with just 5 per cent districts figuring in the category of most productive on account of land productivity, now as many as 21 per cent of the districts in this region figures in the top quartile when distributed as per labour productivity. The proportion of districts in the least productive quartile declined substantially from 57 per cent based on land productivity to a 22 per cent on basis on labour productivity in the Western-central region. However, 61 per cent of the chronically under developed districts on basis of workers productivity are located either in the Eastern or Western-central region.

(ii) Variations Across States:

Like the labour productivity, pattern of district level development based on labour productivity varies considerably across states as well. On one hand we have states like Goa, Haryana, Kerala, and Punjab having all their districts in the most productive quartile of the districts. On the other side is Jharkhand having all its districts in the most underdeveloped quartile of districts. Besides Jharkhand, Jammu and Kashmir, Bihar and Himachal Pradesh are other states having as many as 64, 87 and 92 per cent of their districts respectively in the bottom quartile of the least productive districts. The most interesting is the case of North-eastern region states. With exception of Assam and Nagaland, more than three-fourth of the districts in remaining states falls in the bottom two lowest labour productivity quartiles of the districts. Like North-eastern region, Chattisgarh is also a special case having all its districts in figuring in bottom two quartiles of labour productivity.

Among the Union Territories, while Andeman and Nicobar Islands, Lakshadweep, Daman and Diu ranks quite high on the labour productivity whereas Dadra and Nagar Haveli ranks among the chronically low labour productivity quartile of the districts. Leaving aside the case of hill states of Himachal Pradesh, Jammu and Kashmir and Uttaranchal due to reason already explained, almost all districts in the states of Bihar and Jharkhand need special policy package to enhance the productivity of agricultural workers.

Table-5 a. Inter State Distribution of districts by the Level of Labour Productivity, 2001-04.

Sr No	Region / State/UTs	Number of Districts					%age of Districts				
		I	II	III	IV	All	I	II	III	IV	All
	North- Western Region										
1	Haryana	19	0	0	0	19	13.1	0.0	0.0	0.0	3.3
2	Himachal Pradesh	0	0	1	11	12	0.0	0.0	0.7	7.5	2.1
3	Jammu & Kashmir	0	2	3	9	14	0.0	1.4	2.1	6.2	2.4
4	Punjab	17	0	0	0	17	11.7	0.0	0.0	0.0	2.9
5	Uttar Pradesh	24	15	31	0	70	16.6	10.3	21.3	0.0	12.0
6	Uttaranchal	2	2	0	9	13	1.4	1.4	0.0	6.2	2.2
	Region	**62**	**19**	**35**	**29**	**145**	**42.8**	**13.1**	**24.1**	**19.9**	**25.0**
	Eastern Region										
7	Bihar	0	1	4	32	37	0.0	0.7	2.8	21.9	6.4
8	Jharkhand	0	0	0	22	22	0.0	0.0	0.0	15.1	3.8
9	Orissa	0	17	13	0	30	0.0	11.8	8.9	0.0	5.2
10	West Bengal	9	8	1	0	18	6.2	5.4	0.7	0.0	3.1
	Region	**9**	**26**	**18**	**54**	**107**	**6.2**	**17.9**	**12.4**	**37.0**	**18.5**
	North-Eastern Region										
11	Arunachal Pradesh	2	2	5	4	13	1.4	1.4	3.3	2.6	2.2
12	Assam	9	10	2	2	23	6.2	6.8	1.4	1.4	4.0
13	Manipur	0	2	3	4	9	0.0	1.4	2.1	2.7	1.5
14	Meghalaya	0	2	3	2	7	0.0	1.4	2.1	1.4	1.2
15	Mizoram	0	1	2	3	6	0.0	0.7	1.4	2.1	1.0
16	Nagaland	2	1	2	2	7	1.4	0.7	1.4	1.4	1.2
17	Sikkim	0	1	3	0	4	0.0	0.7	2.1	0.0	0.7
18	Tripura	1	2	1	0	4	0.7	1.4	0.7	0.0	0.7
	Region	**14**	**21**	**21**	**17**	**73**	**9.7**	**14.5**	**14.5**	**11.6**	**12.6**
	Western-Central Region										
19	Chattisgarh	0	0	9	7	16	0.0	0.0	6.2	4.7	2.8
20	Goa	2	0	0	0	2	1.4	0.0	0.0	0.0	0.3
21	Gujarat	13	7	2	3	25	9.0	4.8	1.4	2.1	4.3
22	Madhya Pradesh	9	21	7	11	48	6.2	14.5	4.8	7.5	8.3
23	Maharashtra	4	11	13	5	33	2.7	7.6	9.0	3.5	5.7
24	Rajasthan	5	8	11	8	32	3.4	5.5	7.6	5.5	5.5
25	Dadra & Nagar Haveli	0	0	0	1	1	0.0	0.0	0.0	0.7	0.2
26	Daman & Diu	0	1	0	0	1	0.0	0.7	0.0	0.0	0.2
	Region	**33**	**48**	**42**	**35**	**158**	**22.7**	**33.1**	**29.0**	**24.0**	**26.2**
	Southern-Region										
27	Andhra Pradesh	2	10	9	1	22	1.4	6.9	6.2	0.7	3.7
28	Karnataka	3	9	9	6	27	2.0	6.2	6.2	4.1	4.5
29	Kerala	14	0	0	0	14	9.7	0.0	0.0	0.0	2.4
30	Pondicherry	1	2	1	0	4	0.7	1.4	0.7	0.0	0.7
31	Tamil Nadu	5	10	10	4	29	3.4	6.9	6.9	2.7	5.0
32	Andeman & Nicobar Island	1	0	0	0	1	0.7	0.0	0.0	0.0	0.2
33	Lakshadweep	1	0	0	0	1	0.7	0.0	0.0	0.0	0.2
	Region	**27**	**31**	**29**	**11**	**98**	**18.6**	**21.4**	**20.0**	**7.5**	**16.7**
	All India	**145**	**145**	**145**	**146**	**581**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

Note:

Level of Development	**Average Productivity**
I – Highly Developed	27789 (Rs per worker)
II – Developed	12192
III – Underdeveloped	8391
IV – Chronically Underdeveloped	4608

Table-5b Intra-State Distribution (%) of Districts by the Levels of Labour Productivity, 2001-04

Sr No	Region / State	Distribution(%) of Districts by Level of Development				All
		Highly-Developed	Developed	Under - Developed	Chronically-Underdeveloped	
	North- Western Region					
1	Haryana	100.0	0.0	0.0	0.0	100.0
2	Himachal Pradesh	0.0	0.0	8.3	91.7	100.0
3	Jammu & Kashmir	0.0	14.3	21.4	64.3	100.0
4	Punjab	100.0	0.0	0.0	0.0	100.0
5	Uttar Pradesh	34.3	21.4	44.3	0.0	100.0
6	Uttaranchal	15.4	15.4	0.0	6.2	100.0
	Region	**42.8**	**13.1**	**24.1**	**20.0**	100.0
	Eastern Region					
7	Bihar	0.0	2.7	10.8	86.5	100.0
8	Jharkhand	0.0	0.0	0.0	100.0	100.0
9	Orissa	0.0	56.7	43.3	0.0	100.0
10	West Bengal	50.0	44.4	5.6	0.0	100.0
	Region	**8.4**	**243**	**16.8**	**50.5**	100.0
	North-Eastern Region					
11	Arunachal Pradesh	15.4	15.4	38.5	30.7	100.0
12	Assam	39.1	43.5	8.7	8.7	100.0
13	Manipur	0.0	22.2	33.3	44.5	100.0
14	Meghalaya	0.0	28.6	42.8	28.6	100.0
15	Mizoram	0.0	16.7	33.3	50.0	100.0
16	Nagaland	28.6	14.2	28.6	28.6	100.0
17	Sikkim	0.0	25.0	75.0	0.0	100.0
18	Tripura	25.0	50.0	25.0	0.0	100.0
	Region	**19.2**	**28.8**	**28.8**	**23.2**	100.0
	Western-Central Region					
19	Chattisgarh	0.0	0.0	56.3	43.7	100.0
20	Goa	100.0	0.0	0.0	0.0	100.0
21	Gujarat	52.0	28.0	8.0	12.0	100.0
22	Madhya Pradesh	18.8	43.8	14.6	22.8	100.0
23	Maharashtra	12.1	33.3	39.4	15.2	100.0
24	Rajasthan	15.6	25.0	34.4	25.0	100.0
25	Dadra & Nagar Haveli	0.0	0.0	0.0	100.0	100.0
26	Daman & Diu	0.0	100.0	0.0	0.0	100.0
	Region	**20.9**	**30.4**	**26.6**	**22.1**	100.0
	Southern-Region					
27	Andhra Pradesh	9.1	45.5	40.9	4.5	100.0
28	Karnataka	11.1	33.3	33.3	22.3	100.0
29	Kerala	100.0	0.0	0.0	0.0	100.0
30	Pondicherry	25.0	50.0	25.0	0.0	100.0
31	Tamil Nadu	17.2	34.5	34.5	13.8	100.0
32	Andeman & Nicobar Island	100.0	0.0	0.0	0.0	100.0
33	Lakshadweep	100.0	0.0	0.0	0.0	100.0
	Region	**27.6**	**29.6**	**31.6**	**11.2**	100.0
	All India	**25.0**	**25.0**	**25.0**	**25.0**	**100.0**

In fact 41 per cent of the chronically under developed districts of India are located in these two states. Besides these states, a substantial proportion of low labour /land productivity districts in the states of Andhra Pradesh, Chattisgarh, Karnataka, Madhya Pradesh, Maharashtra, Rajasthan and North-eastern Region also need special policy initiatives to rejuvenate agriculture in many of their chronically under developed districts.

5. Growth of Agricultural Production:

Growth of agricultural production has been estimated for the post liberalisation period, 1990-3 to 2003-4. For compatibility of information across districts we merged the information for the 105 newly created districts in the intervening period in their parental constituent districts. By dropping the main urban/metropolitan districts, we compiled the comparable information on area and production for the 45 crops sector for the 416 districts in the selected major states. These 416 districts were divided into the following four different categories on the basis of the compound annual rate of growth recorded in their value of agricultural production.

A. Rapidly growing districts

(i) *Very Rapidly growing districts*: those recording annual growth exceeding 5 per Cent.

(ii) *Rapidly growing districts*: those with annual growth rate ranges between 3.5 to 5.0 per.

B. Moderately Growing districts

(iii) Upper Moderately growing districts: those with annual growth rate ranges between 2.5 to 3.5 per cent

C. Slow growing districts

(iv) *Slow growing districts*: those with annual growth rate ranges between 1.5 to 2.5 per cent.

(v) Very Slow growing districts: Those with annual growth rate ranges between 0.0 to 1.5 per cent

D. Negatively growing districts

(vi) Those with annual growth rate ranges less than 0.0 (negative) per cent.

Distribution of the districts across different levels of growth is provided in Table-6 and Figure-5 (Details provided in Appendix-6). There is a big shift in districts across the growth categories during 1980s and 1990s. During the pre-reform period (1980-3 to 1990-3), 68.3 per cent of the districts recorded growth rate exceeding 2.5 per whereas 31.7 per cent

grew below 2.5 per cent per annum. The situation reversed during the post reform period. Only 30.8 per cent could grow at more than 2.5 per cent whereas 69.2 per cent recorded growth below 2.5 per cent per annum. The decline was mainly in the case of top two categories. Proportion of the rapidly growing districts decline to 17.6 per cent during 1990-93 to 2001-4 period whereas about half (49.1 per cent) of the districts in India were growing at rapid rate exceeding 3.5 per cent per annum. On the lower end, proportion of the very slow and negative growing districts swelled to 50.7 per cent in the later period from 16.4 per cent during 1980/3-1990-3. In fact about a quarter (26.4 per cent) of the districts experienced decline in agricultural production due to negative growth during the post-reform period. In fact the post reform period witnessed more than four-fold rise in these negative growth districts from 6.1 per cent during 1980s to 26.4 per cent during 1990s. In fact post reform period witnessed serious deceleration in growth of crop production. After recording an average growth of 3.5 per cent during 1980s, it decline to less than half, 1.6 per cent per annum, during the post reform period. Most of the districts earlier growing on high growth path slipped downward on growth trajectory. In fact distribution of the districts over growth ranges during 1980s just reversed during 1990s. For instance proportion of districts in top to high growth ranges declined from 49.1 per cent during 1980s to 17.6 per cent during 1990s whereas that of bottom two very slow growing categories increased from 16.4 to 50.7 per cent.

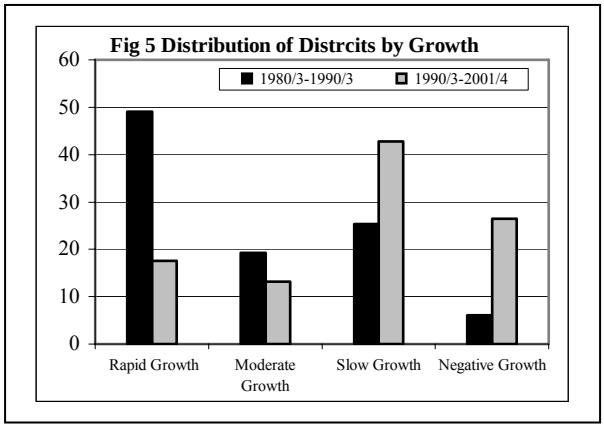


Table-6 Distribution of Districts by Growth of Production and Growth in Output, Area, and Yield

Growth of Production (% per year)		Number of districts		Growth rate (% per year					
				1980-83 to 1990-93			1990-93 to 2001-04		
		1980-3 to 1990-93	1990-3 to 2001-04	Output	Area	Yield	Output	Area	Yield
Very Rapid	>= 5.0	21.7	10.6	6.3	1.3	4.9	6.8	2.5	4.3
Rapid	3.5 – 5.0	27.4	7.0	4.3	0.8	3.6	3.9	-0.2	4.1
Moderate	2.5 – 3.5	19.2	13.2	3.0	0.4	2.6	3.1	1.0	2.1
Slow	1.5 – 2.5	15.3	18.5	2.1	0.3	1.8	1.9	0.1	1.8
Very Slow	0.0 – 1.5	10.3	24.3	0.8	-0.1	0.9	0.1	-0.7	0.9
Negative	< 0.0	6.1	26.4	-0.9	-0.4	-0.5	-0.5	-0.5	-0.1
Overall		100.0	100.0	3.5	0.6	2.9	1.6	0.1	1.5

Source: (i) Growth during 1980-3 to 1990-3 are based on data from Bhalla and Singh (2001).
(ii) Figures for 1990-3 to 2001-04 are estimates derived in the present study.

Table-7 Share of Districts in Output and Area by Levels of Growth, 1990-93 and 2001-04

		Number of districts	Per cent share in overall			
			Output		Area	
			1990-93	2001-04	1990-93	2001-04
Very Rapid	>= 5.0	10.6	8.1	14.1	10.1	13.0
Rapid	3.5 – 5.0	7.0	5.2	6.6	7.8	7.5
Moderate	2.5 – 3.5	13.2	12.3	14.4	13.3	14.5
Slow	1.5 – 2.5	18.5	17.4	17.9	19.4	19.4
Very Slow	0.0 – 1.5	24.3	31.0	26.4	24.6	22.4
Negative	<0.0	26.4	26.0	20.6	24.9	23.3

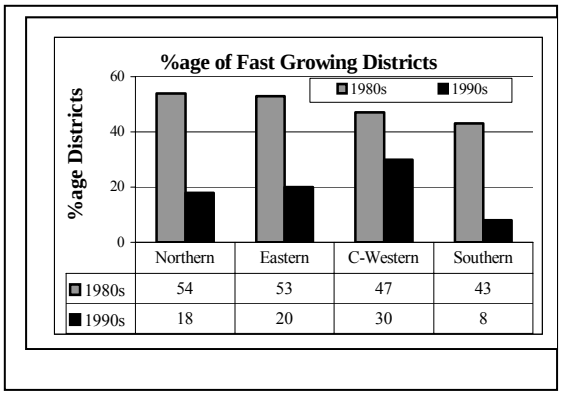
The decline in agricultural production occurred due to slowdown in growth of both area and yield during the reform period. However decline in production has mainly occurred due to deceleration in crop yield that has halved to 1.5 per cent during reform period from a high of 2.9 per cent per annum during the earlier period. The cropped area also declined by 0.5 per cent point from 0.5 to 0.1 per cent per annum during this period. While decline in yield could occur due to numerous causes such as drought /flood or adverse weather conditions, crop losses due to insect/pest attack, poor crop, untimely rains, etc. The decline in area under crops mainly occurs due to drought conditions. Hence serious deceleration in output during triennium 2001-04 might be due to drought conditions. This would be clearer on studying the geographical distribution of very low and negative growth districts across states. This is examined in the following section.

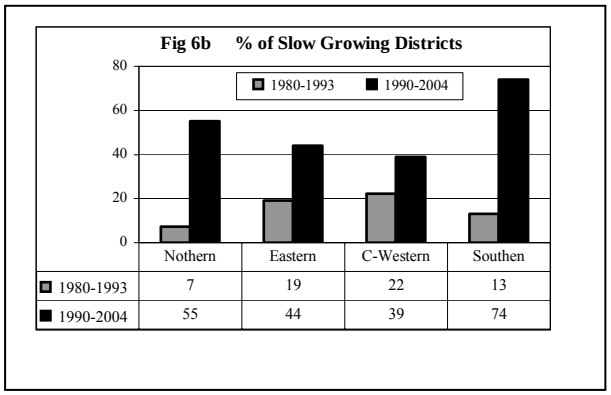
(i) Pattern Across Regions

Regional and state wise distribution of districts across various levels of growth presented in Table 8 brings out another interesting dynamics of agricultural growth in the post reform India. It may be seen that more than three-fourth (77 per cent) of the very rapidly growing (growth more than 5 per cent) districts are located either in the Eastern or Western-central regions. Similarly more than three-fourth (79 per cent) of the rapidly growing (growth 3.5-5.0 per cent) districts are located in these two regions. Moreover, more than half (55 per cent) of the very rapidly and 42 per cent of rapidly growing districts are located in located in the least developed Western-central region alone. Proportion of the rapidly growing districts in the Northern and Southern regions, which constitute agriculturally leading states, is very low- 13 and 10 per cent respectively. On other end of the spectrum, about half of the negative and equal proportion of the very slow (0.0-0.5 per cent) growing districts are located in the Northern and Southern regions. This suggests that slow down in agricultural growth

badly hit the districts in relatively developed northern and southern regions. The proportion of very slow and negatively growing districts in these two regions together doubled to 58 per cent during 1990s compared form 26.1 per cent during 1980-3 (Bhalla and Singh, 2001). On the contrary share of these two regions in the top two rapidly growing groups declined from 43.5 per cent during 1980s to 21.9 per cent during the post reform period (1990s).

Inter-regional comparison of districts on growth path reveals that relatively districts in the Southern region suffered the most in the Southern region during post reform period. In fact about half (46 per cent) its districts recorded negative growth and 28 per cent experienced very low growth (0.0-1.5 per cent) during the post 1990-93 period. This is also





borne out by the fact that compared with 74 per cent of the districts in this region growing at a very slow pace of less than 1.5 per cent per annum during 1990-93 to 2001-4 period. On the contrary, only 13.0 per cent of the districts in this region were in this slow growth category during 1980s (Figure 6b). The Northern region follows the Southern in this context. The proportion of very slow (growth less than 1.5 per cent) growing districts in this region swelled from just 7 per cent during 1980s to 55 per cent during 1990-93 to 2001-04 period. Comparison of the distribution of districts across growth categories during 1980s and 1990s also reveals that slow down also engulfed increased number of districts in the Eastern and Western-central regions also but the magnitude of affected districts is comparatively small as compared to other two region. Nevertheless even the proportion of districts in these regions in the lowest two categories also nearly doubled during the reform period as compared to the decade preceding the reform period.

Though the slow down also marked the Eastern and Western-central regions as well, yet the magnitude of the impact was comparatively low compared with the Northern and the

Table 8 (a) Distribution of Districts by Level of Growth Rate of Crop Production , 1990-93 to 2001-4

Growth Rate (% per year)	Northern Region							Eastern Region						Western-Central Region						Southern Region					All
	HR	HP	JK	PB	UP	Ur	All	AS	BH	JH	OR	WB	All	GJ	MP	CH	MH	RJ	All	AP	KT	KL	TN	All	
>5.0	1	0	1	0	4	0	6	1	1	4	1	3	10	7	1	0	9	7	24	2	0	2	0	4	44
3.5 – 5.0	2	0	1	0	1	0	4	2	3	3	0	3	11	1	1	0	7	3	12	1	1	0	0	2	29
2.5 - 3.5	4	0	0	1	11	0	16	4	4	3	1	7	19	1	5	0	4	5	15	1	1	1	1	4	54
1.5 - 2.5	4	1	2	2	18	0	27	2	7	3	2	2	20	1	15	5	3	1	25	2	3	5	0	10	82
0.0 - 1.5	4	4	3	10	20	3	44	8	5	0	0	0	13	6	7	1	3	6	23	8	3	5	5	21	101
<0.0	1	7	7	0	0	6	21	6	9	0	13	2	30	3	9	1	3	8	24	8	11	1	15	35	108
All	16	12	14	13	54	9	118	23	29	13	17	17	99	19	38	7	29	30	123	22	19	14	21	76	416

Table 8 (b) Percent Distribution of Districts by Level of Growth Rate of Crop Production , 1990-93 to 2001-4

Growth Rate (% per year)	Northern Region							Eastern Region						Western-Central Region						Southern Region					All
	HR	HP	JK	PB	UP	Ur	All	AS	BH	JH	OR	WB	All	GJ	MP	CH	MH	RJ	All	AP	KT	KL	TN	All	
>5.0	6	0	7	0	7	0	5	4	4	31	6	18	10	37	3	0	31	23	20	9	0	14	0	5	11
3.5 – 5.0	13	0	7	0	2	0	13	10	10	23	6	17	10	5	3	0	24	10	10	5	5	0	0	3	7
2.5 - 3.5	25	0	0	8	20	0	14	14	14	23	0	41	19	5	13	0	14	17	12	5	5	7	5	5	12
1.5 - 2.5	25	8	14	15	33	0	23	24	24	23	12	12	20	5	39	72	10	3	20	9	16	36	0	13	20
0.0 - 1.5	25	33	22	77	37	33	37	17	17	0	0	0	13	32	18	14	11	20	19	36	16	36	24	28	24
<0.0	6	59	50	0	0	67	18	31	31	0	76	12	28	16	24	14	10	27	20	36	58	7	71	46	26
All	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

Table 8 (c) Percent Distribution of Districts by Level of Growth Rate of Crop Production , 1990-93 to 2001-4

Growth Rate (% per year)	Northern Region							Eastern Region						Western-Central Region						Southern Region					All
	HR	HP	JK	PB	UP	Ur	All	AS	BH	JH	OR	WB	All	GJ	MP	CH	MH	RJ	All	AP	KT	KL	TN	All	
>5.0	2	0	2	0	9	0	13	2	2	9	2	7	22	16	2	0	21	16	55	5	0	5	0	10	100
3.5 – 5.0	7	0	3	0	3	0	13	7	10	10	0	10	37	3	3	0	24	10	42	3	3	0	0	8	100
2.5 - 3.5	7	0	0	2	20	0	29	4	8	6	2	13	36	2	9	0	7	9	27	2	2	2	2	8	100
1.5 - 2.5	5	1	3	3	23	0	35	3	9	4	3	3	21	1	19	6	4	3	31	3	4	6	0	13	100
0.0 - 1.5	4	4	3	10	19	3	44	8	5	0	0	0	13	6	7	1	3	1	23	8	3	5	5	20	100
<0.0	1	6	6	0	0	6	19	6	8	0	12	2	27	3	8	1	3	6	22	7	10	1	14	32	100
All	4	3	3	3	13	2	28	46	7	3	4	4	24	5	9	2	7	7	30	5	5	3	5	18	100

Southern regions. The proportion of the fast growing districts in these regions also reduced but the decline is small, specifically in the Western-central region. The decline in this region is 17 per cent point as compared with 35 per cent points in the Northern region. Similarly proportion of slow growing districts in this region though increased but again the magnitude was small compared with other regions. The proportion of rapidly growing districts in the Eastern region also declined sharply from 53 per cent in 1980s to 20 during 1990s but the rise in the magnitude of slow growing districts is low comparison with the worst hit Southern and Northern regions. On the whole, the slow down in the Indian agriculture worst hit the Southern region, followed by the Northern, Eastern and the Western-central regions in that order. Whether or not the states within each region follow the pattern described by their respective regions is examined in the following sub-section.

(ii) Pattern Across States

Distribution of districts in different states across various growth categories is detailed in Table-4 and Figure-7. Though half of the districts in India have recorded very slow growth falling short of 1.5 per cent per annum, but no unique pattern is discernable across the states or even across states within a same region. Besides the three hill states of Himachal Pradesh, Jammu and Kashmir, and Uttaranchal, Punjab, Orissa, Karnataka and Tamil Nadu are the other states having absolute majority of their districts performing very poorly (growth less than 1.5 per cent) during the post reform period. Even among these states, Orissa and Tamil Nadu are the special cases having respectively 76 and 71 per cent of their districts recording negative growth during this period. Very poor performance of these very badly growing states is contrary to their growth record during 1980s. For instance, compared with exception of one, all other districts in Tamil Nadu recorded growth exceeding 1.5 per cent per annum during the decade preceding reforms (1980s) (Bhalla and Singh, 2001). However, all bearing one district grew at less than 1.5 per cent during the post reform period (1990-93 to 2001-04). It is true for Punjab as well, another very poor agricultural performing state during the post-reform period. Agricultural production in all districts of Punjab grew at more than 2.5 per cent during 1980s whereas all recorded growth falling short of 2.5 per cent during 1990-93 to 2001-04. Apart from Punjab and Tamil Nadu, Andhra Pradesh and Karnataka are the other states having majority of their districts slipped to a very low level of growth during 1990s. In both these states, proportion of districts in the slow growing ranges (growth less than 1.5 per cent per annum) swelled to about 73 per cent during 1990s from 11/12 per cent during 1980s

Figure -7a

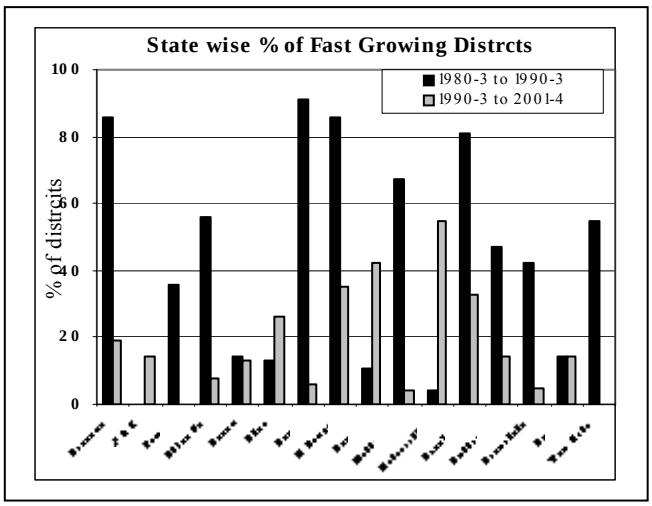
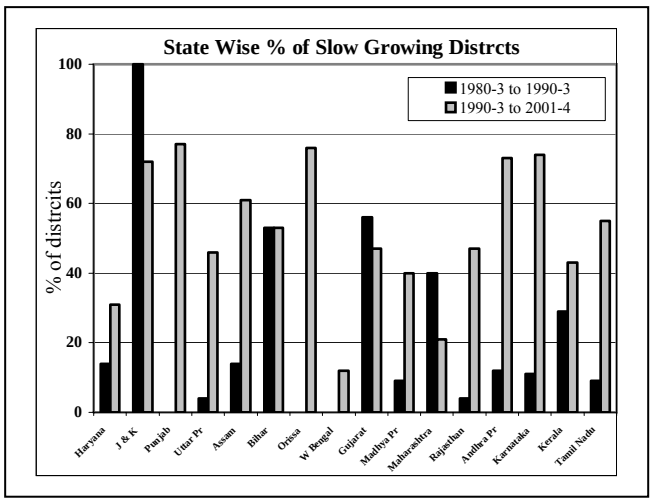


Figure -7b



Contrary to the serious set back suffered by majority of the districts in these four states, many districts in some other states graduated on growth path. Notable is the case of districts in Maharashtra state. Bearing one, none of it's district appeared in the highest two levels of growth during 1980s, whereas more than half (55 per cent) of its districts during 1990s figured in top two rapidly growing ranges of growth exceeding 3.5 per cent per annum. Besides Maharashtra, Gujarat is another state having many of its districts improved on growth trajectory during 1990s. There has been a four fold increase in the proportion of districts in highest three levels of growth exceeding annual growth of 2.5 per cent, from just 11 per cent during 1980s to 47 per cent during 1990s. On the other end, proportion of the very slow or negatively growing districts show marginal decline from 56 during 1980s to 47 percent during 1990s. Like Gujarat, the proportion of the rapidly growing districts in Bihar (including Jharkhand) also doubled from 13 during 1980s to 26 per cent during 1990s, though proportion of very slow (growth less than 1. 5 per cent) growing districts remained at 53 per cent both during 1980s and 1990s.

(iii) Intra-Regional Pattern

Among the regions, Northern region stands alone so far the dynamics of growth during the post reform period is concerned. Unlike other three regions, proportion of districts in all of its states slipped down on the growth path. Proportion of the districts in the top two rapidly growing ranges declined substantially whereas that in the bottom two very slow and negative growth ranges swelled uniformly in all states in this region. Contrary to this region, states in

the Eastern region present a mixed picture. Most of the districts in Orissa and West Bengal suffered serious reverses, proportion of districts in Bihar (un-divided) state doubled though proportion in the least two ranges remained the same. While almost all districts (91 per cent) in Orissa were growing at growth exceeding 3.5 per cent during 1980s whereas 76 per cent of its districts were found to record very poor growth of less than 1.5 per cent per annum during 1990s. Serious deceleration to growth also marked in districts of West Bengal in this region. The proportion of the district in the top two fast growing categories in Assam, another state in this region, though remained same, but proportion in the bottom two ranges increased rapidly from 14 in 1980s to 61 per cent in 1990s. On the whole, West Bengal, though it suffered reverses during 1990s but stands unique in this regions, as almost one-third (35 per cent) of its districts still managed to grow rapidly with growth exceeding 3.5 per cent per annum.

Likewise the Eastern region, no unique pattern in distribution of districts is discernible in states of the Western-central region. While about half of the districts in Mahrashtra and Gujarat recorded growth exceeding 3.5 per cent per annum during 1990s whereas none of the districts in Chattisgarh and only 6 per cent of the districts in Madhya Pradesh could manage to grow at this pace. On the other end, proportion of the slow growing districts with growth falling short of 1.5 per cent per annum are least in Chattisgarh and Maharashtra states. Overtime, while proportion of the rapidly growing districts declined whereas those in the least two growth ranges increased substantially in the Rajasthan and Madhya Pradesh (un-divided) states. Just opposite is the pattern of movement of districts in the other two states- Gujarat and Maharashtra- in this region.

The pattern of growth in the Southern regions comes closer to the Northern region, as districts in all states in this region suffered serious setbacks and slipped down the growth trajectory. Kerala is the only exception in this context. With exception of marginal increase in the proportion of districts in the bottom two categories from 29 to 43 per cent, districts in this state presents a consistent pattern of growth during 1980s and 1990s.

6. Sources of Growth

Various sources of growth in the crop production mainly operate through two channels. While one set of factors affects production through growth and use of area under various crops. This constitutes factors like changes in area under cultivation (Net Sown Area), climatic conditions like rainfall, drought, floods, expansion of area under assured

irrigation, cropping intensity, crop composition, and diversion of cultivable land for non-agricultural purposes like rapid urbanisation and industrial uses. The other set of factors affect production through changes in productivity or yield of land resources. This includes the factors like technological changes embodied in factors of production like seeds, fertilizers, pesticides and machinery, cultural practices, technical efficiency of the farmers, quality/fertility of soil, and climatic conditions of the area. Therefore to identify the sources of growth during the post reform period, it would be worthwhile to examine the growth in gross cropped area and crop yield across districts in India. The following sub-sections are devoted to examine the growths of gross cropped area and yield to examine the extent of their contribution to overall changes in agricultural growth studied in the preceding section.

(i) Growth of Cropped Area:

Information detailed in Table-9 presents the state and region wise distribution of districts in various ranges of the growth of gross cropped areas during the 1990-93 to 2001-04. It may be seen the half (51 per cent) of the districts during this period experienced decline in gross cropped area over this period. Gross cropped area in another 40 per cent of the districts experienced a marginal growth at less than 1.5 per cent per annum. Taken together, 91 per cent of the districts have either recorded decline or marginal increase in the gross cropped area during the 1990-93 to 2001-04 period. Though the proportion of the districts in these two low growth categories was roughly same during 1980-3 to 1990-3 period as well but the proportion of the negative growth in GCA was much smaller (Bhalla and Singh, 2001). Compared with the 23.5 per cent of the districts recording negative growth in GCA during 1980s, their proportion doubled to 51 per cent during 1990-3 to 2001-04 period. The proportion of districts in the slow GCA growth category declined from 64 per cent during 1980s to 40 per cent during 1990s. Consequently, the observed serious slow down of output growth in half of the districts in India during the recent past (1990s) seems to be partly due to increasing proportion of the districts experiencing decline in their cropped area (GCA). The phenomenon might be associated with the severe drought condition prevailing in major part of the country during 2002.

Across the regions, decline in GCA marked more seriously in the Southern region. Gross cropped area in as many as three-fourth of the districts falling in this region declined during 1990s. The Eastern region followed the Southern region with 64 per cent of its districts recording negative growth of GCA during this period. The decline in gross

Table 9 (a) Distribution of Districts by Growth of Gross Cropped Area , 1990-3 to 2001-4

Growth Rate (% per year)	Northern Region							Eastern Region						Western-Central Region						Southern Region					All
	HR	HP	JK	PB	UP	Ur	All	AS	BH	JH	OR	WB	All	GJ	MP	CH	MH	RJ	All	AP	KT	KL	TN	All	
>5.0	0	0	0	0	0	0	0	0	0	0	1	1	2	1	0	0	1	1	3	0	0	0	0	0	5
3.5 – 5.0	0	0	0	0	2	0	2	0	1	0	1	0	2	0	1	0	1	0	2	0	0	0	0	0	6
2.5 - 3.5	0	0	0	0	1	0	1	0	0	1	1	1	3	0	1	0	0	3	4	0	0	1	0	1	9
1.5 - 2.5	2	0	0	0	1	0	3	0	1	1	0	4	6	0	4	0	3	2	9	0	0	1	2	3	21
0.0 - 1.5	12	4	10	11	30	1	68	0	12	1	1	9	23	11	24	1	14	9	59	5	5	2	3	15	165
<0.0	2	8	4	2	20	8	44	23	15	10	13	2	63	7	8	6	10	15	46	17	14	10	16	57	210
All	16	12	14	13	54	9	118	23	29	13	17	17	99	19	38	7	29	30	123	22	19	14	21	76	416

Table 9 (b) Percent Distribution of Districts by Growth of Gross Cropped Area , 1990-3 to 2001-4

Growth Rate (% per year)	Northern Region							Eastern Region						Western-Central Region						Southern Region					All
	HR	HP	JK	PB	UP	Ur	All	AS	BH	JH	OR	WB	All	GJ	MP	CH	MH	RJ	All	AP	KT	KL	TN	All	
>5.0	0	0	0	0	0	0	0	0	0	0	6	6	2	5	0	0	3	3	2	0	0	0	0	0	1
3.5 – 5.0	0	0	0	0	4	0	2	0	3	0	6	0	2	0	3	0	3	0	2	0	0	0	0	0	1
2.5 - 3.5	0	0	0	0	2	0	1	0	0	8	6	6	3	0	3	0	0	10	3	0	0	7	0	1	2
1.5 - 2.5	12	0	0	0	2	0	3	0	3	8	0	23	6	0	10	0	10	7	7	0	0	7	10	4	5
0.0 - 1.5	75	33	71	85	55	11	58	0	42	8	6	53	24	58	63	14	49	30	48	23	26	14	14	20	40
<0.0	13	67	29	15	37	89	37	100	52	76	76	12	64	37	21	86	35	50	38	77	74	72	76	75	51
All	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

Table 9 (c) Percent Distribution of Districts by Growth of Gross Cropped Area , 1990-3 to 2001-4

Growth Rate (% per year)	Northern Region							Eastern Region						Western-Central Region						Southern Region					All
	HR	HP	JK	PB	UP	Ur	All	AS	BH	JH	OR	WB	All	GJ	MP	CH	MH	RJ	All	AP	KT	KL	TN	All	
>5.0	0	0	0	0	0	0	0	0	0	0	20	20	40	20	0	0	20	20	60	0	0	0	0	0	100
3.5 – 5.0	0	0	0	0	33	0	33	0	16	0	17	0	33	0	17	0	17	0	34	0	0	0	0	0	100
2.5 - 3.5	0	0	0	0	11	0	11	0	0	11	11	11	33	0	11	0	0	33	45	0	0	11	0	11	100
1.5 - 2.5	10	0	0	0	5	0	15	0	5	5	0	19	29	0	19	0	14	10	42	0	0	5	10	14	100
0.0 - 1.5	7	6	6	7	18	1	43	0	7	1	1	5	13	7	14	1	8	6	35	3	3	1	2	9	100
<0.0	1	2	2	1	9	4	19	11	7	5	6	1	30	3	4	3	5	7	22	8	7	5	7	27	100
All	4	3	3	3	13	2	28	5	7	3	4	4	24	5	9	2	7	7	30	5	5	3	5	18	100

cropped area however affected comparatively smaller number (37 per cent) of districts in the Northern and Western-central regions. Therefore, reverses to agricultural production due to adverse weather conditions seems to have comparatively hit hard the Southern and Eastern region during TE 2001-04.

Comparison of the changes in the growth of GCA across states reveals that with only exception of the states in Southern regions that has been equally affected by the decline in GCA, no unique pattern across states within each region is discernable. For instance, compared with 15 per cent of the districts in Punjab, 89 per cent of the districts in Uttaranchal in Northern region have experienced decline in GCA during 1990s. Similarly, in the Eastern region, compared with 100 per cent districts in Assam, and 76 per cent of the districts in Jharkhand and Orissa states, only 12 per cent of the districts in West Bengal recorded negative growth of GCA during 1990s. On the whole, factors responsible for decline in the area under crops in three-fourth of the districts in 10 of the 20 states, namely Uttaranchal, Assam, Jharkhand, Orissa, Chattisgarh, Andhra Pradesh, Karnataka, Kerala, and Tamil Nadu seem to be responsible for poor growth performance of the districts falling in theses states. On the other hand two of the Northern states-Haryana and Punjab- along with West Bengal have been least affected by such adverse conditions.

The decline in cropped area during the triennium 2001-04 is mainly due to drought conditions prevailing in majority of the districts during 2002. Information on state wise proportion of drought affected districts, proportion of area under irrigation and state wise proportion of districts experiencing negative growth in cropped area provided in Appendix - 5 suggests a close relationship between decline in area, drought and irrigation. The Pearson coefficient of correlation between irrigation and decline in area is -0.57. This suggests that the drought made least impact on agricultural production in high irrigated area. Very low proportion of districts experiencing decline in area in high irrigation states like Punjab and Haryana is mainly due to the drought insulating impact of irrigation. Furthermore, the Pearson Coefficient of correlation between proportion of drought affected districts and proportion of districts where area under crops declined is 0.45. This however suggests that drought alone is not responsible for decline in area under crops during triennium ending 2001-04. Many other factors also seem to be at work for decline in cropped area in many states. For instance, while all districts of Orissa were declared drought affected but area under crops declined in 13 of the 17 districts whereas in remaining 3 it actually expanded.

Similarly, contrary to the drought in most part of the country, almost whole of Assam (22 of the 24 districts) and major part of Bihar (24 of the 38 districts) were under floods. Therefore decline gross cropped area in mainly due to serious flood situation prevailing in these two states during 2002. In many other districts, specifically industrially fast growing states, decline might be due diversion of agriculture land for industrial and urbanisation uses. Similarly, in many other districts, decline in area might be due to diversification of cropping pattern from seasonal to perennial crops. This might be the case in many districts falling in the Southern India. Exploration into role and contribution of these factors, however, is beyond scope of the present study.

Though decline in area seems to be a major factor behind poor performance of a substantial number of districts, yet some factors other than drought might also be at work resulting in poor performance by a substantial number of districts during the post reform India. This is borne by the fact that though 72 per cent of the districts in Kerala recorded negative growth in area under crops yet only 7 per cent experienced negative output growth during 1990s. Similarly, 76 per cent districts in Jharkhand state falls in negative area growth category but all its districts recorded growth of output exceeding 2.5 per cent per annum. To further explore into the sources, growth in crop yield across districts is examined in the following sub-section.

(ii) Growth of Crop Yield

Distribution of districts by the ranges of growth in crop yield provided in Table-10 reveals that compared with observed 51 per cent of the all India districts experiencing negative growth in GCA, only 20 per cent of them recorded negative growth in crop yields. In fact, distribution of the districts across various growth categories on the basis of yield and growth (Table -8) follow almost similar patterns. For example, compared with 18 per cent of the districts in the top two growth ranges on the basis of output, 12 per cent of the districts falls in these top categories on the basis of crop yield. Similarly 51-54 per cent of the districts figures in the bottom two growth categories both on the basis of crop output and crop yield. However on the basis of GCA growth, 91 per cent falls in these two categories. This implies that though expansion or contraction of area under crops does matter, but the growth or decline in crop yield seems to matter more in acceleration or deceleration in growth of crop output in Indian agriculture. For example, GCA in 76 per cent of the Jharkhand districts declined but all districts in the state grew at more than 1.5 per cent per annum during 1990s

Table 10 (a) Distribution of Districts by Growth of Yield , 1990-3 to 2001-4

Growth Rate (% per year)	Northern Region							Eastern Region						Western-Central Region						Southern Region					All
	HR	HP	JK	PB	UP	Ur	All	AS	BH	JH	OR	WB	All	GJ	MP	CH	MH	RJ	All	AP	KT	KL	TN	All	
>5.0	0	0	1	0	0	0	1	1	0	5	0	1	7	5	0	0	6	5	16	1	0	0	0	1	25
3.5 – 5.0	1	0	0	0	1	0	2	2	1	4	0	1	8	2	0	0	5	2	9	3	0	1	0	4	23
2.5 - 3.5	3	0	1	0	7	0	11	4	10	4	1	5	24	1	0	0	6	7	14	3	3	3	2	11	60
1.5 - 2.5	2	1	1	3	17	0	24	2	6	0	1	3	12	3	13	6	4	4	30	3	3	6	5	17	83
0.0 - 1.5	10	8	3	10	26	4	61	8	10	0	2	6	26	4	16	0	5	7	32	8	4	4	5	21	140
<0.0	0	3	8	0	3	5	19	6	2	0	13	1	22	4	9	1	3	5	22	4	9	0	9	22	85
All	16	12	14	13	54	9	118	23	29	13	17	17	99	19	38	7	29	30	123	22	19	14	21	76	416

Table 10 (b) Percent Distribution of Districts by Growth of Yield , 1990-3 to 2001-4

Growth Rate (% per year)	Northern Region							Eastern Region						Western-Central Region						Southern Region					All
	HR	HP	JK	PB	UP	Ur	All	AS	BH	JH	OR	WB	All	GJ	MP	CH	MH	RJ	All	AP	KT	KL	TN	All	
>5.0	0	0	7	0	0	0	1	4	0	38	0	6	7	26	0	0	21	17	13	4	0	0	0	1	6
3.5 – 5.0	6	0	0	0	2	0	2	9	4	32	0	6	8	11	0	0	17	7	7	14	0	7	0	5	6
2.5 - 3.5	19	0	7	0	13	0	9	17	34	32	6	29	24	5	0	0	21	23	11	14	16	21	9	14	14
1.5 - 2.5	12	8	7	23	32	0	20	9	21	0	6	18	12	16	34	86	14	13	24	14	16	43	24	22	20
0.0 - 1.5	63	67	22	77	48	44	52	35	34	0	12	35	26	21	42	0	17	23	26	36	21	29	24	28	34
<0.0	0	25	57	0	5	56	16	26	7	0	76	6	23	21	24	14	10	17	18	18	47	0	43	29	20
All	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

Table 10 (c) Percent Distribution of Districts by Levels of Growth of Yield , 1990-3 to 2001-4

Growth Rate (% per year)	Northern Region							Eastern Region						Western-Central Region						Southern Region					All
	HR	HP	JK	PB	UP	Ur	All	AS	BH	JH	OR	WB	All	GJ	MP	CH	MH	RJ	All	AP	KT	KL	TN	All	
>5.0	0	0	4	0	0	0	4	4	0	20	0	4	28	20	0	0	24	20	64	4	0	0	0	4	100
3.5 – 5.0	4	0	0	0	4	0	9	9	4	17	0	4	34	9	0	0	22	9	40	13	0	4	0	17	100
2.5 - 3.5	5	0	2	0	12	0	19	7	17	7	2	8	39	2	0	0	10	12	24	5	5	5	3	18	100
1.5 - 2.5	2	1	1	4	20	0	28	2	7	0	1	4	14	3	16	7	5	5	37	4	4	7	6	21	100
0.0 - 1.5	7	6	2	7	19	3	43	6	7	0	1	4	18	3	11	0	4	5	23	6	3	3	4	16	100
<0.0	0	3	9	0	3	6	22	7	2	0	15	1	25	5	10	1	3	6	27	5	10	0	11	26	100
All	4	3	3	3	13	2	28	5	7	3	4	4	24	5	9	2	7	7	30	5	5	3	5	18	100

mainly because of the fact that all districts in the state recorded yield growth exceeding 2.5 per cent per annum.

Across the regions, almost half of the districts growing rapidly (growth exceeding 3.5 per cent) on account of crop yield are located in the Western-central region. Another about one-third of the rapidly growing districts are located in the Eastern region. Therefore more than 80 per cent of the rapidly growing districts during 1990s are from these regions alone. The most noticeable is the case of the Northern region, which during 1960s, 1970s and 1980s has grown rapidly in wake of availability of the green revolution technology. During 1990s, however, only 6 per cent of the fast growing districts in India were from this region. The gains of Green Revolution technology seems to have petered out in this region. This is evident from the fact that proportion of districts in two high growth ranges has declined rapidly overtime. For instance, 74 per cent of the districts in this region recoded high growth exceeding 3.5 per cent per annum during 1962-1980 period. The proportion high growth districts has declined to 27 per cent during 1980s and ultimately to 6 per cent during 1990s. On the other end, compared with just 2 per cent during 1962-1983 period, and 7 per cent during 1980s, as many as 68 per cent of the districts recorded very slow growth (Less than 1.5 per cent) in crop yield during 1990s. The districts in this region are losing their advantages of being earlier adopters of the Green Revolution technology. Though deceleration in growth of yield also marked other regions as well, but as noticed earlier it was mainly due to unfavourable weather conditions prevailing in most part of the semi-arid tropical India. However, poor growth of yield by majority of the districts in a region with a very high proportion of its area under assured irrigation may not be entirely attributed to adverse weather conditions. It seems the phenomenon is intimately related with technological stagnation in agriculture of the region.

Across the states, Himachal Pradesh, Punjab, Uttranchal, Madhya Pradesh and Chattisgath are the worst performer during 1990s having none of their district in the top three high yield growth ranges. Closely follow these are the states of Orissa and Tamil Nadu in this context. In contract to these eight states is Jharkhand having all its districts figuring in the top three yield growth categories. Jharkahnd in this context is followed by Maharashtra with 59 per cent, Rajasthan 47 per cent and Gurjarat with 59, 47 and 42 per cent districts respectively falling in these top high yield growth categories. This has occurred despite the fact that almost all districts in these states were declared drought affected during 2002. (Appendix 7).

Most of the districts in the Northern and Southern regions perform poorly on account of yield growth during the 1990s. On the other hand, with the exception of districts falling in Assam, Orissa, and Madhya Pradesh, most of districts in the Eastern and Western-central region states performed comparatively better on this account. Since majority of the districts in these regions figure in the bottom of the ranking scale on basis of land productivity, but their appearance on the high side on ranking scale on yield growth seems to suggest the technological up-gradation of agricultural production in states of these lagging regions. The most notable is the performance of districts falling in the states of Gujarat and Maharashtra, that despite drought conditions never performed so high on growth account. With only exception on 2 in Gujarat and 1district in Mahrashtra, all other districts in these states has growth less than 3.5 per cent per annum during 1980-83 to 1990-93 (Bhalla and Singh, 2001). However, during 1990-3 to 2001-4 as many as 37 per cent of the districts in these states have recorded growth in crop yield exceeding 3.5 per cent per annum. Therefore, technology driven high growth in crop yield seems to have acted as a main engine of growth for comparatively better performance of the districts in these states. However this engine seems to be losing its stream as prime mover of growth in the Northern region states. This certainly applies to Punjab and Haryana agriculture that were on forefront in adoption of the 'Green Revolution' technology but experienced serious deceleration in agricultural growth since early 1990s (ICAR, 1998).

7. Development and Use of Modern Inputs

The recent debacles in the growth of agricultural sector in India, *inter alia*, is attributed to slow down in capital formation in general and that of capital formation in public sector in particular (GOI, 2005). Similarly slowdown in supply of institutional credit to agriculture sector is also considered to be one of the factors for poor plight of the peasantry and slowdown of Indian agriculture. How the observed pattern of district level growth in Indian agriculture is associated with these observed developments at the micro level? Though time and resource constraint does not permit us to go into details of explore into observed phenomenon, yet we examined the association between the use of some inputs and observed district levels of agricultural development in India during the triennium 2001-04.

Information on distribution of districts by the level of development and use of land area, labour, fertilizer, irrigation, tractors, and tubewells, and availability of credit supplied by the scheduled commercial banks for agriculture purposes is detailed in Table-11. A close

affinity between use of inputs and level of agricultural development in India is clearly evident from the information. Level of development measured in term of land productivity and per hectare use of modern inputs moves in tandem with each other. There are 3-4 time variations across districts in use of modern inputs across highly developed and chronically under developed districts in India. For instance fertilizer use, which determine the impact of other inputs like irrigation, cropping intensity, and mechanisation, varies from a high of 239 kilograms per hectare of the net sown area in highly developed districts to as low as 57 kilograms for chronically under developed districts. Similarly compared with 54 per cent in the case of highly developed districts, chronically under developed districts has a very small proportion (21 per cent) of their area under irrigation. More specifically, intensity of tubewells in these districts, is as low as 74 per thousand hectares of the net sown area against 173 in the highly developed quartile. In fact irrigation in general and assured and regulated supply of irrigation through tubewells in particular, along with other time saving and production efficiency enhancing machines and implements like tractors, facilitates intensification of land use. This is evident from the fact that high density of irrigation, tubewells, and tractors enabled the most productive top quartile of districts to use as much as 60 per cent of their land area under double cropping. Compared with these districts, the proportion of the double cropped area in the chronically under developed quartile of districts is as low as 19 per cent.

Most of the modern inputs, specifically machines like tractors, tubewells, electric motors, diesel engines and other power driven mechanical implements requires considerable initial investment. Most of these costly machines are beyond the purchasing power of the farmers in a country like India having almost three-fourth of its farmers falling in small and marginal farmer categories and almost one-third of them living in abject poverty. Availability of institutional finance therefore not only provides purchasing power to them to buy such costly lumpy machines and implements but also help them to buy other crucial inputs like improved seed, fertilizer, pesticides and other services. Information on the supply of credit by the scheduled commercial banks in districts is used to examine its role in agricultural development. For this purpose, information on the outstanding credit on 1st April 2002 is compiled for all the districts included in our study. It may be seen that the outstanding bank credit varies from Rs. 6893 for highly developed quartile of districts to Rs 2782 per hectare for the most under developed districts in India (Table-11) .

Table- 11 Use of Inputs by Levels of Development, 2001-04

Level of Development	Land Productivity (Rs./ Hc)	No of Districts	Cropping Intensity (%)	% age of area under Irrigation	Fertilizers consumption (Kgs/Hc)	Tractors (Number / 000 Hc)	Tubewells (Number / 000 Hc)	Bank Credit (Rs/Hc)	Agriculture workers (000/Hc)
Highly Developed	41576	145	160	56	239	32	173	6893	1845
Developed	23145	145	137	47	129	22	138	4512	2098
Underdeveloped	16159	145	129	33	97	13	97	3561	1904
Chronically Underdeveloped	9767	146	119	21	57	9	74	2782	1283
All	20845	581	134	39	120	18	114	4205	1701

Share (%) of Districts in Inputs and Output by Level of Developments, 2001-04

Level of Development	Districts (%)	Output	Area (NAS)	Agriculture Workers	Area Irrigated	Fertilizers (NPK)	Tractors	Tubewells	Credit
Highly Developed	25	44	22	23	39	44	40	33	36
Developed	25	23	21	26	26	23	26	26	23
Underdeveloped	25	16	20	24	17	16	15	17	17
Chronically Underdeveloped	25	17	37	27	18	18	19	24	24
All	100	100	100	100	100	100	100	100	100

The role of modern inputs in inter-district differences is also evident from the comparative variations in the share of area, output, and modern inputs across the districts categorized by their level of development. Surprisingly, the share of districts in use of fertilisers and their share in the output exactly follow the same patterns. This validates our earlier hypothesis of fertilisers as a catchall indicator of other modern inputs contributing to higher production. Even in the case of bottom two underdeveloped groups of districts, share in area irrigated, fertilizer use and tractors almost match their share in production. Due to low intensive use of modern inputs, the chronically underdeveloped group of districts are contributing just 17 per cent to overall agricultural production from 37 per cent share in net sown area and 28 per cent of the agricultural work force in the country. On the other extreme, the most developed group of districts contribute more than double (44 per cent) to overall agricultural production than their share in the overall cultivable area (22 per cent) and workforce (24 per cent). Share of each category of districts in the outstanding credit extended by the scheduled commercial banks to agriculture, follow the same pattern as their share in modern inputs in general and tubewells in particular. Therefore, besides other spatial constraints, avoidance of banks and other financial institution to poor farmers in the backward and remote rural region seems to be responsible for sorry status of agriculture in these chronically underdeveloped districts.

Information provided in Table-12 suggests that besides the use of modern inputs, differences in the level of agricultural development across districts are intimately related with the cropping pattern across districts. In fact the use of modern inputs in general and fertilisers and irrigation in particular is closely related with high input intensive modern technology crops like wheat and rice. This is evident as more than half of the area in highly developed group of districts is under wheat and rice crops. Proportion of area under these two crops monotonically decline (from 52 to 23 per cent) as we move down the levels of development. Same is true for very high value fruits and vegetables (F&V), and condiments and spices (C&S) groups taken together. Conversely, area under coarse cereals and pulses groups monotonically increases as we move down the productivity scale. While the developed top quartile group has 56 per cent of their areas under high productive rice and wheat crops and high value condiments, spices, fruits and vegetables. On the contrary, the bottom quartile of chronically underdeveloped districts has as much as 56 per cent of their area under low productivity groups of coarse cereals, pulses and oil seeds crops. The impact of cropping pattern on level of development is also evident form the fact that the chronically

underdeveloped group of districts account for about a half of the All-India area under coarse cereals and pulses compared with top quartile accounting for just only 9 per cent. The top quartile however share as high as 42 and 36 per cents of the area under high value crops of F&V and C&S, and wheat and rice groups respectively.

Table-12 Cropping Pattern and Crop Yields by Levels of Development

Level of Development	Rice & Wheat	Coarse Cereals	Pulses	Oil Seeds	Fruits &Veg & Cond & Spices
% share of each crop in overall area					
Highly Developed	52	6	4	8	4
Developed	44	12	10	15	3
Underdeveloped	32	16	15	16	2
Chronically Underdeveloped	23	26	18	14	1
% share of each level in all India crop area					
Highly Developed	36	9	9	16	42
Developed	26	16	18	25	26
Underdeveloped	18	22	26	26	20
Chronically Underdeveloped	20	52	47	33	12
Crop Yield (Rs. per hectare)					
Highly Developed	22894	21511	10739	22133	77383
Developed	15813	13905	11734	16840	63600
Underdeveloped	12219	10463	10566	12501	47128
Chronically Underdeveloped	9388	6651	7710	9707	42868

Though cropping pattern is intimately related with the levels of development, yet some other factors seems to be at work for emerging inter-district disparities in the levels of development. This is evident from variations in inter-crop yields across the levels of development. With exceptions of F&V and C&S, and pulses groups, there are not much significant inter-crop differences in crop yields. Exceptionally high level of F&V and C&S yield, however, may be interpreted cautiously as many crops constituting this group are perennial (having whole year as crop cycle) whereas most of the other crops are seasonal (having 3-6 month of crop cycle). However, even on adjusting for crop cycle (halving the yield level), this group still has a higher level of productivity compared with other crops. Very small inter-crop variations in yield and very high intra crop differences in yield across districts seems to suggest that factors other than cropping pattern, like access and choices of crops technology, capacity and capability of the farmers in exploitation of the available technology, agro-climatic constraints and agricultural environmental factors related with access, quality and efficacy of rural infrastructure may be at work for observed inter-district differences in development of Indian agriculture.

To further explore into contribution of cropping pattern and various identified inputs and other factors to inter-district differences in the level of agricultural development, we estimated the following form of the Cobb-Douglas production function on the district level data:

$$Log_n(Y) = \beta_0 + \sum_{i=1}^{7} \beta_i Log_n(X_i) + \sum_{j=1}^{4} \gamma_j Log_n(Z_j) + \sum_{k=1}^{2} \delta_k Log_n(H_k) + \sum_{l=1}^{3} \lambda_l (D_l) + U$$

Where Y- is total value of agricultural output in a district during the triennium 2001-04.

Xi- is a set of direct input variables [Land, Labour, Cropping Intensity, Irrigation, Fertiliser, Tractors and Bank Credit] used in a district during 2001-04.

Zj – is the set of variables measuring %age of the 'Gross Cropped Area' in a district under j-th set of crops[4 set of crops included are: coarse cereals, pulses, condiments and spices, and fruits and vegetables]

H_k – is the set of human resource variables [education and health] of the population

D_l – is a set of Dummy variables [one each for districts experiencing drought during 2001 and 2002 and third for districts experiencing serious flood during 2003]

U - is the stochastic error term

and β, γ, and δ- are coefficients of the regression model, interpreted as production elasticity's of the respective variables and λ is interpreted as the impact of the drought/flood on production.

The underlying hypothesis in this production function is that increased use of land, labour, fertilisers, tractors, supply of more bank credit to farmers, higher proportion of land area under irrigation, and intensive use of land (higher cropping intensity) leads to higher agricultural production. The model also hypothesise that higher proportion of area under high value crops of condiments and spices, and fruits and vegetables contributes to higher productivity. Conversely allocation of a higher proportion of area under low technology crops of coarse cereals and pulses leads to low agricultural productivity. We also hypothesise that the better human resources capital (health and education) of the work force enhances its capacity and capabilities in terms of better performance of physical work, awareness about technology, and efficient utilisation of resources. All these tend to augment agricultural development. The adverse impact of unfavourable weather conditions (droughts and floods) on agricultural production is also incorporated in the model by inserting dummy variable for

the districts experiencing adverse drought in 2001 and 2002 and serious floods during 2003. The OLS estimates of the regression model are presented in Table-13.

Table- 13
Determinants of Inter District Variations in Agricultural Production

OLS Regression [Dependent Variable: Value Output]

Variables	Regression Coefficients	Standard Error	p-value
(Constant)	3.996	0.549	0.000
Area {Net Area sown in Hectares]	0.827	0.033	0.000
Labour [Number]	-0.024	0.029	0.407
Cropping Intensisty [%]	1.010	0.078	0.000
Irrigated [%age of Gross cropped area]	0.063	0.017	0.000
Fertilisers(Kgs of NPK)	0.080	0.015	0.000
Tractors [000 Numbers]	0.004	0.010	0.709
Bank Credit [Agriculture Purposes]	0.118	0.018	0.000
% Area under Coarse Cereals	-0.045	0.007	0.000
% Area under Pulses	-0.053	0.009	0.000
% Area under Condiment & Spices	0.015	0.007	0.026
% Area under Fruits & Vegetables	0.070	0.008	0.000
Literacy (District Rural) Rate	0.121	0.073	0.094
Health Status [Composite Index]	0.159	0.044	0.000
Drought Districts-2001 Dummy	-0.130	0.039	0.001
Drought Districts-2002 Dummy	-0.121	0.036	0.001
Flood Districts-2003 Dummy	-0.127	0.041	0.002
R^2	0.934		
$\overline{R}^2$	0.932		
Conditional Index	172.87		
Number of Observations	581		

Note All variables (except Dummy variables) are measured in logarithmic form

The estimates of regression parameters reveal that the impact of all variables on inter-district differences in the agricultural development is on the expected lines with exceptions of labour and tractor variables. The estimated values of their coefficients are not significant statistically. Moreover sign of the labour coefficient is negative, which is contrary to our hypothesis and widely accepted contribution of workers to agricultural production. Researchers generally encounter such adverse signs and unexpected results in having a high degree of multicollinearity among various explanatory variables studies (Bhalla and Singh, 2001 and Gujarati, 2007). Though the model explains about 93 per cent inter-district

differences in agricultural production and most of the included variables are significant statistically, but it suffers from a very high degree of multicollinearity among the included variables. This is indicated by a very high value of the conditional index (172.87) as condition index value over 30 suggests serious multicollinearity problems (Gujarati, 2007). Merging problematic variable(s) with some other variable, estimating restricted function or dropping variable form the regression are some suggested measures. Merging variable in present context is not feasible and nor one can afford to drop variables as it may leads to serious model specification problem and distortion of estimates. We estimated the restricted function by estimating per hectare productivity function rather than output function. However problem persists even in this restricted version of the model. In absence of any widely accepted fool proof method to completely overcome the problem, 'Ridge Regression' method has been recommended and empirically employed to overcome problems posed by the presence of multicollinearity in regression models (Vinod and Ullah, 1981, and Bhalla and Singh, 2001). Therefore we also re-estimated the model using Ridge Regression and the estimates are presented in Table-14.

The ridge regression estimates are on the expected lines. All the variables included in the model contribute significantly to inter-district differences in the agricultural development. As mentioned earlier, all other estimated coefficients except of Dummy variables, has straight forward interpretation as production elasticity's of the respective variables. For instance, other things being same, 0.134 value of the credit variable means that 10% more supply of bank credit to agriculture on an average leads to 1.34 per cent higher growth of agriculture production. However, dummy variable coefficients need to be modified for their institutive interpretation. Conversion [drought impact(%)=$\{\exp(\beta_{Dummy})/Log_e\}$x100] of the coefficients for the drought and flood dummies suggests that agricultural production on average declined by 41 per cent in the districts that have experienced drought during 2001 or 2002 or flood during 2003. Such a high reduction in production from the same resources cost very dearly to the producers.

Besides the usual regression coefficients, Table-14 also reports their corresponding standardised or beta coefficients. The standardised coefficients, as being standardised to the unit of measurement, help us to compare the impact of individual impacts of independent variables and hence to determine which of the independent variables have a greater effect on

Table- 14 Determinants of Inter District Variations in Agricultural Production

Ridge Regression[k=0.03] [Dependent Variable: Value Output]

Variables	Estimated Coefficient	Standard Error	Standardized Coefficients*	p-value
(Constant)	4.594	0.517	0.000	0.000
Area [Net Area Sown in Hectares]	0.683	0.025	0.638	0.000
Labour [Number]	0.052	0.024	0.045	0.032
Cropping Intensisty [%]	0.940	0.075	0.149	0.000
Irrigated [%age of Gross cropped area]	0.040	0.015	0.035	0.011
Fertilisers (Kgs of NPK)	0.093	0.012	0.156	0.000
Tractors [000 Numbers]	0.018	0.009	0.033	0.045
Bank Credit [Agriculture Purposes]	0.134	0.016	0.175	0.000
% Area under Coarse Cereals	-0.044	0.006	-0.082	0.000
% Area under Pulses	-0.046	0.009	-0.071	0.000
% Area under Condiment & Spices	0.020	0.007	0.038	0.002
% Area under Fruits & Vegetables	0.062	0.008	0.092	0.000
Literacy (District Rural) Rate	0.161	0.068	0.032	0.019
Health Status [Composite Index]	0.154	0.042	0.051	0.000
Drought Districts-2001 Dummy	-0.101	0.038	-0.031	0.008
Drought Districts-2002 Dummy	-0.104	0.034	-0.039	0.002
Flood Districts-2003 Dummy	-0.092	0.040	-0.028	0.021
R2	0.931			
$\overline{R}^2$	0.929			
Number of Observations	581			

Note: . All variables (except Dummy variables) are measured in logarithmic form.

* Standardized coefficient or beta coefficient is the estimate of an analysis performed on variables that have been standardized so that they have variances of 1.

the dependent variable in multiple regression analysis. Comparison of standardised coefficients reveals that supply of agricultural credit by banks is the second most important determinant of inter-district difference in agricultural production after land. That is, it is the most important contributors to the differences in level of agricultural development. Along with bank credit, use of chemical fertilizers, intensive use of land (higher cropping intensity), higher area under fruits and vegetables, and better health status of the population are the five most important contributors, in that order, to higher level of agricultural development in India. Besides these five, higher proportion of area under condiments and spices and higher level of rural literacy also lead to higher level of agricultural development. On the other end, adverse climatic conditions resulting in severe droughts and floods, high proportion of area under low productive coarse cereals and pulses, low level of mechanisation and non-availability of irrigation facilities are mainly responsible for low level of agricultural development in a substantial number of districts in India. It may be noted that both the coarse

cereals and pulses group of crops are marked with low level of technological development compared with other (green revolution) food crops - wheat and rice. Dynamic changes in contribution of various inputs notwithstanding, role of many identified factors are well recognised in the literature on inter-regional differences in agricultural development. Observed contribution of human resource (health, and education) and bank credit, however, are exceptions in this context. Probably this is first econometric exercise to conclusively establish the contribution of human resource development to agricultural development, though Schultz (1964) recognised its role in transformation of traditional agriculture way back in early 1960s. Similarly, role of institutional credit in enhancing farmers access to modern inputs like fertiliser, tractors, tubewells, and other farm implements and machines, and hence modernisation of agriculture is well recognised. However, the present study brings out its significant contribution to development even though its role in higher use fertiliser consumption, irrigation and tractors is controlled (in regression). This implies the existence of some other channels as well through which bank credit contributes to higher level of agricultural development in India.

Three sets of important policy implications follow the findings of econometric exercise. One is that besides technological upgradation, there is an urgent need to drought proofing of Indian agriculture, expansion of irrigation facilities and control of floods. This requires plans and policies for efficient management of water resources and precision in weather (rain) forecasting. In fact occasional floods are major hurdles to many on farm investments in land improvement, soil conservation, buildings, and on-farm structures and sources of irrigation facilities. The other set includes expansion of institutional agricultural credit, intensification of agriculture, and improvement in human resource development of the rural population in agriculturally backward districts. Many short and medium term polices can bring significant improvement in many of these areas. Third set requires a mix of technological and many other strategies for enhancing the productivity of coarse cereals and pulses or diversification of area under these crops to superior foodgrains-wheat and rice, high value condiments and spices, and fruits and vegetables. This however requires building institutional capacities and identification of the constraints and potential crop technologies suitable to specific agro-climatic conditions prevailing in the chronically underdeveloped districts.

8. Summary and Conclusions

A. Summary

Recent poor performance of Indian agriculture notwithstanding, the district level evidence assembled in the study reveals considerable variations in overall impression across regions, states and districts in the country. Ranking of the districts on land productivity scale brings out the prevalence of extreme disparities in Indian agriculture. On one extreme are 175 agriculturally most developed districts contributing as much as 50 per cent to total agricultural production with only 27 per cent of the land resources in the country. On the other extreme are 231 agriculturally most underdeveloped districts contributing just 27 per cent to production but owning as much as 50 per cent of cultivated land in the country during 2001-04.

Geographically, Western-central region turned out to be the 'Achilles Heal' of India agriculture. About two-third (62%) of the India's chronically underdeveloped bottom quartile of the districts is located in this region. Only 8 of its 158 districts figure in the list of the top quartile of agriculturally most developed districts in India. Diagonally opposite is the case of Northern region that account for half of the agriculturally most productive districts in India. Only 10 per cent of the chronically underdeveloped quartile of the districts happens to be from this region. With exception of Goa, Gujarat and Daman and Diu, more than 80 per cent of the districts in the Western-central region states of Chattisgarh, Madhya Pradesh, Maharashtra, and Rajasthan fall in the agriculturally underdeveloped category of districts. Besides districts in this region, Jammu and Kashmir in the Northern, Jharkhand, and Orissa in the Eastern, Mizoram and Nagaland in the North-Eastern, and Karnataka in the Southern region are other states having about three-fourth on their districts in the underdeveloped category. The observed pattern of all-India ranking of the districts on level of development is quite consistent overtime.

Spatial pattern of development, however, undergo a change when districts are ranked on basis of the productivity of the workers employed in the agriculture sector. On labour productivity scale, 37 per cent of the chronically underdeveloped districts in India found to be located in the Eastern region states. Jharkhand is a special case in this context having all its districts in the chronically underdeveloped quartile of districts. Along with Jharkhand, Bihar and Himachal Pradesh are other two states having as much as 87 and 92 per cent of their districts respectively in the bottom quartile of chronically underdeveloped quartile of

districts. Besides these three, a substantial proportion of the districts in the states of Jammu and Kashmir, Uttaranchal, and Chattisgarh also figures in the category of chronically underdeveloped category of districts. Like the Eastern region, North-eastern region is special case in this context. With exceptions of Assam and Tripura, majority of the districts in remaining states in this region have low level of labour productivity. The deviation between the patterns of districts ranked on the basis on land and labour productivities is mainly due to high concentration of population and overdependence of work force on land resources in these states.

Besides wide regional variations, the study brings out that agricultural growth suffered a serious set back in majority of the districts during 1990s. Compared with 68 per cent during 1980s, only 31 per cent of the districts have recorded growth exceeding 2.5 per cent per annum during 1990s. The most distressing is the case of 26 per cent districts that suffered serious set back to their agricultural production and registered negative growth during 1990s. Besides these 26 negative growth districts, another 24 per cent districts recorded very slow growth falling short of 1.5 per cent per annum during 1990s. These negative or very slow growth districts do not depict any specific spatial pattern. They figures in the developed as well as in underdeveloped regions and states. The slow or negative growth though is mainly attributed to drought conditions during 2002 but drought alone is not responsible for their poor performance. Some other factors, including geographical, technological and institutional factors might also be at work for their poor growth during 1990s. Even many districts in the highly irrigated states like Punjab and Haryana also suffered serious slow down in their agricultural production. This is born out by the fact that not only the growth rate in gross cropped area, even the growth in crop yield decelerated seriously in many of the poor performing districts. The study brings out that the slow pace of technological developments is at work for poor performance of many districts. This is specifically the case of districts falling in comparatively agriculturally developed Northern and Southern regions in the country.

The observed pattern of agricultural development across districts in the country show close affinity with cropping pattern, availability of irrigation facilities and use of modern inputs like chemical fertilizers, and services of tractors and tubewells in agricultural production. Like a big gap in the levels of agricultural development between the most developed and chronically under developed quartiles of districts, similar gap also prevails in

use of these resources. Besides these inputs, similar big gap in the use of agricultural credit supplied by the scheduled commercial banks also found across the developed and underdeveloped districts in the country. In a country like India having three-fourth of its farmers falling in the small and marginal farmers categories, observed highly uneven distribution of agriculture credit among districts by the scheduled commercial banks, therefore, seems to be at work behind the existence of a big gap in the use of modern inputs across districts that ultimately get reflected in the level of agricultural development. Besides inputs, cropping pattern, and agro-climatic conditions, study probably first time conclusively establish the role of human resource capital, health and education, as significant contributors to agricultural development in India. In fact heath and credit found to be among the five most important determinants of explaining inter-district disparities in Indian agriculture.

B. Conclusion

The role of agricultural development in overall economic growth, food security, generation of employment opportunities through numerous direct and indirect linkages, alleviation of rural poverty, and in improving overall quality of life of the population is well accepted. For rapid, inclusive, equitable and sustainable development, it is therefore crucial not only to put the agriculture on fast growth trajectory but also to reduce the persisting widespread disparities across regions. Whatsoever welfare policies the country may adopt, it would be almost impossible to provide a sustainable decent livelihood to a large segment of small and marginal farmers and landless workers, which constitutes bulk on rural poor, without rejuvenation of agriculture in the chronically underdeveloped regions. Left to them, a large number of districts trapped in very low level of development may never be in a position to catch up with the districts on the frontier of agricultural development. With divergent cropping pattern, growth and levels of development, varied agro climatic and environmental diversities, uniform development strategy may not resolve the problem of all the regions. Based on the observed growth and pattern of development in this study, following region specific strategy is recommended for inclusive rapid growth of Indian agriculture:

With squeezing area under cultivation and emerging population pressure on land resources, future of Indian agriculture only lies in up-gradation in its technological base. Like historical transformation of Indian agriculture followed by adoption of ‘Green Revolution’ technology during mid-sixties, the road ahead lies in successful adoption of biotechnology in Indian agriculture (Borlaug, 2002). The future of food security lies exclusively in new

technology as the green revolution technology seems to have attained its plateau, as is evident form serious slow down of agricultural growth in the northern region states. Expansion of technological base is equally relevant for other regions as well, but steps need to be initiated to exploit the potentials of existing technologies. This is so in case of the Western-central and eastern region districts, as evidence compiled by the Ministry of Agriculture, Government of India, indicate wide unexploited gap in potential and actual yield of almost all crops in these regions (GOI, 2007).

Technology apart, rehabilitating the productive capacity of the soil is another policy initiate urgently required in many regions in India. Acidity and/or alkalinity problems in parts of the Eastern, North-east, and Western-central region states are major problems. Similarly serious depletion of land fertility due to overexploitation in the northern region states of Punjab, Haryana and Uttar Pradesh leading to decline in productivity of resources needs to be addressed urgently. Besides land, serious depletion of groundwater in Punjab, Haryana, and Tamil Nadu is posing a big question mark on future sustainability of agriculture in these states. Sooner of later, many more states may encounter similar water depletion problem. Policies therefore urgently required promoting investment in conservation of land and water resources in the problematic regions.

Besides technology and resource conservation, many research, market and institutional complementarities needs to be strengthened so as meet the challenges posed by the globalization of Indian agriculture. Consolidation of land holdings, strengthening market infrastructure, formalisation of contract farming and development of agro-processing industries are some of such policy initiatives. Similarly, as suggested by the study, human resources development through better health and education would not only facilitate to put the agriculture on sustained path of higher development but would also go a long way to reduce poverty and to release population pressure on land resource. Only better human resource development can enhance the capabilities of rural workers, which is a pre-requisite for grabbing the emerging opportunities in the modern sector. In fact shift of work force must be given overriding priority as share of agriculture is GDP is declining exponentially whereas share of work force declining at snails' pace. This would further accentuate the rural-urban inequalities, which would be contrary to the the declared objective of inclusive and equitable growth envisaged in the approach paper to the 11th Five Year Plan.

Macro level policies no doubt would go a long way in rejuvenation on Indian agriculture but these alone may not be able bridge wide gap between developed and underdeveloped region. Concentration of the employment guarantee scheme in the 150 most backward districts during first year of the UPA government and its expansion later on to some other districts has been well taken. Development of infrastructure in these districts under this employment guarantee act and recently announced "Mahatama Gandhi Backward Region Development Fund' are well come steps in this context. However much more needs to be done for agricultural development in the chronically lagging districts. Policies, institutions, and technologies need to be designed to overcome the impediments to agricultural development in these lagging districts. For a viable and permanent solution to the persistent problem of chronic underdevelopment and mass poverty in these districts, and also in order the growth to be more inclusive, as being envisaged in the 'Approach Paper to the 11th Five Year Plan', an '**Intensive Agricultural Development Programme(IADP) for Chronically Underdeveloped Districts**' **package [on lines of 150 districts adopted for the National Rural Employment Guarantee (NREG) programme] based on the local resources, potentials and constraints need to be provided for modernization of 150-200 agriculturally most backward districts in the country.** Many ongoing rural development programmes like the Rural Infrastructure Development Fund (RIDF), the National Agricultural Insurance Scheme (NAIS), Backward Region Grant Fund (BRGF), Accelerated Irrigation Benefits Programme (AIBP) and other district level rural development programmes, need to be implemented on priority basis in these lagging districts so as to supplement envisaged IADP for rapid overall economic transformation of the chronically underdeveloped districts.

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Appendix -1

List of Crops Covered and Their Prices' During Triennium Ending 2001-04

Sr No	**Crop**	**Price (Rs/Tonnne)**
1	Rice	8081
2	Wheat	6408
3	Jowar	5533
4	Bajra	4546
5	Barley	5629
6	Maize	5150
7	Ragi	4839
8	Small millets	6376
9	Gram	16259
10	Arhar	15965
11	Other Pulses	15325
12	Linseed	16011
13	Seasmum	21797
14	Groundnut	15174
15	Rapeseed & Mustard	15482
16	Castor	15149
17	Coconut	3973
18	Nigerseed	15973
19	Safflower	6415
20	Sunflower	16616
21	Soyabeans	12283
22	Sugarcane	651
23	Cotton	10696
24	Jute	1473
25	Sanhemp	14410
26	Mesta	1316
27	Tea	51539
28	Coffee	52861
29	Tobacco	35137
30	Rubber	34520
31	Cardamom	442667
32	Chillies (Dry)	36809
33	Balck Pepper	91910
34	Ginger	32305
35	Turmeric	26707
36	Arcea nuts	53716
37	Garlic	31545
38	Coriander	26046
39	Bannana	5967
40	Cashew Nuts	35628
41	Potatoes	3460
42	Sweet Potatoes	7469
43	Tapioca	3088
44	Onion	4469
45	Guarseeds	9923

Source: (i) CSO(2005), *National Accounts Statistics*, New Delhi, Ministry of Statistics and Programme Implementation, government of India.

(ii) MOA (various Years), Area and Production of Principal Crops in India, New Delhi, Directorate of Economics and Statistics, Ministry of Agriculture.

Appendix – 2

Formation of Comparable District Units, 1990-93 and 2001-04

Sr no	State	Comparable District Units 1990-93	2001-04
1	Andhra Pradesh	Adilabad	Adilabad
2	Andhra Pradesh	Anantapur	Anantapur
3	Andhra Pradesh	Chittoor	Chittoor
4	Andhra Pradesh	Cuddapah	Cuddapah
5	Andhra Pradesh	East Godavari	East Godavari
6	Andhra Pradesh	Guntur	Guntur
7	Andhra Pradesh	Karimnagar	Karimnagar
8	Andhra Pradesh	Khammam	Khammam
9	Andhra Pradesh	Krishna	Krishna
10	Andhra Pradesh	Kurnool	Kurnool
11	Andhra Pradesh	Mahaboobnagar	Mahaboobnagar
12	Andhra Pradesh	Medak	Medak
13	Andhra Pradesh	Nalgonda	Nalgonda
14	Andhra Pradesh	nellore	Nellore
15	Andhra Pradesh	nizamabad	Nizamabad
16	Andhra Pradesh	prakasam	Prakasam
17	Andhra Pradesh	ranga reddy	Ranga reddy
18	Andhra Pradesh	srikakulam	Srikakulam
19	Andhra Pradesh	visakhapatnam	Visakhapatnam
20	Andhra Pradesh	vizianagaram	Vizianagaram
21	Andhra Pradesh	warangal	Warangal
22	Andhra Pradesh	West Godavari	West Godavari
23	Assam	Barpeta	Barpeta
24	Assam	Bongaigaon	Bongaigaon
25	Assam	Cachar	Cachar
26	Assam	Darrang	Darrang
27	Assam	Dhemaji	Dhemaji
28	Assam	Dhubri	Dhubri
29	Assam	Dibrugarh	Dibrugarh
30	Assam	Goalpara	Goalpara
31	Assam	Golaghat	Golaghat
32	Assam	Hailakandi	Hailakandi
33	Assam	Jorhat	Jorhat
34	Assam	Kamrup	Kamrup
35	Assam	Karbi Anglong	Karbi Anglong
36	assam	Karimganj	Karimganj
37	Assam	Kokrajhar	Kokrajhar
38	Assam	Lakhimpur	Lakhimpur
39	Assam	Marigaon	Marigaon
40	Assam	N Kachar Hills	N Kachar Hills
41	Assam	Nagaon	Nagaon
42	Assam	Nalbari	Nalbari
43	Assam	Sivasagar	Sivasagar
44	Assam	Sonitpur	Sonitpur
45	Assam	Tinsukia	Tinsukia
46	Bihar	Araria	Araria
47	Bihar	Aurangabad	Aurangabad
48	Bihar	Begusarai	Begusarai

Sr no	State	Comparable District Units 1990-93	2001-04
49	Bihar	Bhagalpur	Bhagalpur + Banka
50	Bihar	Bhojpur	Bhojpur + Buxar
51	Bihar	Champaran(east)	Champaran (east)
52	Bihar	Champaran(west)	Champaran (west)
53	Bihar	Darbhanga	Darbhanga
54	Bihar	Gaya	Gaya
55	Bihar	Gopalganj	Gopalganj
56	Bihar	Jahanabad	Jahanabad + Arval
57	Bihar	Katihar	Katihar
58	Bihar	Khagaria	Khagaria
59	Bihar	Kishanganj	Kishanganj
60	Bihar	Madhubani	Madhubani
61	Bihar	Madhupura	Madhupura
62	Bihar	Monghyr	Monghyr + 75% of Sheikhpura + Lakhisarai + Jamui
63	Bihar	Muzafarpur	Muzafarpur
64	Bihar	Nalanda	Nalanda + 25% of Sheikhpura
65	Bihar	Nawadha	Nawadha
66	Bihar	Patna	Patna
67	Bihar	Purnea	Purnea
68	Bihar	Rohtas	Rohtas + Bhabhua
69	Bihar	Saharsa	Saharsa + Supaul
70	Bihar	Samastipur	Samastipur
71	Bihar	Saran	Saran
72	Bihar	Sitamarhi	Sitamarhi + Sivhar
73	Bihar	Siwan	Siwan
74	Bihar	Vaishali	Vaishali
75	Chattisgarh	Bilaspur	Bilaspur
76	Chattisgarh	Durg	Durg
77	Chattisgarh	Jagdalpur (Bastar)	Jagdalpur (Bastar) + Dantewala + Kanker
78	Chattisgarh	Raigarh	Raigarh + Jashpur
79	Chattisgarh	Raipur	Raipur + Damtari + Mahasamund
80	Chattisgarh	Rajnandgaon	Rajnandgaon + 67.6% of Kabridham
81	Chattisgarh	Sarguja	Sarguja + Koriya
82	Gujarat	Ahmedabad	Ahmedabad
83	Gujarat	Amreli	Amreli
84	Gujarat	Banaskantha	Banaskantha + 17.6% Patan
85	Gujarat	Bharuch	Bharuch + 86.4 % Narmada
86	Gujarat	Bhavnagar	Bhavnagar
87	Gujarat	Dang	Dang
88	Gujarat	Gandhinagar	Gandhinagar
89	Gujarat	Jamnagar	Jamnagar
90	Gujarat	Junagadh	Junagadh+ Porbander
91	Gujarat	Kheda	Kheda + Anand
92	Gujarat	Kutch	Kutch
93	Gujarat	Mehsana	Mehsana +82.4% Patan
94	Gujarat	Panchmahal	Panchmahal + Dahod
95	Gujarat	Rajkot	Rajkot
96	Gujarat	Sabarkantha	Sabarkantha
97	Gujarat	Surat	Surat
98	Gujarat	Surendranagar	Surendranagar
99	Gujarat	Vadodara	Vadodara + 13.6% Narmada

Sr no	State	Comparable District Units 1990-93	2001-04
100	Gujarat	Valsad	Valsad + Navasari
101	Haryana	Ambala	Ambala + Panchkula
102	Haryana	Bhiwani	Bhiwani
103	Haryana	Faridabad	Faridabad
104	Haryana	Gurgaon	Gurgaon
105	Haryana	Hisar	Hisar + Fatehabad
106	Haryana	Jind	Jind
107	Haryana	Kaithal	Kaithal
108	Haryana	Karnal	Karnal
109	Haryana	Kurukshetra	Kurukshetra
110	Haryana	Mahendragarh	Mahendragarh
111	Haryana	Panipat	Panipat
112	Haryana	Rewari	Rewari
113	Haryana	Rohtak	Rohtak + Jhajjar
114	Haryana	Sirsa	Sirsa
115	Haryana	Sonipat	Sonipat
116	Haryana	Yamunanagar	Yamunanagar
117	Himachal Pradesh	Bilaspur	Bilaspur
118	Himachal Pradesh	Chamba	Chamba
119	Himachal Pradesh	Hamirpur	Hamirpur
120	Himachal Pradesh	Kangra	Kangra
121	Himachal Pradesh	Kinnaur	Kinnaur
122	Himachal Pradesh	Kullu	Kullu
123	Himachal Pradesh	Lahul spiti	Lahul spiti
124	Himachal Pradesh	Mandi	Mandi
125	Himachal Pradesh	Shimla	Shimla
126	Himachal Pradesh	Sirmaur	Sirmaur
127	Himachal Pradesh	Solan	Solan
128	Himachal Pradesh	Una	Una
129	Jammu & kashmir	Anantnag	Anantnag
130	Jammu & kashmir	Baramulla	Baramulla
131	Jammu & kashmir	Budgam	Budgam
132	Jammu & kashmir	Doda	Doda
133	Jammu & kashmir	Jammu	Jammu
134	Jammu & kashmir	Kargil	Kargil
135	Jammu & kashmir	Kathua	Kathua
136	Jammu & kashmir	Kupwara	Kupwara
137	Jammu & kashmir	Leh	Leh
138	Jammu & kashmir	Poonch	Poonch
139	Jammu & kashmir	Pulwama	Pulwama
140	Jammu & kashmir	Rajouri	Rajouri
141	Jammu & kashmir	Srinagar	Srinagar
142	Jammu & kashmir	Udhampur	Udhampur
143	Jharkhand	Deoghar	Deoghar
144	Jharkhand	Dhanbad	Dhanbad + 67% Bokaro
145	Jharkhand	Dumka	Dumka + Jamtara
146	Jharkhand	East Singhbhum	East Singhbhum
147	Jharkhand	Giridh	Giridh +33% Bokaro
148	Jharkhand	Godda	Godda
149	Jharkhand	Gumla	Gumla + Simdega
150	Jharkhand	Hazaribag	Hazaribag + Chatra + Koderma
151	Jharkhand	Lohargada	Lohargada

Sr no	State	Comparable District Units 1990-93	2001-04
152	Jharkhand	Palamu	Palamu + Garwah +Latehar
153	Jharkhand	Ranchi	Ranchi
154	Jharkhand	Sahibganj	Sahibganj + Pakur
155	Jharkhand	West Singhbum	West Singhbum +Seraikela
156	Karnataka	Bangalore rural	Bangalore rural
157	Karnataka	Belgaum	Belgaum
158	Karnataka	Bellary	Bellary + 38.6% Devanagere
159	Karnataka	Bidar	Bidar
160	Karnataka	Bijapur	Bijapur +Bagalkote
161	Karnataka	Chickmagalur	Chickmagalur
162	Karnataka	Chitradurga	Chitradurga + 34.7% Davanagere
163	Karnataka	Dakshina Kannada	Dakshina Kannada + Udipi
164	Karnataka	Dharwar	Dharwar + Gadag + Haveri
165	Karnataka	Gulbarga	Gulbarga
166	Karnataka	Hassan	Hassan
167	Karnataka	Kodagu	Kodagu
168	Karnataka	Kolar	Kolar
169	Karnataka	Mandya	Mandya
170	Karnataka	Mysore	Mysore + Chamarajanagar
171	Karnataka	Raichur	Raichur + Koppal
172	Karnataka	Shimoga	Shimoga + 26.7% Davanagere
173	Karnataka	Tumkur	Tumkur
174	Karnataka	Uttara kannada	Uttara kannada
175	Kerala	Alappuzha	Alappuzha
176	Kerala	Ernakulam	Ernakulam
177	Kerala	Idukki	Idukki
178	Kerala	Kannur	Kannur
179	Kerala	Kasaragod	Kasaragod
180	Kerala	Kollam	Kollam
181	Kerala	Kottayam	Kottayam
182	Kerala	Kozhikode	Kozhikode
183	Kerala	Malappuram	Malappuram
184	Kerala	Palakkad	Palakkad
185	Kerala	Pathanamthitta	Pathanamthitta
186	Kerala	Thiruvananthapuram	Thiruvananthapuram
187	Kerala	Thrissur	Thrissur
188	Kerala	Wayanad	Wayanad
189	Madhya Pradesh	Balaghat	Balaghat
190	Madhya Pradesh	Betul	Betul
191	Madhya Pradesh	Bhind	Bhind
192	Madhya Pradesh	Bhopal	Bhopal
193	Madhya Pradesh	Chhatarpur	Chhatarpur
194	Madhya Pradesh	Chhindwara	Chhindwara
195	Madhya Pradesh	Damoh	Damoh
196	Madhya Pradesh	Datia	Datia
197	Madhya Pradesh	Dewas	Dewas
198	Madhya Pradesh	Dhar	Dhar
199	Madhya Pradesh	Guna	Guna + Ashok Nagar
200	Madhya Pradesh	Gwalior	Gwalior
201	Madhya Pradesh	Hoshangabad	Hoshangabad + Harda
202	Madhya Pradesh	Indore	Indore
203	Madhya Pradesh	Jabalpur	Jabalpur + Katni

Sr no	State	Comparable District Units 1990-93	2001-04
204	Madhya Pradesh	Jhabua	Jhabua
205	Madhya Pradesh	Khandwa	Khandwa + Burhanpur
206	Madhya Pradesh	Khargone	Khargone + Barwani
207	Madhya Pradesh	Mandla	Mandla + Dindori
208	Madhya Pradesh	Mandsaur	Mandsaur + Neemach
209	Madhya Pradesh	Morena	Morena + Sheopur Kalan
210	Madhya Pradesh	Narsinghpur	Narsinghpur
211	Madhya Pradesh	Panna	Panna
212	Madhya Pradesh	Raisen	Raisen
213	Madhya Pradesh	Rajgarh	Rajgarh
214	Madhya Pradesh	Ratlam	Ratlam
215	Madhya Pradesh	Rewa	Rewa
216	Madhya Pradesh	Sagar	Sagar
217	Madhya Pradesh	Satna	Satna
218	Madhya Pradesh	Sehore	Sehore
219	Madhya Pradesh	Seoni	Seoni
220	Madhya Pradesh	Shahdol	Shahdol + Anupur + Umaria
221	Madhya Pradesh	Shajapur	Shajapur
222	Madhya Pradesh	Shivpuri	Shivpuri
223	Madhya Pradesh	Sidhi	Sidhi
224	Madhya Pradesh	Tikamgarh	Tikamgarh
225	Madhya Pradesh	Ujjain	Ujjain
226	Madhya Pradesh	Vidisha	Vidisha
227	Maharashtra	Ahmednagar	Ahmednagar
228	Maharashtra	Akola	Akola+ Washim
229	Maharashtra	Amravati	Amravati
230	Maharashtra	Aurangabad	Aurangabad
231	Maharashtra	Beed	Beed
232	Maharashtra	Bhandara	Bhandara+ Gondia
233	Maharashtra	Buldhana	Buldhana
234	Maharashtra	Chandrapur	Chandrapur
235	Maharashtra	Dhule	Dhule + Nandubar
236	Maharashtra	Gadchiroli	Gadchiroli
237	Maharashtra	Jalgaon	Jalgaon
238	Maharashtra	Jalna	Jalna
239	Maharashtra	Kolhapur	Kolhapur
240	Maharashtra	Latur	Latur
241	Maharashtra	Nagpur	Nagpur
242	Maharashtra	Nanded	Nanded
243	Maharashtra	Nasik	Nasik
244	Maharashtra	Osmanabad	Osmanabad
245	Maharashtra	Parbhani	Parbhani + Hingoli
246	Maharashtra	Pune	Pune
247	Maharashtra	Raigad	Raigad
248	Maharashtra	Ratnagiri	Ratnagiri
249	Maharashtra	Sangli	Sangli
250	Maharashtra	Satara	Satara
251	Maharashtra	Sindhudurg	Sindhudurg
252	Maharashtra	Solapur	Solapur
253	Maharashtra	Thane	Thane
254	Maharashtra	Wardha	Wardha
255	Maharashtra	Yavatmal	Yavatmal

Sr no	State	Comparable District Units 1990-93	2001-04
256	Orissa	Balasore	Balasore + Bhadrak + Kendrapara
257	Orissa	Bolangir	Bolangir + Sonepur
258	Orissa	Cuttack	Cuttack + Jagatsingpur + Jajpur
259	Orissa	Dhenkanal	Dhemkanal + Angul
260	Orissa	Gajapati	Gajapati
261	Orissa	Ganjam	Ganajm
262	Orissa	Kalahandi	Kalahandi + Nawapara
263	Orissa	Keonjhar(Phulbani)	Keonjhar(Phulbani) + Boudh
264	Orissa	Koraput	Koraput
265	Orissa	Malkangiri	Malkangiri
266	Orissa	Mayurbhanj	Mayurbhanj
267	Orissa	Nawarangpur	Nawarangpur
268	Orissa	Phulbani	Phulbni
269	Orissa	Puri	Puri + khurda + Nayagarh
270	Orissa	Rayagada	Rayagada
271	Orissa	Sambalpur	Samabalpur + Bargarh + Deogarh + Jharsuguda
272	Orissa	Sundargarh	Sundargarh
273	Punjab	Amritsar	Amritsar
274	Punjab	Bhathinda	Bhathinda + Mansa
275	Punjab	Faridkot	Faridkot + 83.5% of Moga + Muktsar
276	Punjab	Fatehgarh Sahib	Fatehgarh Sahib
277	Punjab	Ferozepur	Ferozepur + 16.5% of Moga
278	Punjab	Gurdaspur	Gurdaspur
279	Punjab	Hoshiarpur	Hoshiarpur + 49% of Nawansahar
280	Punjab	Jalandhar	Jalandhar + 59% of Nawansahar
281	Punjab	Kapurthala	Kapurthala
282	Punjab	Ludhiana	Ludhiana
283	Punjab	Patiala	Patiala
284	Punjab	Ropar	Ropar
285	Punjab	Sangrur	Sangrur
286	Rajasthan	Ajmer	Ajmer
287	Rajasthan	Alwar	Alwar
288	Rajasthan	Banswara	Banswara
289	Rajasthan	Baran	Baran
290	Rajasthan	Barmer	Barmer
291	Rajasthan	Bharatpur	Bharatpur
292	Rajasthan	Bhilwara	Bhilwara
293	Rajasthan	Bikaner	Bikaner
294	Rajasthan	Bundi	Bundi
295	Rajasthan	Chittore	Chittore
296	Rajasthan	Churu	Churu
297	Rajasthan	Dausa	Dausa
298	Rajasthan	Dholpur	Dholpur
299	Rajasthan	Dungarpur	Dungarpur
300	Rajasthan	Ganganagar	Ganganagar + Hanumangarh
301	Rajasthan	Jaipur	Jaipur
302	Rajasthan	Jaisalmer	Jaisalmer
303	Rajasthan	Jalore	Jalore
304	Rajasthan	Jhalawar	Jhalawar
305	Rajasthan	Jhunjhunu	Jhunjhunu
306	Rajasthan	Jodhpur	Jodhpur
307	Rajasthan	Kota	Kota

Sr no	State	Comparable District Units 1990-93	2001-04
308	Rajasthan	Nagaur	Nagaur
309	Rajasthan	Pali	Pali
310	Rajasthan	Rajsamand	Rajsamand
311	Rajasthan	S. Madhopur	Swai Madhopur + Karoli
312	Rajasthan	Sikar	Sikar
313	Rajasthan	Sirohi	Sirohi
314	Rajasthan	Tonk	Tonk
315	Rajasthan	Udaipur	Udaipur
316	Tamil nadu	Coimbatore	Coimbatore
317	Tamil nadu	Cuddalore(s arcot)	Cuddalore(South Arcot)
318	Tamil nadu	Dharmapuri	Dharmapuri + Krishnagiri
319	Tamil nadu	Dindigul	Dindigul
320	Tamil nadu	Erode	Erode
321	Tamil nadu	Kanyakumari	Kanyakumari
322	Tamil nadu	Madurai	Madurai + Theni
323	Tamil nadu	Nagapattinam	Nagapattinam
324	Tamil nadu	Pudukottai	Pudukottai
325	Tamil nadu	Ramanathapuram	Ramanathapuram
326	Tamil nadu	Salem	Salem + Karur + Namakkal
327	Tamil nadu	Sivagangai	Sivagangai
328	Tamil nadu	Thanjavur	Thanjavur + Thiruvarur
329	Tamil nadu	The nilgiris	The nilgiris
330	Tamil nadu	Thiruvallur (MGR)	Thiruvallur (M.G.chengalpatu) + Kancheepuram
331	Tamil nadu	Thiruvannamalai	Thiruvannamalai
332	Tamil nadu	Thoothukudi	Thoothukudi
333	Tamil nadu	Tiruchirapalli	Tiruchirapalli + Perambalur
334	Tamil nadu	Tirunelveli	Tirunelveli
335	Tamil nadu	Vellore	Vellore
336	Tamil nadu	Virudhunagar	Virudhunagar
337	Uttar Pradesh	Agra	Agra
338	Uttar Pradesh	Aligarh	Aligarh + 64.3% Hathras
339	Uttar Pradesh	Allahabad	Allahabad + Kaushambi
340	Uttar Pradesh	Azamgarh	Azamgarh + 25% Ambedkar Nagar
341	Uttar Pradesh	Badaun	Badaun
342	Uttar Pradesh	Bahraich	Bahraich + Shravasti
343	Uttar Pradesh	Ballia	Ballia
344	Uttar Pradesh	Banda	Banda + Chitrakoot
345	Uttar Pradesh	Barabanki	Barabanki
346	Uttar Pradesh	Bareilly	Bareilly
347	Uttar Pradesh	Basti	Basti + 92% Sant Kabir Nagar
348	Uttar Pradesh	Bijnor	Bijnor
349	Uttar Pradesh	Bulandshahar	Bulandshahar + 54% Gautam Budha Nagar
350	Uttar Pradesh	Deoria	Deoria + Kushi Nagar
351	Uttar Pradesh	Eath	Eath
352	Uttar Pradesh	Etawah	Etawah + Auraiya
353	Uttar Pradesh	Faizabad	Faizabad + 75% of Ambedkar Nagar
354	Uttar Pradesh	Farrukhabad	Farrukhabad + Kannauj
355	Uttar Pradesh	Fatehpur	Fatehpur
356	Uttar Pradesh	Ferozabad	Ferozabad
357	Uttar Pradesh	Ghaziabad	Ghaziabad + 46% of Gautam Budha Nagar
358	Uttar Pradesh	Ghazipur	Ghazipur

Sr no	State	Comparable District Units 1990-93	2001-04
359	Uttar Pradesh	Gonda	Gonda + Balrampur
360	Uttar Pradesh	Gorakhpur	Gorakhpur
361	Uttar Pradesh	Hamirpur	Hamirpur + Mahoba
362	Uttar Pradesh	Hardoi	Hardoi
363	Uttar Pradesh	Jalaun	Jalaun
364	Uttar Pradesh	Jaunpur	Jaunpur
365	Uttar Pradesh	Jhansi	Jhansi
366	Uttar Pradesh	Kanpur (c)	Kanpur (c)
367	Uttar Pradesh	Kanpur (d)	Kanpur (d)
368	Uttar Pradesh	Kheri	Kheri
369	Uttar Pradesh	Lalitpur	Lalitpur
370	Uttar Pradesh	Lucknow	Lucknow
371	Uttar Pradesh	Maharalganj	Maharalganj
372	Uttar Pradesh	Mainpuri	Mainpuri
373	Uttar Pradesh	Mathura	Mathura + 35.7% Hathras
374	Uttar Pradesh	Mau	Mau
375	Uttar Pradesh	Meerut	Meerut + Bagpat
376	Uttar Pradesh	Mirzapur	Mirzapur
377	Uttar Pradesh	Moradabad	Moradabad + J.B.Phule Nagar
378	Uttar Pradesh	Muzaffarnagar	Muzaffarnagar
379	Uttar Pradesh	Pilibhit	Pilibhit
380	Uttar Pradesh	Pratapgarh	Pratapgarh
381	Uttar Pradesh	Raibareli	Raibareli
382	Uttar Pradesh	Rampur	Rampur
383	Uttar Pradesh	Saharanpur	Saharanpur
384	Uttar Pradesh	Shahjahanpur	Shahjahanpur
385	Uttar Pradesh	Siddarthanagar	Siddarthanagar + 8% Sant Kabir Nagar
386	Uttar Pradesh	Sitapur	Sitapur
387	Uttar Pradesh	Sonbhadra	Sonbhadra
388	Uttar Pradesh	Sultanpur	Sultanpur
389	Uttar Pradesh	Unnao	Unnao
390	Uttar Pradesh	Varanasi	Varanasi + Chandauli + Sant Rabidas Nagar
391	Uttranachal	Almora	Almora + Vageshwar
392	Uttranachal	Chamoli	Chamoli + 48% of Rudraprayag
393	Uttranachal	Dehradun	Dehradun
394	Uttranachal	Haridwar	Haridwar
395	Uttranachal	Nainital	Nainital + Udam Singh Nagar
396	Uttranachal	Pauri garhwal	Pauri garhwal + 28% of Rudraprayag
397	Uttranachal	Pithoragarh	Pithoragarh + Champawat
398	Uttranachal	Tehri garhwal	Tehri garhwal + 24% of Rudraprayag
399	Uttranachal	Uttar kashi	Uttar kashi
400	West bengal	24-parganas(N)	24-parganas(N)
401	West bengal	24-parganas(S)	24-parganas(S)
402	West bengal	Bankura	Bankura
403	West bengal	Birbhum	Birbhum
404	West bengal	Burdwan	Burdwan
405	West bengal	Cooch behar	Cooch behar
406	West bengal	Darjeeling	Darjeeling
407	West bengal	Hooghly	Hooghly
408	West bengal	Howrah	Howrah
409	West bengal	Jalpaiguri	Jalpaiguri
410	West bengal	Malda	Malda

Sr no	State	Comparable District Units 1990-93	2001-04
411	West bengal	Midnapore (East)	Midnapore (East)
412	West bengal	Midnapore (West)	Midnapore (West)
413	West bengal	Murshidabad	Murshidabad
414	West bengal	Nadia	Nadia
415	West bengal	Purulia	Purulia
416	West bengal	Uttar Dinajpur	Uttar Dinajpur + Dakshin Dinajpur

Appendix- 3
Intra-State Ranking of Districts Duirng 2001-04 by Level of Development

Sr. No	State	District	Value Output (Rs.)	NAS (Hectares)	GCA (Hectares)	Agri. Workers	Land Productivity	Labour Productivity
1	Andeman &Nikobar Island	Andeman &Nikobar Island	939739960	38000	45000	26630	24730	35289
2	Andhra Pradesh	W-West Godavari	20720437837	412876	636838	1164983	50186	17786
3	Andhra Pradesh	East Godavari	18556894381	399797	703171	1207356	46416	15370
4	Andhra Pradesh	Guntur	25577167670	582288	777426	1466665	43925	17439
5	Andhra Pradesh	Krishna	15411255573	436500	640448	1090697	35306	14130
6	Andhra Pradesh	Nizamabad	7323195485	220626	325194	657799	33193	11133
7	Andhra Pradesh	Karimnagar	11607499222	359603	499116	1026540	32279	11307
8	Andhra Pradesh	Khammam	10885746949	394083	417891	895217	27623	12160
9	Andhra Pradesh	Nellore	8499701609	316588	350177	758330	26848	11208
10	Andhra Pradesh	Warangal	11958739940	456267	565203	1068502	26210	11192
11	Andhra Pradesh	Visakhapatnam	7386759296	292737	372824	854539	25233	8644
12	Andhra Pradesh	Chittoor	8003497163	364896	408019	1162410	21934	6885
13	Andhra Pradesh	Prakasam	11607633094	532022	571880	1051912	21818	11035
14	Andhra Pradesh	Srikakulam	6035515796	286594	387347	822348	21059	7339
15	Andhra Pradesh	Vizianagaram	5844765702	303184	408097	802491	19278	7283
16	Andhra Pradesh	Medak	8177894816	434353	540233	874377	18828	9353
17	Andhra Pradesh	Cuddapah	6080173432	367380	430305	738756	16550	8230
18	Andhra Pradesh	Ranga reddy	4384123439	265223	287374	576390	16530	7606
19	Andhra Pradesh	Kurnool	13175195158	847131	928830	1192770	15553	11046
20	Andhra Pradesh	Nalgonda	6870956125	460239	534751	1081104	14929	6355
21	Andhra Pradesh	Adilabad	7654432440	538110	559037	687714	14225	11130
22	Andhra Pradesh	Mahaboobnagar	8784792558	770910	839245	1333130	11395	6590
23	Andhra Pradesh	Anantapur	8038004189	1006088	1043713	1205402	7989	6668
24	Arunachal Pradesh	Dipnag Valley	360367209	9691	16475	15597	37186	23105
25	Arunachal Pradesh	East Siang	621711405	25344	33611	19477	24531	31920
26	Arunachal Pradesh	Lohit	472756040	20057	36184	38710	23571	12213
27	Arunachal Pradesh	Papumpare	125527160	6498	14037	12255	19318	10243
28	Arunachal Pradesh	Tawang	77906914	4148	7018	9968	18782	7816
29	Arunachal Pradesh	Changlang	277876966	15669	21962	45208	17734	6147
30	Arunachal Pradesh	East kameng	130166115	7699	12653	19100	16907	6815
31	Arunachal Pradesh	Lower Subabsiri	262051409	18208	28371	34044	14392	7697
32	Arunachal Pradesh	West Kameng	71095256	4981	7461	13539	14273	5251
33	Arunachal Pradesh	Upper Siang	77702481	5716	9225	11544	13594	6731
34	Arunachal Pradesh	West Siang	251292395	24367	28951	27965	10313	8986
35	Arunachal Pradesh	Upper Subansiri	79141997	7923	9395	15747	9989	5026
36	Arunachal Pradesh	Tirap	136369826	13893	19004	37237	9816	3662
37	Assam	Tinsukia	5594188667	99450	141054	175405	56251	31893
38	Assam	Dibrugarh	7254930876	137977	178293	174905	52581	41479
39	Assam	Jorhat	4506105608	119933	171044	191220	37572	23565
40	Assam	Golaghat	4002106109	117349	150561	226008	34104	17708
41	Assam	Sonitpur	5605754005	165855	244006	296393	33799	18913
42	Assam	Sivasagar	4629541472	137619	152995	186140	33640	24871
43	Assam	Karimganj	2244459879	68683	96269	119865	32679	18725
44	Assam	Cachar	3711539792	115489	146219	159754	32138	23233
45	Assam	Hailakandi	1450878549	46027	64878	88802	31522	16338
46	Assam	N Kachar Hills	829876063	28316	36095	38109	29308	21776
47	Assam	Nagaon	6124191431	234633	354801	424849	26101	14415
48	Assam	Darrang	4888837001	205111	294319	332458	23835	14705
49	Assam	Dhubri	3095052736	143797	220427	287460	21524	10767

Sr. No	State	District	Value Output (Rs.)	NAS (Hectares)	GCA (Hectares)	Agri. Workers	Land Productivity	Labour Productivity
50	Assam	Karbi Anglong	2618403267	126206	194316	241293	20747	10852
51	Assam	Lakhimpur	2062946333	99930	171929	374951	20644	5502
52	Assam	Kamrup	3648251828	179913	251388	282724	20278	12904
53	Assam	Goalpara	1550814339	79264	108467	150862	19565	10280
54	Assam	Kokrajhar	1649442910	84876	135574	226858	19434	7271
55	Assam	Bongaigaon	1767278929	94908	156397	166352	18621	10624
56	Assam	Barpeta	3321110452	180112	277095	293531	18439	11314
57	Assam	Marigaon	1683233409	92422	124352	191759	18212	8778
58	Assam	Dhemaji	1115187001	63049	102097	204376	17688	5457
59	Assam	Nalbari	2560697130	153545	211064	197740	16677	12950
60	Bihar	Rohtas	6214117712	254293	361554	549024	24437	11318
61	Bihar	Bhabhua	3699289997	153365	199726	366318	24121	10099
62	Bihar	Katihar	3829664956	162389	270964	750957	23583	5100
63	Bihar	Patna	4425878561	206746	257732	788261	21407	5615
64	Bihar	Aurangabad	4023529796	190147	282277	533821	21160	7537
65	Bihar	Gopalganj	3196742272	151384	235041	523384	21117	6108
66	Bihar	Madhupura	2761370130	133037	220901	613353	20756	4502
67	Bihar	Chamaparan(West)	5768249549	280367	375512	972093	20574	5934
68	Bihar	Vaishali	2607711524	128086	195446	570470	20359	4571
69	Bihar	Bhojpur	3781960534	185845	237120	486531	20350	7773
70	Bihar	Saharasra	2214101634	111380	204843	497610	19879	4449
71	Bihar	Supaul	3024771330	153456	260819	656923	19711	4604
72	Bihar	Sitamari	2268780215	122051	209748	677387	18589	3349
73	Bihar	Siwan	3013960157	164041	250433	548957	18373	5490
74	Bihar	Khagaria	1562263635	85435	134827	376526	18286	4149
75	Bihar	Buxar	2518038073	138795	149001	311822	18142	8075
76	Bihar	Araria	3226107268	179529	282112	744186	17970	4335
77	Bihar	Begusarai	2122818940	118574	176201	495529	17903	4284
78	Bihar	Sivhar	460130290	25940	45652	142116	17738	3238
79	Bihar	Jahanabad	1848245957	104543	138733	466768	17679	3960
80	Bihar	Samastipur	3209172455	185374	250849	838141	17312	3829
81	Bihar	Nawadha	1894631894	111387	149217	545267	17009	3475
82	Bihar	Muzafarpur	3478266973	205774	326989	811124	16903	4288
83	Bihar	Gaya	3317614321	197575	265566	1001463	16792	3313
84	Bihar	Purnea	3620207131	218838	307952	830832	16543	4357
85	Bihar	Kishanganj	2069246424	129930	188029	351114	15926	5893
86	Bihar	Sheikhpura	618801364	41206	52884	155168	15017	3988
87	Bihar	Champaran(east)	4407072589	294198	344353	1058377	14980	4164
88	Bihar	Monghyr	651336594	43640	61175	192321	14925	3387
89	Bihar	Nalanda	2694326533	180618	221632	703450	14917	3830
90	Bihar	Saran	2837269221	197002	238965	631843	14402	4490
91	Bihar	Bhagalpur	2056720848	146996	177249	584729	13992	3517
92	Bihar	Madhubani	3026130052	225953	318838	1025155	13393	2952
93	Bihar	Lakhisarai	873364686	69188	78201	223584	12623	3906
94	Bihar	Banka	1813510347	154128	161389	545772	11766	3323
95	Bihar	Jamui	813664993	77431	84002	375390	10508	2168
96	Bihar	Darbhanga	1796194726	171731	196287	774226	10459	2320
97	Chattisgarh	Dhamtari	1996004586	133883	195902	281106	14909	7101
98	Chattisgarh	Janjgir	3255777168	261975	301250	479274	12428	6793
99	Chattisgarh	Durg	6630957987	546650	733267	749675	12130	8845
100	Chattisgarh	Bilaspur	4393339805	367330	468678	627876	11960	6997
101	Chattisgarh	Raipur	5869298948	549111	654739	794468	10689	7388

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102	Chattisgarh	U.B. Kanker	2041575049	207501	219929	298250	9839	6845
103	Chattisgarh	Rajnandgaon	3537456722	359700	443541	518454	9834	6823
104	Chattisgarh	Raigarh	2647945535	280463	307954	480312	9441	5513
105	Chattisgarh	Kabirdham	1732584768	184811	225572	254606	9375	6805
106	Chattisgarh	Mahasamund	2496931893	266610	286403	347282	9365	7190
107	Chattisgarh	Sarguja	4288995813	485884	561742	855113	8827	5016
108	Chattisgarh	Korba	1168987211	132934	143047	278660	8794	4195
109	Chattisgarh	Jagdalpur	3020629202	351523	360221	553172	8593	5461
110	Chattisgarh	Koriya	891300932	106361	118667	201309	8380	4428
111	Chattisgarh	Jashpur	1989922265	251687	266820	349515	7906	5693
112	Chattisgarh	D.B. Dantewara	2089065926	291102	295163	336125	7176	6215
113	Dadra & Nagar Haveli	Dadra & Nagar Haveli	279564315	23000	30000	54185	12155	5159
114	Daman & Diu	All distrcits	77988374	4000	5000	5357	19497	14558
115	Goa	Goa South	1833407775	55639	65750	32525	32952	56369
116	Goa	Goa North	2458987497	85131	102884	54288	28885	45295
117	Gujarat	Navsari	6599411139	147233	174812	308641	44823	21382
118	Gujarat	Porbandar	3642579856	113233	128267	109493	32169	33268
119	Gujarat	Junagadh	16247673537	525233	601724	642025	30934	25307
120	Gujarat	Surat	12802611590	429267	486100	739391	29824	17315
121	Gujarat	Narmada	3087979365	109533	113840	205130	28192	15054
122	Gujarat	Gandhinagar	3847249619	159567	199844	222653	24111	17279
123	Gujarat	Jamnagar	13920907305	600900	636951	346406	23167	40187
124	Gujarat	Banaskantha	16866932120	734833	1063455	725724	22953	23242
125	Gujarat	Valsad	3448787607	161300	180828	339232	21381	10166
126	Gujarat	Amreli	11559039822	541300	565273	382745	21354	30200
127	Gujarat	Bhavnagar	11633606633	550400	610696	424695	21137	27393
128	Gujarat	Kheda	6443275627	305867	366092	533742	21066	12072
129	Gujarat	Rajkot	15508897041	739900	780768	440861	20961	35179
130	Gujarat	Bharuch	6649963564	329800	339072	314338	20164	21155
131	Gujarat	Anand	3222171751	162867	224366	444083	19784	7256
132	Gujarat	Mehsana	6499731084	346800	462853	397185	18742	16364
133	Gujarat	Vadodara	7718774634	516600	570371	808316	14941	9549
134	Gujarat	Sabarkantha	6112546801	439100	520614	592504	13921	10316
135	Gujarat	Patan	5004033755	384933	441390	340850	13000	14681
136	Gujarat	Surendranagar	8138251082	687000	723873	402429	11846	20223
137	Gujarat	Kutch	6996890630	596333	597390	193415	11733	36176
138	Gujarat	Ahmedabad	5655260632	505733	560022	365381	11182	15478
139	Gujarat	Dahod	2038907335	196833	218860	674136	10359	3024
140	Gujarat	Panchmahal	2748579535	271600	295993	760944	10120	3612
141	Gujarat	Dang	480413095	56233	57455	79938	8543	6010
142	Haryana	Kurukshetra	7659321733	149990	265917	143913	51065	53222
143	Haryana	Karnal	9948717351	194918	382661	229994	51041	43256
144	Haryana	Panipat	4544742963	91416	184539	145252	49715	31289
145	Haryana	Kaithal	9435592303	197177	383972	234773	47853	40190
146	Haryana	Fatehabad	9901198012	223753	406774	245298	44251	40364
147	Haryana	Yamunanagar	5362688558	124795	196083	104778	42972	51181
148	Haryana	Hisar	12708939906	308459	600264	392351	41201	32392
149	Haryana	Sirsa	15724718806	383384	672562	291231	41016	53994
150	Haryana	Jind	9823072537	241107	450789	348675	40742	28173
151	Haryana	Sonipat	6212522865	159086	276213	278284	39051	22324
152	Haryana	Faridabad	5719303308	146986	260954	281320	38911	20330

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153	Haryana	Ambala	5144660536	133391	201624	97022	38568	53026
154	Haryana	Panchkula	789831689	25275	45106	40743	31250	19386
155	Haryana	Gurgaon	5340502400	172128	292816	254522	31026	20982
156	Haryana	Rohtak	4176237412	141034	222799	190449	29612	21928
157	Haryana	Mahendragarh	4181551419	141980	253901	232241	29452	18005
158	Haryana	Rewari	3683510283	126516	192008	193713	29115	19015
159	Haryana	Bhiwani	11515011383	401948	723805	391046	28648	29447
160	Haryana	Jhajjar	4208262394	156005	233216	226629	26975	18569
161	Himachal Pradesh	Sirmaur	1296351182	40621	74778	167626	31913	7734
162	Himachal Pradesh	Mandi	1962212053	86839	158258	336722	22596	5827
163	Himachal Pradesh	Lahul Spiti	69532331	3311	3395	11537	21000	6027
164	Himachal Pradesh	Solan	799706942	38766	62884	150156	20629	5326
165	Himachal Pradesh	Bilaspur	598122906	30138	57534	117567	19846	5088
166	Himachal Pradesh	Una	792665623	40797	72202	126714	19430	6256
167	Himachal Pradesh	Kullu	685877053	36900	60982	170748	18588	4017
168	Himachal Pradesh	Hamirpur	645447320	35244	70144	147167	18314	4386
169	Himachal Pradesh	Kangra	2120041589	116628	219058	373639	18178	5674
170	Himachal Pradesh	Shimla	1216680037	68287	95439	248112	17817	4904
171	Himachal Pradesh	Chamba	716540204	42156	66961	170034	16997	4214
172	Himachal Pradesh	Kinnaur	59940718	7424	8840	32106	8074	1867
173	Jammu & Kashmir	Srinagar	485658163	22680	28631	46704	21414	10399
174	Jammu & Kashmir	Jammu	2267854719	112210	201464	162306	20211	13973
175	Jammu & Kashmir	Rajouri	977379714	51865	96227	151551	18845	6449
176	Jammu & Kashmir	Kathua	1126898788	62689	123267	115456	17976	9760
177	Jammu & Kashmir	Poonch	493557043	27555	46158	118044	17912	4181
178	Jammu & Kashmir	Pulwama	934543039	55207	81480	140828	16928	6636
179	Jammu & Kashmir	Anantnag	1084214566	77311	99906	207013	14024	5237
180	Jammu & Kashmir	Budgam	697899846	52680	57131	169426	13248	4119
181	Jammu & Kashmir	Udhampur	897158299	70175	113608	235919	12785	3803
182	Jammu & Kashmir	Baramulla	1038158983	83021	95770	103681	12505	10013
183	Jammu & Kashmir	Kargil	79545227	9565	10445	26161	8316	3041
184	Jammu & Kashmir	Doda	506501047	63934	85044	218655	7922	2316
185	Jammu & Kashmir	Kupwara	344574124	43558	45695	127800	7911	2696
186	Jammu & Kashmir	Leh	64206668	10166	10475	24689	6316	2601
187	Jharkhand	Koderma	368632098	17658	24228	110062	20876	3349
188	Jharkhand	East Singhbhum	1777763337	91274	176269	318835	19477	5576
189	Jharkhand	Godda	1348599166	77180	83810	342060	17473	3943
190	Jharkhand	Chatra	797228032	47090	50920	245707	16930	3245
191	Jharkhand	Garhwa	1017002773	63097	90149	341535	16118	2978
192	Jharkhand	Jamtara	756458073	47713	49483	0	15854	3948
193	Jharkhand	Latehar	701460872	45428	56073	0	15441	3483
194	Jharkhand	Dumka	1761033772	116813	121148	637637	15076	2948
195	Jharkhand	Palamu	1506752272	101115	124807	634040	14901	3483
196	Jharkhand	Giridh	1277407724	85858	117443	479829	14878	2662
197	Jharkhand	Hazaribag	1443385436	97953	109615	488404	14735	2955
198	Jharkhand	Sahibganj	677281202	46108	54482	248024	14689	2731
199	Jharkhand	Bokaro	524850544	36264	50692	227877	14473	2303
200	Jharkhand	Pakur	851818027	61312	69148	207489	13893	4105
201	Jharkhand	Dhanbad	493113580	37749	43809	157735	13063	3126
202	Jharkhand	Deoghar	947296124	72578	76316	279999	13052	3383
203	Jharkhand	Seraikela	815799842	66223	76300	0	12319	3022
204	Jharkhand	Lohargada	565335423	46169	51019	124263	12245	4550

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205	Jharkhand	Simdega	1055867243	92485	97995	0	11417	6102
206	Jharkhand	Gumla	1753848651	171757	181991	574885	10211	6102
207	Jharkhand	Ranchi	2438985409	251638	270376	683245	9692	3570
208	Jharkhand	West Singhbum	1204230662	134452	154913	668548	8957	3022
209	Karnataka	Kodagu	7118069140	147135	148242	31179	48378	228297
210	Karnataka	Dakshina Kannada	3326139516	133765	161917	91575	24866	36321
211	Karnataka	Chamarajanagar	3853980786	155063	194877	319349	24854	12068
212	Karnataka	Mandya	5126437928	212835	249766	619920	24086	8270
213	Karnataka	Chickmagalur	6500307738	279950	297398	257736	23220	25221
214	Karnataka	Udupi	2294436605	100062	125400	184434	22930	12440
215	Karnataka	Shimoga	4315031855	215618	239689	443526	20012	9729
216	Karnataka	Mysore	6853191615	352829	462342	649803	19424	10547
217	Karnataka	Davanagere	6230715705	356479	413213	514822	17478	12103
218	Karnataka	Hassan	6411789322	376458	437475	604542	17032	10606
219	Karnataka	Belgaum	12048197794	732946	893204	1295798	16438	9298
220	Karnataka	Uttara Kannada	1646266530	108863	118988	228071	15122	7218
221	Karnataka	Bagalkote	6212410325	422694	458378	470447	14697	13205
222	Karnataka	Bellary	6220961719	426278	493684	616307	14594	10094
223	Karnataka	Chitradurga	4834874442	419078	480755	520588	11537	9287
224	Karnataka	Bangalore Rural	3325283946	289586	307406	553122	11483	6012
225	Karnataka	Kolar	3610270971	323347	335000	792167	11165	4557
226	Karnataka	Bangalore Urban	819158560	73484	82070	147057	11147	5570
227	Karnataka	Koppal	3590437576	326771	418252	405069	10988	8864
228	Karnataka	Tumkur	5810343264	559207	599490	917354	10390	6334
229	Karnataka	Bidar	3839936847	372238	452153	349772	10316	10978
230	Karnataka	Haveri	3497373380	351826	444549	496368	9941	7046
231	Karnataka	Raichur	5283598303	553161	614547	533008	9552	9913
232	Karnataka	Gulbarga	10241201877	1170079	1368501	908970	8753	11267
233	Karnataka	Bijapur	5345771231	728544	819661	508838	7338	10506
234	Karnataka	Dharwar	2154165399	328778	481810	365386	6552	5896
235	Karnataka	Gadag	1841717068	388166	451779	320066	4745	5754
236	Kerala	Idukki	15886493479	227853	281730	235549	69723	67445
237	Kerala	Wayanad	8000078387	116321	202831	146520	68776	54601
238	Kerala	Kollam	7082133364	141312	195303	177887	50117	39813
239	Kerala	Pathanamthitta	4436859930	91521	116132	122256	48479	36292
240	Kerala	Kottayam	8111569902	171712	218485	135041	47239	60067
241	Kerala	Thiruvananthapuram	6183816547	142459	188864	215767	43408	28660
242	Kerala	Kozhikode	6604150626	159894	227058	93016	41303	71000
243	Kerala	Malappuram	7988439483	198614	270626	212908	40221	37521
244	Kerala	Ernakulam	6592715487	166277	215071	147469	39649	44706
245	Kerala	Thrissur	5623834827	142428	194403	161278	39485	34870
246	Kerala	Palakkad	7957748856	202925	319993	404778	39215	19660
247	Kerala	Kannur	7461417838	201331	263153	151852	37060	49136
248	Kerala	Kasaragod	4919505388	132964	152030	61814	36999	79586
249	Kerala	Alappuzha	2750898242	94110	126684	127869	29231	21513
250	Lakshadweep	All distrcits	106717617	2669	2800	5781	39984	18460
251	Madhya Pradesh	Harda	4082880690	169915	290472	171214	24029	23847
252	Madhya Pradesh	Hoshangabad	7016180703	294835	492867	245062	23797	28630
253	Madhya Pradesh	Narsinghpur	6592997594	301016	402859	309809	21903	21281
254	Madhya Pradesh	Indore	5420573904	255497	399231	282149	21216	19212
255	Madhya Pradesh	Sehore	7724569518	379981	564937	367632	20329	21012
256	Madhya Pradesh	Dewas	7718986649	382380	542701	446274	20187	17297

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257	Madhya Pradesh	Neemach	3362318515	188310	240626	262399	17855	12814
258	Madhya Pradesh	Morena	4564733418	257322	314826	403310	17739	11318
259	Madhya Pradesh	Sheopur kalan	2065266241	117745	146616	186660	17540	11064
260	Madhya Pradesh	Tikamgarh	4388706521	253257	383642	461859	17329	9502
261	Madhya Pradesh	Gwalior	3341249759	194696	238647	213751	17161	15632
262	Madhya Pradesh	Bhopal	2535224538	152259	208906	135531	16651	18706
263	Madhya Pradesh	Datia	3234056830	194323	222471	247266	16643	13079
264	Madhya Pradesh	Khandwa	6168062185	394733	470779	565262	15626	11455
265	Madhya Pradesh	Shivpuri	5498189851	366192	465610	541072	15015	10162
266	Madhya Pradesh	Bhind	4822396371	323814	352516	380268	14892	12682
267	Madhya Pradesh	Ratlam	4815960794	328168	405694	409220	14675	11769
268	Madhya Pradesh	Raisen	5998657101	429224	506814	295076	13976	20329
269	Madhya Pradesh	Chhindwara	6518051845	477866	566928	580004	13640	11238
270	Madhya Pradesh	Dhar	6852026565	506202	661814	663603	13536	10325
271	Madhya Pradesh	Ujjain	6564121658	485551	674351	511249	13519	12839
272	Madhya Pradesh	Vidisha	7122775009	536940	660897	336850	13265	21145
273	Madhya Pradesh	Jabalpur	3568545985	271676	365031	321076	13135	11114
274	Madhya Pradesh	Mandsaur	4653162516	354946	439032	457223	13109	10177
275	Madhya Pradesh	Shajapur	5841237723	448058	593894	511666	13037	11416
276	Madhya Pradesh	Balaghat	3405369509	274929	344377	570241	12386	5972
277	Madhya Pradesh	Chhatarpur	4563651000	377575	465993	446854	12087	10213
278	Madhya Pradesh	Betul	4721006655	399650	521745	489917	11813	9636
279	Madhya Pradesh	Rajgarh	4786332563	415685	526588	512898	11514	9332
280	Madhya Pradesh	Ashoknagar	1159545633	101541	120900	76847	11419	12450
281	Madhya Pradesh	Rewa	4127069160	369826	499276	676184	11159	6103
282	Madhya Pradesh	Seoni	4044741454	365686	461729	473329	11061	8545
283	Madhya Pradesh	Sagar	5724804725	529907	693319	439285	10803	13032
284	Madhya Pradesh	Guna	5475019107	509296	609801	439697	10750	12450
285	Madhya Pradesh	Mandla	2305991531	217295	276445	395655	10612	5828
286	Madhya Pradesh	Satna	3788647427	358151	471103	491683	10578	7705
287	Madhya Pradesh	Damoh	3176939875	306716	382551	279645	10358	11361
288	Madhya Pradesh	Khargone	3811797208	409055	462656	574110	9319	6639
289	Madhya Pradesh	Burhanpur	307240449	34615	38923	0	8876	11455
290	Madhya Pradesh	Katni	1699300133	196107	258786	280179	8665	6065
291	Madhya Pradesh	Barwani	2008663731	232344	261792	442397	8645	4540
292	Madhya Pradesh	Panna	2041497950	243196	279421	293432	8394	6957
293	Madhya Pradesh	Sidhi	3015192512	360006	487977	622693	8375	4842
294	Madhya Pradesh	Jhabua	2836749280	358856	396312	639343	7905	4437
295	Madhya Pradesh	Dindori	1515630911	204006	266271	299131	7429	5067
296	Madhya Pradesh	Shahdol	1929782989	283088	328736	506275	6817	3812
297	Madhya Pradesh	Umaria	705652747	107748	138673	167749	6549	4496
298	Madhya Pradesh	Anupur	346364546	53875	64508		6429	4496
299	Maharashtra	Kolhapur	19559612941	427733	744300	979419	45729	19971
300	Maharashtra	Jalgaon	34209857279	852133	1325300	1144428	40146	29893
301	Maharashtra	Sindhudurg	3182661353	140300	159000	271915	22685	11705
302	Maharashtra	Hingoli	7325709577	329500	521800	391924	22233	18692
303	Maharashtra	Raigad	4128764606	188500	215500	457840	21903	9018
304	Maharashtra	Ratnagiri	4461465258	244900	255600	514982	18217	8663
305	Maharashtra	Thane	4182233310	244600	260600	718322	17098	5822
306	Maharashtra	Washim	6464767029	379533	574500	392908	17033	16454
307	Maharashtra	Satara	9345963367	556700	701900	929278	16788	10057
308	Maharashtra	Parbhani	7937277248	489967	825600	496852	16200	15975

Sr. No	State	District	Value Output (Rs.)	NAS (Hectares)	GCA (Hectares)	Agri. Workers	Land Productivity	Labour Productivity
309	Maharashtra	Wardha	5305933477	365567	384100	388813	14514	13646
310	Maharashtra	Amravati	10651781171	750067	1031100	793250	14201	13428
311	Maharashtra	Nanded	10018987223	706167	822500	912158	14188	10984
312	Maharashtra	Buldhana	9574572274	686333	851800	840424	13950	11393
313	Maharashtra	Nandurbar	4017860724	296367	325300	503385	13557	7982
314	Maharashtra	Akola	5753938721	436867	547200	449369	13171	12804
315	Maharashtra	Bhandara	4672915598	364233	434800	390786	12829	11958
316	Maharashtra	Sangli	7541867980	591667	690700	866868	12747	8700
317	Maharashtra	Nagpur	6757289169	547267	591900	605432	12347	11161
318	Maharashtra	Gondia	2384276595	198000	240000	405072	12042	5886
319	Maharashtra	Yavatmal	10217151753	849300	977400	891894	12030	11456
320	Maharashtra	Pune	11448124900	962500	1169400	1239962	11894	9233
321	Maharashtra	Latur	6069763177	524667	726400	631623	11569	9610
322	Maharashtra	Chandrapur	5132921015	449133	531100	627741	11429	8177
323	Maharashtra	Jalna	6566330906	582300	740100	573153	11277	11457
324	Maharashtra	Nasik	8933858349	876667	958100	1396102	10191	6399
325	Maharashtra	Dhule	4352468553	435433	483200	538737	9996	8079
326	Maharashtra	Aurangabad	6919711423	694533	1033000	771498	9963	8969
327	Maharashtra	Ahmednagar	9831931499	1116367	1516400	1348560	8807	7291
328	Maharashtra	Gadchiroli	1388772940	169900	181500	420263	8174	3305
329	Maharashtra	Osmanabad	3727451138	489867	754500	526120	7609	7085
330	Maharashtra	Beed	5474860661	767400	936400	761993	7134	7185
331	Maharashtra	Solapur	6303988438	1027133	1133700	1116638	6137	5646
332	Manipur	Imphal West	514149064	20975	20975	53586	24512	9595
333	Manipur	Bishnupur	511527799	21300	21300	43153	24015	11854
334	Manipur	Imphal East	695651741	34675	34710	54574	20062	12747
335	Manipur	Thoubal	576099448	29975	29975	111596	19219	5162
336	Manipur	Ukhrul	365739940	19500	19500	48788	18756	7497
337	Manipur	Senapati	652597183	35305	35625	158049	18485	4129
338	Manipur	Churachandpur	494446585	28825	28885	65509	17153	7548
339	Manipur	Chandel	156212088	10980	11000	36995	14227	4223
340	Manipur	Tamenglong	158532625	12360	12615	41437	12826	3826
341	Meghalaya	East Khasi Hills	871073418	27641	36234	76748	31514	11350
342	Meghalaya	RI BHOI	769713455	26911	29377	68217	28602	11283
343	Meghalaya	East Garo Hills	760010715	32117	39414	89519	23664	8490
344	Meghalaya	West Garo Hills	1296961907	64328	85489	152508	20162	8504
345	Meghalaya	West Khasi Hills	546836754	27335	32004	111739	20005	4894
346	Meghalaya	Jainta Hills	592955766	32395	32759	96402	18304	6151
347	Meghalaya	South Garo Hills	281295648	18314	23041	35037	15360	8029
348	Mizoram	Chhimtuipui	223074959	12663	12663	104011	17616	2145
349	Mizoram	Lunglei	176017678	11005	11005	48983	15995	3593
350	Mizoram	Kolasib	263047717	17063	17063	21950	15417	11984
351	Mizoram	Aizwal	289445029	19385	19385	64650	14931	4477
352	Mizoram	Mamit	192569287	13316	13316	21479	14461	8965
353	Mizoram	Saiha	167401990	13736	13736	19582	12187	8549
354	Nagaland	Wokha	1052107997	40760	48897	37295	25812	28210
355	Nagaland	Kohima	611910765	35042	39297	79444	17462	7702
356	Nagaland	Phek	739248424	42608	48307	53455	17350	13829
357	Nagaland	Mokokchun	608857428	36608	42892	72258	16632	8426
358	Nagaland	Denapur	797913477	54093	65573	33674	14751	23695
359	Nagaland	Mon	499296937	34514	39858	114119	14467	4375
360	Nagaland	Thensang	555914576	41439	46646	158657	13415	3504

Sr. No	State	District	Value Output (Rs.)	NAS (Hectares)	GCA (Hectares)	Agri. Workers	Land Productivity	Labour Productivity
361	Orissa	Phulbani	3073804630	118667	173783	212570	25903	14460
362	Orissa	Gajapati	1837666824	79667	132473	215295	23067	8536
363	Orissa	Jagatsingpur	2153881691	98667	182067	179734	21830	11984
364	Orissa	Ganjam	8397980529	388333	649230	824466	21626	10186
365	Orissa	Cuttak	3493798651	166667	306240	342500	20963	10201
366	Orissa	Chenkanal	3450424802	164667	259937	213365	20954	16171
367	Orissa	Sonepur	2089084839	109667	173743	183053	19049	11412
368	Orissa	Bargarh	6259308191	329667	436057	447564	18987	13985
369	Orissa	Puri	2623868693	139333	247677	270536	18832	9699
370	Orissa	Sambalpur	3370328970	179000	244567	225039	18829	14977
371	Orissa	Jajpur	2828445090	150333	258663	249092	18814	11355
372	Orissa	Angul	3591008980	192000	307947	263254	18703	13641
373	Orissa	Nayagareh	2356986622	133333	219273	179523	17677	13129
374	Orissa	Kendrapara	2446366388	138667	237780	262010	17642	9337
375	Orissa	Bhadrak	2937640847	168000	213847	261656	17486	11227
376	Orissa	Balasore	4094561688	234333	321090	433982	17473	9435
377	Orissa	Rayagada	2631237951	152000	229963	298295	17311	8821
378	Orissa	Jharsuguda	1266634764	79667	104403	88417	15899	14326
379	Orissa	Khurda	2070378916	134000	218167	173894	15451	11906
380	Orissa	Deogarh	1012992881	66333	98057	99078	15271	10224
381	Orissa	Koraput	4194014475	282333	377467	416432	14855	10071
382	Orissa	Keonjhar	4361124254	294333	426867	430796	14817	10123
383	Orissa	Boudh	1186219875	85333	121393	133438	13901	8890
384	Orissa	Kalahandi	4653568739	347667	498010	496393	13385	9375
385	Orissa	Mayurbhanj	5166212127	394667	472753	684278	13090	7550
386	Orissa	Nawarangpur	2707099083	212333	284700	418129	12749	6474
387	Orissa	Bolangir	4107906776	332000	425640	399816	12373	10274
388	Orissa	Malkangiri	1646117486	134000	193057	206797	12284	7960
389	Orissa	Nawapara	1872574357	163333	226720	190435	11465	9833
390	Orissa	Sundargarh	3088937044	304333	387697	439585	10150	7027
391	Pondicherry	Pondicherry	810064776	13759	26465	61600	58874	13150
392	Pondicherry	Yaman	34837651	678	1272	2478	51383	14059
393	Pondicherry	MAHE	27986267	630	633	235	44446	119090
394	Pondicherry	Karaikal	133838037	6900	9083	19066	19397	7020
395	Punjab	Ludhiana	19556831230	305752	604681	226927	63963	86181
396	Punjab	Sangrur	26723260791	445238	872429	382398	60020	69883
397	Punjab	Moga	11796282548	199875	392342	188250	59018	62663
398	Punjab	Kapurthala	7890247321	136065	266581	94855	57989	83182
399	Punjab	Patiala	17419919295	301137	588439	266819	57847	65287
400	Punjab	Fatehgarh Sahib	5879634254	103159	192416	70688	56996	83177
401	Punjab	Ferozepur	24930391422	474863	892608	367523	52500	67834
402	Punjab	Muktsar	11874862322	226339	440192	181864	52465	65295
403	Punjab	Jalandhar	12410601418	238648	414101	168140	52004	73811
404	Punjab	Bhathinda	15404871493	298001	552015	255510	51694	60291
405	Punjab	Faridkot	6652817788	130512	246383	129296	50975	51454
406	Punjab	Mansa	9772855832	194183	365248	165914	50328	58903
407	Punjab	Nawanshahar	4666702777	98855	178122	85783	47208	54401
408	Punjab	Amritsar	20394856861	450084	825065	431423	45313	47273
409	Punjab	Gurdaspur	12451121478	293333	493201	244726	42447	50878
410	Punjab	Ropar	4883731939	122807	211483	129277	39767	37777
411	Punjab	Hoshiarpur	7911251928	207473	355499	208913	38131	37869
412	Rajasthan	Kota	6917157517	243471	356852	226353	28411	30559

Sr. No	State	District	Value Output (Rs.)	NAS (Hectares)	GCA (Hectares)	Agri. Workers	Land Productivity	Labour Productivity
413	Rajasthan	Baran	7465428519	273726	382988	340432	27273	21929
414	Rajasthan	Alwar	11292619590	495188	759707	1035554	22805	10905
415	Rajasthan	Bharatpur	8914822370	391133	556419	633572	22792	14071
416	Rajasthan	Dholpur	3034954642	145913	195413	242895	20800	12495
417	Rajasthan	Dausa	4083375444	207436	314022	399761	19685	10215
418	Rajasthan	Bundi	4286730320	226948	334191	329481	18889	13011
419	Rajasthan	Karoli	3331166876	177056	265767	344344	18814	9674
420	Rajasthan	Jhalawar	5583657032	303022	419643	450351	18427	12398
421	Rajasthan	Ganganagar	11840012927	645156	891204	437425	18352	27068
422	Rajasthan	Chittore	7260595793	401977	526127	720867	18062	10072
423	Rajasthan	Jhunjhunu	5947501091	395462	572641	529220	15039	11238
424	Rajasthan	S. Madhopur	3330983262	231597	303573	340304	14383	9788
425	Rajasthan	Jaipur	8904634003	620446	867364	766459	14352	11618
426	Rajasthan	Hanumangarh	9652082675	747004	1039947	478210	12921	20184
427	Rajasthan	Sirohi	1724028266	139563	177745	173595	12353	9931
428	Rajasthan	Sikar	5726503152	487575	667446	587941	11745	9740
429	Rajasthan	Banswara	2640577875	230315	301990	610244	11465	4327
430	Rajasthan	Udaipur	2624163140	237397	282096	702773	11054	3734
431	Rajasthan	Rajsamand	939680941	90415	102301	218274	10393	4305
432	Rajasthan	Bhilwara	3257151280	354724	440923	601764	9182	5413
433	Rajasthan	Dungarpur	983161417	117918	147308	405113	8338	2427
434	Rajasthan	Tonk	3083669670	398168	463372	367086	7745	8400
435	Rajasthan	Nagaur	7767417478	1086052	1248449	815672	7152	9523
436	Rajasthan	Jalore	4159787807	616410	755041	563005	6748	7389
437	Rajasthan	Pali	3208447666	501586	544496	408111	6397	7862
438	Rajasthan	Jodhpur	5955890023	935653	998571	656274	6365	9075
439	Rajasthan	Bikaner	6822597502	1112010	1203476	406513	6135	16783
440	Rajasthan	Ajmer	2147184418	373766	425675	410669	5745	5229
441	Rajasthan	Churu	3786285696	955341	1028861	660235	3963	5735
442	Rajasthan	Jaisalmer	1043099031	378938	420221	116734	2753	8936
443	Rajasthan	Barmer	3776649745	1467508	1566135	716771	2574	5269
444	Sikkim	South	482408712	17500	33250	51202	27566	9422
445	Sikkim	West	395186064	16630	34590	39844	23763	9918
446	Sikkim	East	390473084	18122	27183	46044	21547	8480
447	Sikkim	North	142160203	9740	11493	11271	14596	12613
448	Tamil Nadu	The Nilgiris	6668309285	78618	78702	62171	84819	107258
449	Tamil Nadu	Kanyakumari	4475676887	79829	93501	98066	56066	45639
450	Tamil Nadu	Namakkal	8854455756	165143	227478	450157	53617	19670
451	Tamil Nadu	Tirunelveli	6314847468	135514	157907	508268	46599	12424
452	Tamil Nadu	Cuddalore	9745215494	216367	279100	645096	45040	15107
453	Tamil Nadu	Tiruchirapalli	6756651238	153956	166345	554380	43887	12188
454	Tamil Nadu	Thiruvallur	4525177108	108054	145220	328273	41879	13785
455	Tamil Nadu	Erode	10170461435	260123	273554	787023	39099	12923
456	Tamil Nadu	Theni	4155524882	108127	116755	335068	38432	12402
457	Tamil Nadu	Thanjavur	6533395290	176501	223348	563970	37016	11585
458	Tamil Nadu	Kancheepuram	4809402451	132010	164685	425258	36432	11309
459	Tamil Nadu	Salem	7526239880	218955	286936	694641	34373	10835
460	Tamil Nadu	Thoothukudi	5261186048	156851	160169	238702	33543	22041
461	Tamil Nadu	Villupuram	9455632987	293127	337503	1120328	32258	8440
462	Tamil Nadu	Vellore	5707424286	185582	223910	643894	30754	8864
463	Tamil Nadu	Dharmapuri	8159166852	298710	348171	994167	27315	8207
464	Tamil Nadu	Krishnagiri	1635978862	60059	66604	270231	27239	6054

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465	Tamil Nadu	Pudukottai	3588412990	137015	139012	477901	26190	7509
466	Tamil Nadu	Coimbatore	8079052529	310740	323255	574825	25999	14055
467	Tamil Nadu	Madurai	3132025848	121929	127689	458141	25687	6836
468	Tamil Nadu	Thiruvannamalai	4763202710	202411	256090	772091	23532	6169
469	Tamil Nadu	Karur	1980066496	87214	88435	294457	22704	6724
470	Tamil Nadu	Nagapattinam	3054080600	137701	212359	382246	22179	7990
471	Tamil Nadu	Dindigul	4792244740	228087	234070	606955	21011	7896
472	Tamil Nadu	Perambalur	3780155747	196284	210572	219773	19259	17200
473	Tamil Nadu	Virudhunagar	2385420949	140100	144695	282202	17027	8453
474	Tamil Nadu	Thiruvarur	2214763748	134274	197662	354407	16494	6249
475	Tamil Nadu	Ramanathapuram	2846175263	184105	184105	304045	15460	9361
476	Tamil Nadu	Sivagangai	1594816771	109940	110032	331165	14506	4816
477	Tripura	North (Tripura)	1460346829	43948	69130	85531	33229	17074
478	Tripura	Dhalai	759875545	26447	41700	81829	28732	9286
479	Tripura	South (Tripura)	2319022984	88266	101654	196233	26273	11818
480	Tripura	West (Tripura)	2925023948	121339	130535	226119	24106	12936
481	Uttar Pradesh	Meerut	10329698737	199362	305585	331904	51814	31123
482	Uttar Pradesh	Bagpat	5617643971	110534	174803	226502	50823	24802
483	Uttar Pradesh	Farrukhabad	7627020497	152531	216350	313886	50003	24299
484	Uttar Pradesh	Ghaziabad	7344555046	147771	237150	229148	49702	32052
485	Uttar Pradesh	Muzaffarnagar	16182506904	325770	475731	691794	49675	23392
486	Uttar Pradesh	Kannauj	5873790368	142656	227392	323309	41175	18168
487	Uttar Pradesh	Bijnor	13902931818	342101	444344	509265	40640	27300
488	Uttar Pradesh	Saharanpur	11143409744	274224	424997	531028	40636	20985
489	Uttar Pradesh	J.B.Fule Nagar	6743991875	170005	261493	304175	39669	22171
490	Uttar Pradesh	Rampur	7648625687	193215	354965	360857	39586	21196
491	Uttar Pradesh	Pilibhit	8807421218	232917	381773	330833	37814	26622
492	Uttar Pradesh	Bulandshahar	10553614918	293299	493047	613873	35982	17192
493	Uttar Pradesh	Barabanki	9378062337	263525	468293	779445	35587	12032
494	Uttar Pradesh	Hathras	5174495512	147137	229506	230519	35168	22447
495	Uttar Pradesh	Eath	11148996078	321803	520553	588136	34645	18956
496	Uttar Pradesh	Maharalganj	6906385747	202232	358633	719497	34151	9599
497	Uttar Pradesh	Ferozabad	6116121979	180134	279185	264643	33953	23111
498	Uttar Pradesh	Ambedker Nagar	5544316115	164525	279734	515129	33699	10763
499	Uttar Pradesh	Kheri	16050371089	482810	712085	796645	33244	20147
500	Uttar Pradesh	Kushi Nagar	7291376039	222049	337106	828554	32837	8800
501	Uttar Pradesh	Shahjahanpur	11515168682	350801	565517	428401	32825	26879
502	Uttar Pradesh	Bareilly	10505768347	328550	523444	646035	31976	16262
503	Uttar Pradesh	Agra	9140106671	286684	408413	392857	31882	23266
504	Uttar Pradesh	Moradabad	9688156011	317478	536618	650938	30516	14883
505	Uttar Pradesh	Etawah	4408069119	145262	233055	246051	30346	17915
506	Uttar Pradesh	Mathura	8033991700	270213	405646	441922	29732	18180
507	Uttar Pradesh	Faizabad	4333648234	146107	225758	621268	29661	6975
508	Uttar Pradesh	Chandauli	4048622940	137216	241219	342380	29505	11825
509	Uttar Pradesh	Aligarh	8865918809	301670	493752	480517	29389	18451
510	Uttar Pradesh	Mainpuri	5566124863	190655	291908	343873	29195	16187
511	Uttar Pradesh	Badaun	11871300715	415493	676503	718830	28572	16515
512	Uttar Pradesh	Mau	3508428504	125665	209197	364483	27919	9626
513	Uttar Pradesh	Sant Kabir Nagar	3268714116	117766	205900	404286	27756	8085
514	Uttar Pradesh	Auraiya	3954060342	143042	223310	287573	27643	13750
515	Uttar Pradesh	Azamgarh	8107769079	299105	493650	879356	27107	9220
516	Uttar Pradesh	Sultanpur	7577765406	283359	426470	768487	26743	9861

Sr. No	State	District	Value Output (Rs.)	NAS (Hectares)	GCA (Hectares)	Agri. Workers	Land Productivity	Labour Productivity
517	Uttar Pradesh	Kanpur (C)	5047922906	191551	268616	371240	26353	13597
518	Uttar Pradesh	Kanpur (D)	5848815586	222620	312355	398496	26273	14677
519	Uttar Pradesh	Gonda	7686053555	294649	458673	784653	26085	9795
520	Uttar Pradesh	Deoria	5168359433	198307	321393	568650	26062	9089
521	Uttar Pradesh	Ghazipur	6664832653	256118	413421	693809	26022	9606
522	Uttar Pradesh	Sitapur	11227652418	432795	622550	891409	25942	12595
523	Uttar Pradesh	Jaunpur	7230097420	282968	440188	886254	25551	8158
524	Uttar Pradesh	Basti	5234938709	207587	304046	601545	25218	8702
525	Uttar Pradesh	Ballia	5356392524	217359	350140	562964	24643	9515
526	Uttar Pradesh	Hardoi	10263013266	417875	627654	863047	24560	11892
527	Uttar Pradesh	Varanasi	2781848948	113778	157391	305230	24450	9114
528	Uttar Pradesh	Pratapgarh	5316813720	218268	327898	727177	24359	7312
529	Uttar Pradesh	Allahabad	8184176752	347435	517431	940655	23556	8701
530	Uttar Pradesh	Lucknow	3223820791	137164	207988	345753	23503	9324
531	Uttar Pradesh	Balrampur	4709257284	206892	304966	624371	22762	7542
532	Uttar Pradesh	Fatehpur	6599257164	292139	401467	682988	22589	9662
533	Uttar Pradesh	Gorakhpur	5708884806	253152	388358	750876	22551	7603
534	Uttar Pradesh	Raibareli	5977444956	268789	409490	800490	22238	7467
535	Uttar Pradesh	S.Rabidas Nagar	1511297146	69116	99291	160321	21866	9427
536	Uttar Pradesh	Unnao	6444828439	294878	439013	702230	21856	9178
537	Uttar Pradesh	Mirzapur	4526989497	208903	304645	453727	21670	9977
538	Uttar Pradesh	Bahraich	7134961803	331212	505695	710202	21542	10046
539	Uttar Pradesh	Jalaun	7288185928	347307	402502	395991	20985	18405
540	Uttar Pradesh	G.B. Nagar	2603284465	127726	140850	126707	20382	20546
541	Uttar Pradesh	Kaushambi	2633580940	130196	173308	402616	20228	6541
542	Uttar Pradesh	Shrawashtri	2877159155	142759	216297	408859	20154	7037
543	Uttar Pradesh	Siddarthanagar	4821349118	240309	342133	679834	20063	7092
544	Uttar Pradesh	Jhansi	5810550805	338570	419292	393122	17162	14781
545	Uttar Pradesh	Sonbhadra	3019688303	191885	273895	394574	15737	7653
546	Uttar Pradesh	Hamirpur	4325504533	299769	338807	314863	14429	13738
547	Uttar Pradesh	Banda	4778558761	347692	419585	473894	13744	10084
548	Uttar Pradesh	Lalitpur	3461064335	252804	348361	341038	13691	10149
549	Uttar Pradesh	Chitrakoot	2285632213	171249	190367	279905	13347	8166
550	Uttar Pradesh	Mahoba	2608811195	239856	271572	233486	10877	11173
551	Uttranachal	U.S Nagar	6163838989	149576	248861	217729	41209	28310
552	Uttranachal	Haridwar	4827906905	120844	171440	177689	39952	27171
553	Uttranachal	Nainital	1468056523	48812	81813	141717	30076	10359
554	Uttranachal	Dehradun	1117802950	51500	77825	102653	21705	10889
555	Uttranachal	Uttar Kashi	533416447	29552	45594	104480	18050	5105
556	Uttranachal	Champawat	381266871	23780	38498	64859	16033	5878
557	Uttranachal	Vageshwar	379173469	23763	41477	92443	15957	4102
558	Uttranachal	Pithoragarh	718177110	45788	82377	136811	15685	5249
559	Uttranachal	Chamoli	436806720	30530	46474	105265	14307	4150
560	Uttranachal	Tehri garhwal	797700866	56847	88672	188610	14033	4229
561	Uttranachal	Rudraprayag	239573352	19838	31640	77025	12077	3110
562	Uttranachal	Pauri Garhwal	852783758	83629	127411	185535	10197	4596
563	Uttranachal	Almora	817238794	83035	131455	223351	9842	3659
564	West Bengal	Hooghly	15567152110	225012	516862	725750	69184	21450
565	West Bengal	Nadia	17411807209	308291	855733	693318	56479	25114
566	West Bengal	Burdwan	24284215620	469781	868880	1092247	51693	22233
567	West Bengal	Howrah	4270334426	83459	174332	217643	51167	19621
568	West Bengal	Jalpaiguri	16792182497	344742	519539	495462	48709	33892

Sr. No	State	District	Value Output (Rs.)	NAS (Hectares)	GCA (Hectares)	Agri. Workers	Land Productivity	Labour Productivity
569	West Bengal	24-Parganas(N)	12375191987	266355	556503	698210	46461	17724
570	West Bengal	Murshidabad	18639632977	405574	912618	930265	45959	20037
571	West Bengal	Midnapore (West)	21531570817	532327	852095	1421429	40448	15148
572	West Bengal	Birbhum	12772634325	319540	532384	676874	39972	18870
573	West Bengal	Malda	8957013944	227951	454033	689178	39294	12997
574	West Bengal	Midnapore (East)	12585596895	325131	556796	830851	38709	15148
575	West Bengal	Bankura	12626096005	362869	510441	943017	34795	13389
576	West Bengal	Uttar Dinajpur	8631336170	273432	513841	647706	31567	13326
577	West Bengal	Cooch Behar	7817404548	260192	478594	647285	30045	12077
578	West Bengal	Dakshin Dinajpur	5400738138	193195	302438	411516	27955	13124
579	West Bengal	Darjeeling	3969287567	144188	172739	140506	27528	28250
580	West Bengal	24-Parganas(S)	9881960582	381803	542936	941326	25882	10498
581	West Bengal	Purulia	5909741870	310640	329511	758939	19024	7787

Appendix 4
All India Ranking of Districts by Levels of Development, 2001-04
(Base Land Productivity)

Rank	State	District	Value Output (Rs.)	NAS (Hectares)	GCA (Hectares)	Agri. Workers	Land Productivity	Labour Productivity
1	Tamil Nadu	The Nilgiris	6668309285	78618	78702	62171	84819	107258
2	Kerala	Idukki	15886493479	227853	281730	235549	69723	67445
3	West Bengal	Hooghly	15567152110	225012	516862	725750	69184	21450
4	Kerala	Wayanad	8000078387	116321	202831	146520	68776	54601
5	Punjab	Ludhiana	19556831230	305752	604681	226927	63963	86181
6	Punjab	Sangrur	26723260791	445238	872429	382398	60020	69883
7	Punjab	Moga	11796282548	199875	392342	188250	59018	62663
8	Pondicherry	Pondicherry	810064776	13759	26465	61600	58874	13150
9	Punjab	Kapurthala	7890247321	136065	266581	94855	57989	83182
10	Punjab	Patiala	17419919295	301137	588439	266819	57847	65287
11	Punjab	Fatehgarh Sahib	5879634254	103159	192416	70688	56996	83177
12	West Bengal	Nadia	17411807209	308291	855733	693318	56479	25114
13	Assam	Tinsukia	5594188667	99450	141054	175405	56251	31893
14	Tamil Nadu	Kanyakumari	4475676887	79829	93501	98066	56066	45639
15	Tamil Nadu	Namakkal	8854455756	165143	227478	450157	53617	19670
16	Assam	Dibrugarh	7254930876	137977	178293	174905	52581	41479
17	Punjab	Ferozepur	24930391422	474863	892608	367523	52500	67834
18	Punjab	Muktsar	11874862322	226339	440192	181864	52465	65295
19	Punjab	Jalandhar	12410601418	238648	414101	168140	52004	73811
20	Uttar Pradesh	Meerut	10329698737	199362	305585	331904	51814	31123
21	Punjab	Bhathinda	15404871493	298001	552015	255510	51694	60291
22	West Bengal	Burdwan	24284215620	469781	868880	1092247	51693	22233
23	Pondicherry	Yaman	34837651	678	1272	2478	51383	14059
24	West Bengal	Howrah	4270334426	83459	174332	217643	51167	19621
25	Haryana	Kurukshetra	7659321733	149990	265917	143913	51065	53222
26	Haryana	Karnal	9948717351	194918	382661	229994	51041	43256
27	Punjab	Faridkot	6652817788	130512	246383	129296	50975	51454
28	Uttar Pradesh	Bagpat	5617643971	110534	174803	226502	50823	24802
29	Punjab	Mansa	9772855832	194183	365248	165914	50328	58903
30	Andhra Pradesh	W-West Godavari	20720437837	412876	636838	1164983	50186	17786
31	Kerala	Kollam	7082133364	141312	195303	177887	50117	39813
32	Uttar Pradesh	Farrukhabad	7627020497	152531	216350	313886	50003	24299
33	Haryana	Panipat	4544742963	91416	184539	145252	49715	31289
34	Uttar Pradesh	Ghaziabad	7344555046	147771	237150	229148	49702	32052
35	Uttar Pradesh	Muzaffarnagar	16182506904	325770	475731	691794	49675	23392
36	West Bengal	Jalpaiguri	16792182497	344742	519539	495462	48709	33892
37	Kerala	Pathanamthitta	4436859930	91521	116132	122256	48479	36292
38	Karnataka	Kodagu	7118069140	147135	148242	31179	48378	228297
39	Haryana	Kaithal	9435592303	197177	383972	234773	47853	40190
40	Kerala	Kottayam	8111569902	171712	218485	135041	47239	60067
41	Punjab	Nawanshahar	4666702777	98855	178122	85783	47208	54401
42	Tamil Nadu	Tirunelveli	6314847468	135514	157907	508268	46599	12424
43	West Bengal	24-Parganas(N)	12375191987	266355	556503	698210	46461	17724
44	Andhra Pradesh	East Godavari	18556894381	399797	703171	1207356	46416	15370
45	West Bengal	Murshidabad	18639632977	405574	912618	930265	45959	20037
46	Maharashtra	Kolhapur	19559612941	427733	744300	979419	45729	19971
47	Punjab	Amritsar	20394856861	450084	825065	431423	45313	47273
48	Tamil Nadu	Cuddalore	9745215494	216367	279100	645096	45040	15107

Rank	State	District	Value Output (Rs.)	NAS (Hectares)	GCA (Hectares)	Agri. Workers	Land Productivity	Labour Productivity
49	Gujarat	Navsari	6599411139	147233	174812	308641	44823	21382
50	Pondicherry	MAHE	27986267	630	633	235	44446	119090
51	Haryana	Fatehabad	9901198012	223753	406774	245298	44251	40364
52	Andhra Pradesh	Guntur	25577167670	582288	777426	1466665	43925	17439
53	Tamil Nadu	Tiruchirapalli	6756651238	153956	166345	554380	43887	12188
54	Kerala	Thiruvananthapuram	6183816547	142459	188864	215767	43408	28660
55	Haryana	Yamunanagar	5362688558	124795	196083	104778	42972	51181
56	Punjab	Gurdaspur	12451121478	293333	493201	244726	42447	50878
57	Tamil Nadu	Thiruvallur	4525177108	108054	145220	328273	41879	13785
58	Kerala	Kozhikode	6604150626	159894	227058	93016	41303	71000
59	Uttranachal	U.S Nagar	6163838989	149576	248861	217729	41209	28310
60	Haryana	Hisar	12708939906	308459	600264	392351	41201	32392
61	Uttar Pradesh	Kannauj	5873790368	142656	227392	323309	41175	18168
62	Haryana	Sirsa	15724718806	383384	672562	291231	41016	53994
63	Haryana	Jind	9823072537	241107	450789	348675	40742	28173
64	Uttar Pradesh	Bijnor	13902931818	342101	444344	509265	40640	27300
65	Uttar Pradesh	Saharanpur	11143409744	274224	424997	531028	40636	20985
66	West Bengal	Midnapore (West)	21531570817	532327	852095	1421429	40448	15148
67	Kerala	Malappuram	7988439483	198614	270626	212908	40221	37521
68	Maharashtra	Jalgaon	34209857279	852133	1325300	1144428	40146	29893
69	Lakshadweep	All distrcits	106717617	2669	2800	5781	39984	18460
70	West Bengal	Birbhum	12772634325	319540	532384	676874	39972	18870
71	Uttranachal	Haridwar	4827906905	120844	171440	177689	39952	27171
72	Punjab	Ropar	4883731939	122807	211483	129277	39767	37777
73	Uttar Pradesh	J.B.Fule Nagar	6743991875	170005	261493	304175	39669	22171
74	Kerala	Ernakulam	6592715487	166277	215071	147469	39649	44706
75	Uttar Pradesh	Rampur	7648625687	193215	354965	360857	39586	21196
76	Kerala	Thrissur	5623834827	142428	194403	161278	39485	34870
77	West Bengal	Malda	8957013944	227951	454033	689178	39294	12997
78	Kerala	Palakkad	7957748856	202925	319993	404778	39215	19660
79	Tamil Nadu	Erode	10170461435	260123	273554	787023	39099	12923
80	Haryana	Sonipat	6212522865	159086	276213	278284	39051	22324
81	Haryana	Faridabad	5719303308	146986	260954	281320	38911	20330
82	West Bengal	Midnapore (East)	12585596895	325131	556796	1245659	38709	15148
83	Haryana	Ambala	5144660536	133391	201624	97022	38568	53026
84	Tamil Nadu	Theni	4155524882	108127	116755	335068	38432	12402
85	Punjab	Hoshiarpur	7911251928	207473	355499	208913	38131	37869
86	Uttar Pradesh	Pilibhit	8807421218	232917	381773	330833	37814	26622
87	Assam	Jorhat	4506105608	119933	171044	191220	37572	23565
88	Arunachal Pradesh	Dipnag Valley	360367209	9691	16475	15597	37186	23105
89	Kerala	Kannur	7461417838	201331	263153	151852	37060	49136
90	Tamil Nadu	Thanjavur	6533395290	176501	223348	563970	37016	11585
91	Kerala	Kasaragod	4919505388	132964	152030	61814	36999	79586
92	Tamil Nadu	Kancheepuram	4809402451	132010	164685	425258	36432	11309
93	Uttar Pradesh	Bulandshahar	10553614918	293299	493047	613873	35982	17192
94	Uttar Pradesh	Barabanki	9378062337	263525	468293	779445	35587	12032
95	Andhra Pradesh	Krishna	15411255573	436500	640448	1090697	35306	14130
96	Uttar Pradesh	Hathras	5174495512	147137	229506	230519	35168	22447
97	West Bengal	Bankura	12626096005	362869	510441	943017	34795	13389
98	Uttar Pradesh	Eath	11148996078	321803	520553	588136	34645	18956
99	Tamil Nadu	Salem	7526239880	218955	286936	694641	34373	10835
100	Uttar Pradesh	Maharalganj	6906385747	202232	358633	719497	34151	9599

Rank	State	District	Value Output (Rs.)	NAS (Hectares)	GCA (Hectares)	Agri. Workers	Land Productivity	Labour Productivity
101	Assam	Golaghat	4002106109	117349	150561	226008	34104	17708
102	Uttar Pradesh	Ferozabad	6116121979	180134	279185	264643	33953	23111
103	Assam	Sonitpur	5605754005	165855	244006	296393	33799	18913
104	Uttar Pradesh	Ambedker Nagar	5544316115	164525	279734	515129	33699	10763
105	Assam	Sivasagar	4629541472	137619	152995	186140	33640	24871
106	Tamil Nadu	Thoothukudi	5261186048	156851	160169	238702	33543	22041
107	Uttar Pradesh	Kheri	16050371089	482810	712085	796645	33244	20147
108	Tripura	North (Tripura)	1460346829	43948	69130	85531	33229	17074
109	Andhra Pradesh	Nizamabad	7323195485	220626	325194	657799	33193	11133
110	Goa	Goa South	1833407775	55639	65750	32525	32952	56369
111	Uttar Pradesh	Kushi Nagar	7291376039	222049	337106	828554	32837	8800
112	Uttar Pradesh	Shahjahanpur	11515168682	350801	565517	428401	32825	26879
113	Assam	Karimganj	2244459879	68683	96269	119865	32679	18725
114	Andhra Pradesh	Karimnagar	11607499222	359603	499116	1026540	32279	11307
115	Tamil Nadu	Villupuram	9455632987	293127	337503	1120328	32258	8440
116	Gujarat	Porbandar	3642579856	113233	128267	109493	32169	33268
117	Assam	Cachar	3711539792	115489	146219	159754	32138	23233
118	Uttar Pradesh	Bareilly	10505768347	328550	523444	646035	31976	16262
119	Himachal Pradesh	Sirmaur	1296351182	40621	74778	167626	31913	7734
120	Uttar Pradesh	Agra	9140106671	286684	408413	392857	31882	23266
121	West Bengal	Uttar Dinajpur	8631336170	273432	513841	647706	31567	13326
122	Assam	Hailakandi	1450878549	46027	64878	88802	31522	16338
123	Meghalaya	East Khasi Hills	871073418	27641	36234	76748	31514	11350
124	Haryana	Panchkula	789831689	25275	45106	40743	31250	19386
125	Haryana	Gurgaon	5340502400	172128	292816	254522	31026	20982
126	Gujarat	Junagadh	16247673537	525233	601724	642025	30934	25307
127	Tamil Nadu	Vellore	5707424286	185582	223910	643894	30754	8864
128	Uttar Pradesh	Moradabad	9688156011	317478	536618	650938	30516	14883
129	Uttar Pradesh	Etawah	4408069119	145262	233055	246051	30346	17915
130	Uttranachal	Nainital	1468056523	48812	81813	141717	30076	10359
131	West Bengal	Cooch Behar	7817404548	260192	478594	647285	30045	12077
132	Gujarat	Surat	12802611590	429267	486100	739391	29824	17315
133	Uttar Pradesh	Mathura	8033991700	270213	405646	441922	29732	18180
134	Uttar Pradesh	Faizabad	4333648234	146107	225758	621268	29661	6975
135	Haryana	Rohtak	4176237412	141034	222799	190449	29612	21928
136	Uttar Pradesh	Chandauli	4048622940	137216	241219	342380	29505	11825
137	Haryana	Mahendragarh	4181551419	141980	253901	232241	29452	18005
138	Uttar Pradesh	Aligarh	8865918809	301670	493752	480517	29389	18451
139	Assam	N Kachar Hills	829876063	28316	36095	38109	29308	21776
140	Kerala	Alappuzha	2750898242	94110	126684	127869	29231	21513
141	Uttar Pradesh	Mainpuri	5566124863	190655	291908	343873	29195	16187
142	Haryana	Rewari	3683510283	126516	192008	193713	29115	19015
143	Goa	Goa North	2458987497	85131	102884	54288	28885	45295
144	Tripura	Dhalai	759875545	26447	41700	81829	28732	9286
145	Haryana	Bhiwani	11515011383	401948	723805	391046	28648	29447
146	Meghalaya	RI BHOI	769713455	26911	29377	68217	28602	11283
147	Uttar Pradesh	Badaun	11871300715	415493	676503	718830	28572	16515
148	Rajasthan	Kota	6917157517	243471	356852	226353	28411	30559
149	Gujarat	Narmada	3087979365	109533	113840	205130	28192	15054
150	West Bengal	Dakshin Dinajpur	5400738138	193195	302438	411516	27955	13124
151	Uttar Pradesh	Mau	3508428504	125665	209197	364483	27919	9626
152	Uttar Pradesh	Sant Kabir Nagar	3268714116	117766	205900	404286	27756	8085

Rank	State	District	Value Output (Rs.)	NAS (Hectares)	GCA (Hectares)	Agri. Workers	Land Productivity	Labour Productivity
153	Uttar Pradesh	Auraiya	3954060342	143042	223310	287573	27643	13750
154	Andhra Pradesh	Khammam	10885746949	394083	417891	895217	27623	12160
155	Sikkim	South	482408712	17500	33250	51202	27566	9422
156	West Bengal	Darjeeling	3969287567	144188	172739	140506	27528	28250
157	Tamil Nadu	Dharmapuri	8159166852	298710	348171	994167	27315	8207
158	Rajasthan	Baran	7465428519	273726	382988	340432	27273	21929
159	Tamil Nadu	Krishnagiri	1635978862	60059	66604	270231	27239	6054
160	Uttar Pradesh	Azamgarh	8107769079	299105	493650	879356	27107	9220
161	Haryana	Jhajjar	4208262394	156005	233216	226629	26975	18569
162	Andhra Pradesh	Nellore	8499701609	316588	350177	758330	26848	11208
163	Uttar Pradesh	Sultanpur	7577765406	283359	426470	768487	26743	9861
164	Uttar Pradesh	Kanpur (C)	5047922906	191551	268616	371240	26353	13597
165	Tripura	South (Tripura)	2319022984	88266	101654	196233	26273	11818
166	Uttar Pradesh	Kanpur (D)	5848815586	222620	312355	398496	26273	14677
167	Andhra Pradesh	Warangal	11958739940	456267	565203	1068502	26210	11192
168	Tamil Nadu	Pudukottai	3588412990	137015	139012	477901	26190	7509
169	Assam	Nagaon	6124191431	234633	354801	424849	26101	14415
170	Uttar Pradesh	Gonda	7686053555	294649	458673	784653	26085	9795
171	Uttar Pradesh	Deoria	5168359433	198307	321393	568650	26062	9089
172	Uttar Pradesh	Ghazipur	6664832653	256118	413421	693809	26022	9606
173	Tamil Nadu	Coimbatore	8079052529	310740	323255	574825	25999	14055
174	Uttar Pradesh	Sitapur	11227652418	432795	622550	891409	25942	12595
175	Orissa	Phulbani	3073804630	118667	173783	212570	25903	14460
176	West Bengal	24-Parganas(S)	9881960582	381803	542936	941326	25882	10498
177	Nagaland	Wokha	1052107997	40760	48897	37295	25812	28210
178	Tamil Nadu	Madurai	3132025848	121929	127689	458141	25687	6836
179	Uttar Pradesh	Jaunpur	7230097420	282968	440188	886254	25551	8158
180	Andhra Pradesh	Visakhapatnam	7386759296	292737	372824	854539	25233	8644
181	Uttar Pradesh	Basti	5234938709	207587	304046	601545	25218	8702
182	Karnataka	Dakshina Kannada	3326139516	133765	161917	91575	24866	36321
183	Karnataka	Chamarajanagar	3853980786	155063	194877	319349	24854	12068
184	Andeman &Nikobar Island	Andeman &Nikobar Island	939739960	38000	45000	26630	24730	35289
185	Uttar Pradesh	Ballia	5356392524	217359	350140	562964	24643	9515
186	Uttar Pradesh	Hardoi	10263013266	417875	627654	863047	24560	11892
187	Arunachal Pradesh	East Siang	621711405	25344	33611	19477	24531	31920
188	Manipur	Imphal West	514149064	20975	20975	53586	24512	9595
189	Uttar Pradesh	Varanasi	2781848948	113778	157391	305230	24450	9114
190	Bihar	Rohtas	6214117712	254293	361554	549024	24437	11318
191	Uttar Pradesh	Pratapgarh	5316813720	218268	327898	727177	24359	7312
192	Bihar	Bhabhua	3699289997	153365	199726	366318	24121	10099
193	Gujarat	Gandhinagar	3847249619	159567	199844	222653	24111	17279
194	Tripura	West (Tripura)	2925023948	121339	130535	226119	24106	12936
195	Karnataka	Mandya	5126437928	212835	249766	619920	24086	8270
196	Madhya Pradesh	Harda	4082880690	169915	290472	171214	24029	23847
197	Manipur	Bishnupur	511527799	21300	21300	43153	24015	11854
198	Assam	Darrang	4888837001	205111	294319	332458	23835	14705
199	Madhya Pradesh	Hoshangabad	7016180703	294835	492867	245062	23797	28630
200	Sikkim	West	395186064	16630	34590	39844	23763	9918
201	Meghalaya	East Garo Hills	760010715	32117	39414	89519	23664	8490
202	Bihar	Katihar	3829664956	162389	270964	750957	23583	5100
203	Arunachal Pradesh	Lohit	472756040	20057	36184	38710	23571	12213

Rank	State	District	Value Output (Rs.)	NAS (Hectares)	GCA (Hectares)	Agri. Workers	Land Productivity	Labour Productivity
204	Uttar Pradesh	Allahabad	8184176752	347435	517431	940655	23556	8701
205	Tamil Nadu	Thiruvannamalai	4763202710	202411	256090	772091	23532	6169
206	Uttar Pradesh	Lucknow	3223820791	137164	207988	345753	23503	9324
207	Karnataka	Chickmagalur	6500307738	279950	297398	257736	23220	25221
208	Gujarat	Jamnagar	13920907305	600900	636951	346406	23167	40187
209	Orissa	Gajapati	1837666824	79667	132473	215295	23067	8536
210	Gujarat	Banaskantha	16866932120	734833	1063455	725724	22953	23242
211	Karnataka	Udupi	2294436605	100062	125400	184434	22930	12440
212	Rajasthan	Alwar	11292619590	495188	759707	1035554	22805	10905
213	Rajasthan	Bharatpur	8914822370	391133	556419	633572	22792	14071
214	Uttar Pradesh	Balrampur	4709257284	206892	304966	624371	22762	7542
215	Tamil Nadu	Karur	1980066496	87214	88435	294457	22704	6724
216	Maharashtra	Sindhudurg	3182661353	140300	159000	271915	22685	11705
217	Himachal Pradesh	Mandi	1962212053	86839	158258	336722	22596	5827
218	Uttar Pradesh	Fatehpur	6599257164	292139	401467	682988	22589	9662
219	Uttar Pradesh	Gorakhpur	5708884806	253152	388358	750876	22551	7603
220	Uttar Pradesh	Raibareli	5977444956	268789	409490	800490	22238	7467
221	Maharashtra	Hingoli	7325709577	329500	521800	391924	22233	18692
222	Tamil Nadu	Nagapattinam	3054080600	137701	212359	382246	22179	7990
223	Andhra Pradesh	Chittoor	8003497163	364896	408019	1162410	21934	6885
224	Maharashtra	Raigad	4128764606	188500	215500	457840	21903	9018
225	Madhya Pradesh	Narsinghpur	6592997594	301016	402859	309809	21903	21281
226	Uttar Pradesh	S.Rabidas Nagar	1511297146	69116	99291	160321	21866	9427
227	Uttar Pradesh	Unnao	6444828439	294878	439013	702230	21856	9178
228	Orissa	Jagatsingpur	2153881691	98667	182067	179734	21830	11984
229	Andhra Pradesh	Prakasam	11607633094	532022	571880	1051912	21818	11035
230	Uttranachal	Dehradun	1117802950	51500	77825	102653	21705	10889
231	Uttar Pradesh	Mirzapur	4526989497	208903	304645	453727	21670	9977
232	Orissa	Ganjam	8397980529	388333	649230	824466	21626	10186
233	Sikkim	East	390473084	18122	27183	46044	21547	8480
234	Uttar Pradesh	Bahraich	7134961803	331212	505695	710202	21542	10046
235	Assam	Dhubri	3095052736	143797	220427	287460	21524	10767
236	Jammu & Kashmir	Srinagar	485658163	22680	28631	46704	21414	10399
237	Bihar	Patna	4425878561	206746	257732	788261	21407	5615
238	Gujarat	Valsad	3448787607	161300	180828	339232	21381	10166
239	Gujarat	Amreli	11559039822	541300	565273	382745	21354	30200
240	Madhya Pradesh	Indore	5420573904	255497	399231	282149	21216	19212
241	Bihar	Aurangabad	4023529796	190147	282277	533821	21160	7537
242	Gujarat	Bhavnagar	11633606633	550400	610696	424695	21137	27393
243	Bihar	Gopalganj	3196742272	151384	235041	523384	21117	6108
244	Gujarat	Kheda	6443275627	305867	366092	533742	21066	12072
245	Andhra Pradesh	Srikakulam	6035515796	286594	387347	822348	21059	7339
246	Tamil Nadu	Dindigul	4792244740	228087	234070	606955	21011	7896
247	Himachal Pradesh	Lahul Spiti	69532331	3311	3395	11537	21000	6027
248	Uttar Pradesh	Jalaun	7288185928	347307	402502	395991	20985	18405
249	Orissa	Cuttak	3493798651	166667	306240	342500	20963	10201
250	Gujarat	Rajkot	15508897041	739900	780768	440861	20961	35179
251	Orissa	Chenkanal	3450424802	164667	259937	213365	20954	16171
252	Jharkhand	Koderma	368632098	17658	24228	110062	20876	3349
253	Rajasthan	Dholpur	3034954642	145913	195413	242895	20800	12495
254	Bihar	Madhupura	2761370130	133037	220901	613353	20756	4502
255	Assam	Karbi Anglong	2618403267	126206	194316	241293	20747	10852

Rank	State	District	Value Output (Rs.)	NAS (Hectares)	GCA (Hectares)	Agri. Workers	Land Productivity	Labour Productivity
256	Assam	Lakhimpur	2062946333	99930	171929	374951	20644	5502
257	Himachal Pradesh	Solan	799706942	38766	62884	150156	20629	5326
258	Bihar	Chamaparan(West)	5768249549	280367	375512	972093	20574	5934
259	Uttar Pradesh	G.B. Nagar	2603284465	127726	140850	126707	20382	20546
260	Bihar	Vaishali	2607711524	128086	195446	570470	20359	4571
261	Bihar	Bhojpur	3781960534	185845	237120	486531	20350	7773
262	Madhya Pradesh	Sehore	7724569518	379981	564937	367632	20329	21012
263	Assam	Kamrup	3648251828	179913	251388	282724	20278	12904
264	Uttar Pradesh	Kaushambi	2633580940	130196	173308	402616	20228	6541
265	Jammu & Kashmir	Jammu	2267854719	112210	201464	162306	20211	13973
266	Madhya Pradesh	Dewas	7718986649	382380	542701	446274	20187	17297
267	Gujarat	Bharuch	6649963564	329800	339072	314338	20164	21155
268	Meghalaya	West Garo Hills	1296961907	64328	85489	152508	20162	8504
269	Uttar Pradesh	Shrawashtri	2877159155	142759	216297	408859	20154	7037
270	Uttar Pradesh	Siddarthanagar	4821349118	240309	342133	679834	20063	7092
271	Manipur	Imphal East	695651741	34675	34710	54574	20062	12747
272	Karnataka	Shimoga	4315031855	215618	239689	443526	20012	9729
273	Meghalaya	West Khasi Hills	546836754	27335	32004	111739	20005	4894
274	Bihar	Saharasra	2214101634	111380	204843	497610	19879	4449
275	Himachal Pradesh	Bilaspur	598122906	30138	57534	117567	19846	5088
276	Gujarat	Anand	3222171751	162867	224366	444083	19784	7256
277	Bihar	Supaul	3024771330	153456	260819	656923	19711	4604
278	Rajasthan	Dausa	4083375444	207436	314022	399761	19685	10215
279	Assam	Goalpara	1550814339	79264	108467	150862	19565	10280
280	Daman & Diu	All distrcits	77988374	4000	5000	5357	19497	14558
281	Jharkhand	East Singhbhum	1777763337	91274	176269	318835	19477	5576
282	Assam	Kokrajhar	1649442910	84876	135574	226858	19434	7271
283	Himachal Pradesh	Una	792665623	40797	72202	126714	19430	6256
284	Karnataka	Mysore	6853191615	352829	462342	649803	19424	10547
285	Pondicherry	Karaikal	133838037	6900	9083	19066	19397	7020
286	Arunachal Pradesh	Papumpare	125527160	6498	14037	12255	19318	10243
287	Andhra Pradesh	Vizianagaram	5844765702	303184	408097	802491	19278	7283
288	Tamil Nadu	Perambalur	3780155747	196284	210572	219773	19259	17200
289	Manipur	Thoubal	576099448	29975	29975	111596	19219	5162
290	Orissa	Sonepur	2089084839	109667	173743	183053	19049	11412
291	West Bengal	Purulia	5909741870	310640	329511	758939	19024	7787
292	Orissa	Bargarh	6259308191	329667	436057	447564	18987	13985
293	Rajasthan	Bundi	4286730320	226948	334191	329481	18889	13011
294	Jammu & Kashmir	Rajouri	977379714	51865	96227	151551	18845	6449
295	Orissa	Puri	2623868693	139333	247677	270536	18832	9699
296	Orissa	Sambalpur	3370328970	179000	244567	225039	18829	14977
297	Andhra Pradesh	Medak	8177894816	434353	540233	874377	18828	9353
298	Orissa	Jajpur	2828445090	150333	258663	249092	18814	11355
299	Rajasthan	Karoli	3331166876	177056	265767	344344	18814	9674
300	Arunachal Pradesh	Tawang	77906914	4148	7018	9968	18782	7816
301	Manipur	Ukhrul	365739940	19500	19500	48788	18756	7497
302	Gujarat	Mehsana	6499731084	346800	462853	397185	18742	16364
303	Orissa	Angul	3591008980	192000	307947	263254	18703	13641
304	Assam	Bongaigaon	1767278929	94908	156397	166352	18621	10624
305	Bihar	Sitamari	2268780215	122051	209748	677387	18589	3349
306	Himachal Pradesh	Kullu	685877053	36900	60982	170748	18588	4017
307	Manipur	Senapati	652597183	35305	35625	158049	18485	4129

Rank	State	District	Value Output (Rs.)	NAS (Hectares)	GCA (Hectares)	Agri. Workers	Land Productivity	Labour Productivity
308	Assam	Barpeta	3321110452	180112	277095	293531	18439	11314
309	Rajasthan	Jhalawar	5583657032	303022	419643	450351	18427	12398
310	Bihar	Siwan	3013960157	164041	250433	548957	18373	5490
311	Rajasthan	Ganganagar	11840012927	645156	891204	437425	18352	27068
312	Himachal Pradesh	Hamirpur	645447320	35244	70144	147167	18314	4386
313	Meghalaya	Jainta Hills	592955766	32395	32759	96402	18304	6151
314	Bihar	Khagaria	1562263635	85435	134827	376526	18286	4149
315	Maharashtra	Ratnagiri	4461465258	244900	255600	514982	18217	8663
316	Assam	Marigaon	1683233409	92422	124352	191759	18212	8778
317	Himachal Pradesh	Kangra	2120041589	116628	219058	373639	18178	5674
318	Bihar	Buxar	2518038073	138795	149001	311822	18142	8075
319	Rajasthan	Chittore	7260595793	401977	526127	720867	18062	10072
320	Uttranachal	Uttar Kashi	533416447	29552	45594	104480	18050	5105
321	Jammu & Kashmir	Kathua	1126898788	62689	123267	115456	17976	9760
322	Bihar	Araria	3226107268	179529	282112	744186	17970	4335
323	Jammu & Kashmir	Poonch	493557043	27555	46158	118044	17912	4181
324	Bihar	Begusarai	2122818940	118574	176201	495529	17903	4284
325	Madhya Pradesh	Neemach	3362318515	188310	240626	262399	17855	12814
326	Himachal Pradesh	Shimla	1216680037	68287	95439	248112	17817	4904
327	Madhya Pradesh	Morena	4564733418	257322	314826	403310	17739	11318
328	Bihar	Sivhar	460130290	25940	45652	142116	17738	3238
329	Arunachal Pradesh	Changlang	277876966	15669	21962	45208	17734	6147
330	Assam	Dhemaji	1115187001	63049	102097	204376	17688	5457
331	Bihar	Jahanabad	1848245957	104543	138733	466768	17679	3960
332	Orissa	Nayagareh	2356986622	133333	219273	179523	17677	13129
333	Orissa	Kendrapara	2446366388	138667	237780	262010	17642	9337
334	Mizoram	Chhimtuipui	223074959	12663	12663	104011	17616	2145
335	Madhya Pradesh	Sheopur kalan	2065266241	117745	146616	186660	17540	11064
336	Orissa	Bhadrak	2937640847	168000	213847	261656	17486	11227
337	Karnataka	Davanagere	6230715705	356479	413213	514822	17478	12103
338	Jharkhand	Godda	1348599166	77180	83810	342060	17473	3943
339	Orissa	Balasore	4094561688	234333	321090	433982	17473	9435
340	Nagaland	Kohima	611910765	35042	39297	79444	17462	7702
341	Nagaland	Phek	739248424	42608	48307	53455	17350	13829
342	Madhya Pradesh	Tikamgarh	4388706521	253257	383642	461859	17329	9502
343	Bihar	Samastipur	3209172455	185374	250849	838141	17312	3829
344	Orissa	Rayagada	2631237951	152000	229963	298295	17311	8821
345	Uttar Pradesh	Jhansi	5810550805	338570	419292	393122	17162	14781
346	Madhya Pradesh	Gwalior	3341249759	194696	238647	213751	17161	15632
347	Manipur	Churachandpur	494446585	28825	28885	65509	17153	7548
348	Maharashtra	Thane	4182233310	244600	260600	718322	17098	5822
349	Maharashtra	Washim	6464767029	379533	574500	392908	17033	16454
350	Karnataka	Hassan	6411789322	376458	437475	604542	17032	10606
351	Tamil Nadu	Virudhunagar	2385420949	140100	144695	282202	17027	8453
352	Bihar	Nawadha	1894631894	111387	149217	545267	17009	3475
353	Himachal Pradesh	Chamba	716540204	42156	66961	170034	16997	4214
354	Jharkhand	Chatra	797228032	47090	50920	245707	16930	3245
355	Jammu & Kashmir	Pulwama	934543039	55207	81480	140828	16928	6636
356	Arunachal Pradesh	East kameng	130166115	7699	12653	19100	16907	6815
357	Bihar	Muzafarpur	3478266973	205774	326989	811124	16903	4288
358	Bihar	Gaya	3317614321	197575	265566	1001463	16792	3313
359	Maharashtra	Satara	9345963367	556700	701900	929278	16788	10057

Rank	State	District	Value Output (Rs.)	NAS (Hectares)	GCA (Hectares)	Agri. Workers	Land Productivity	Labour Productivity
360	Assam	Nalbari	2560697130	153545	211064	197740	16677	12950
361	Madhya Pradesh	Bhopal	2535224538	152259	208906	135531	16651	18706
362	Madhya Pradesh	Datia	3234056830	194323	222471	247266	16643	13079
363	Nagaland	Mokokchun	608857428	36608	42892	72258	16632	8426
364	Andhra Pradesh	Cuddapah	6080173432	367380	430305	738756	16550	8230
365	Bihar	Purnea	3620207131	218838	307952	830832	16543	4357
366	Andhra Pradesh	Ranga reddy	4384123439	265223	287374	576390	16530	7606
367	Tamil Nadu	Thiruvarur	2214763748	134274	197662	354407	16494	6249
368	Karnataka	Belgaum	12048197794	732946	893204	1295798	16438	9298
369	Maharashtra	Parbhani	7937277248	489967	825600	496852	16200	15975
370	Jharkhand	Garhwa	1017002773	63097	90149	341535	16118	2978
371	Uttranachal	Champawat	381266871	23780	38498	64859	16033	5878
372	Mizoram	Lunglei	176017678	11005	11005	48983	15995	3593
373	Uttranachal	Vageshwar	379173469	23763	41477	92443	15957	4102
374	Bihar	Kishanganj	2069246424	129930	188029	351114	15926	5893
375	Orissa	Jharsuguda	1266634764	79667	104403	88417	15899	14326
376	Jharkhand	Jamtara	756458073	47713	49483	0	15854	3948
377	Uttar Pradesh	Sonbhadra	3019688303	191885	273895	394574	15737	7653
378	Uttranachal	Pithoragarh	718177110	45788	82377	136811	15685	5249
379	Madhya Pradesh	Khandwa	6168062185	394733	470779	565262	15626	11455
380	Andhra Pradesh	Kurnool	13175195158	847131	928830	1192770	15553	11046
381	Tamil Nadu	Ramanathapuram	2846175263	184105	184105	304045	15460	9361
382	Orissa	Khurda	2070378916	134000	218167	173894	15451	11906
383	Jharkhand	Latehar	701460872	45428	56073	0	15441	3483
384	Mizoram	Kolasib	263047717	17063	17063	21950	15417	11984
385	Meghalaya	South Garo Hills	281295648	18314	23041	35037	15360	8029
386	Orissa	Deogarh	1012992881	66333	98057	99078	15271	10224
387	Karnataka	Uttara Kannada	1646266530	108863	118988	228071	15122	7218
388	Jharkhand	Dumka	1761033772	116813	121148	637637	15076	2948
389	Rajasthan	Jhunjhunu	5947501091	395462	572641	529220	15039	11238
390	Bihar	Sheikhpura	618801364	41206	52884	155168	15017	3988
391	Madhya Pradesh	Shivpuri	5498189851	366192	465610	541072	15015	10162
392	Bihar	Champaran(east)	4407072589	294198	344353	1058377	14980	4164
393	Gujarat	Vadodara	7718774634	516600	570371	808316	14941	9549
394	Mizoram	Aizwal	289445029	19385	19385	64650	14931	4477
395	Andhra Pradesh	Nalgonda	6870956125	460239	534751	1081104	14929	6355
396	Bihar	Monghyr	651336594	43640	61175	192321	14925	3387
397	Bihar	Nalanda	2694326533	180618	221632	703450	14917	3830
398	Chattisgarh	Dhamtari	1996004586	133883	195902	281106	14909	7101
399	Jharkhand	Palamu	1506752272	101115	124807	634040	14901	3483
400	Madhya Pradesh	Bhind	4822396371	323814	352516	380268	14892	12682
401	Jharkhand	Giridh	1277407724	85858	117443	479829	14878	2662
402	Orissa	Koraput	4194014475	282333	377467	416432	14855	10071
403	Orissa	Keonjhar	4361124254	294333	426867	430796	14817	10123
404	Nagaland	Denapur	797913477	54093	65573	33674	14751	23695
405	Jharkhand	Hazaribag	1443385436	97953	109615	488404	14735	2955
406	Karnataka	Bagalkote	6212410325	422694	458378	470447	14697	13205
407	Jharkhand	Sahibganj	677281202	46108	54482	248024	14689	2731
408	Madhya Pradesh	Ratlam	4815960794	328168	405694	409220	14675	11769
409	Sikkim	North	142160203	9740	11493	11271	14596	12613
410	Karnataka	Bellary	6220961719	426278	493684	616307	14594	10094
411	Maharashtra	Wardha	5305933477	365567	384100	388813	14514	13646

Rank	State	District	Value Output (Rs.)	NAS (Hectares)	GCA (Hectares)	Agri. Workers	Land Productivity	Labour Productivity
412	Tamil Nadu	Sivagangai	1594816771	109940	110032	331165	14506	4816
413	Jharkhand	Bokaro	524850544	36264	50692	227877	14473	2303
414	Nagaland	Mon	499296937	34514	39858	114119	14467	4375
415	Mizoram	Mamit	192569287	13316	13316	21479	14461	8965
416	Uttar Pradesh	Hamirpur	4325504533	299769	338807	314863	14429	13738
417	Bihar	Saran	2837269221	197002	238965	631843	14402	4490
418	Arunachal Pradesh	Lower Subabsiri	262051409	18208	28371	34044	14392	7697
419	Rajasthan	S. Madhopur	3330983262	231597	303573	340304	14383	9788
420	Rajasthan	Jaipur	8904634003	620446	867364	766459	14352	11618
421	Uttranachal	Chamoli	436806720	30530	46474	105265	14307	4150
422	Arunachal Pradesh	West Kameng	71095256	4981	7461	13539	14273	5251
423	Manipur	Chandel	156212088	10980	11000	36995	14227	4223
424	Andhra Pradesh	Adilabad	7654432440	538110	559037	687714	14225	11130
425	Maharashtra	Amravati	10651781171	750067	1031100	793250	14201	13428
426	Maharashtra	Nanded	10018987223	706167	822500	912158	14188	10984
427	Uttranachal	Tehri garhwal	797700866	56847	88672	188610	14033	4229
428	Jammu & Kashmir	Anantnag	1084214566	77311	99906	207013	14024	5237
429	Bihar	Bhagalpur	2056720848	146996	177249	584729	13992	3517
430	Madhya Pradesh	Raisen	5998657101	429224	506814	295076	13976	20329
431	Maharashtra	Buldhana	9574572274	686333	851800	840424	13950	11393
432	Gujarat	Sabarkantha	6112546801	439100	520614	592504	13921	10316
433	Orissa	Boudh	1186219875	85333	121393	133438	13901	8890
434	Jharkhand	Pakur	851818027	61312	69148	207489	13893	4105
435	Uttar Pradesh	Banda	4778558761	347692	419585	473894	13744	10084
436	Uttar Pradesh	Lalitpur	3461064335	252804	348361	341038	13691	10149
437	Madhya Pradesh	Chhindwara	6518051845	477866	566928	580004	13640	11238
438	Arunachal Pradesh	Upper Siang	77702481	5716	9225	11544	13594	6731
439	Maharashtra	Nandurbar	4017860724	296367	325300	503385	13557	7982
440	Madhya Pradesh	Dhar	6852026565	506202	661814	663603	13536	10325
441	Madhya Pradesh	Ujjain	6564121658	485551	674351	511249	13519	12839
442	Nagaland	Thensang	555914576	41439	46646	158657	13415	3504
443	Bihar	Madhubani	3026130052	225953	318838	1025155	13393	2952
444	Orissa	Kalahandi	4653568739	347667	498010	496393	13385	9375
445	Uttar Pradesh	Chitrakoot	2285632213	171249	190367	279905	13347	8166
446	Madhya Pradesh	Vidisha	7122775009	536940	660897	336850	13265	21145
447	Jammu & Kashmir	Budgam	697899846	52680	57131	169426	13248	4119
448	Maharashtra	Akola	5753938721	436867	547200	449369	13171	12804
449	Madhya Pradesh	Jabalpur	3568545985	271676	365031	321076	13135	11114
450	Madhya Pradesh	Mandsaur	4653162516	354946	439032	457223	13109	10177
451	Orissa	Mayurbhanj	5166212127	394667	472753	684278	13090	7550
452	Jharkhand	Dhanbad	493113580	37749	43809	157735	13063	3126
453	Jharkhand	Deoghar	947296124	72578	76316	279999	13052	3383
454	Madhya Pradesh	Shajapur	5841237723	448058	593894	511666	13037	11416
455	Gujarat	Patan	5004033755	384933	441390	340850	13000	14681
456	Rajasthan	Hanumangarh	9652082675	747004	1039947	478210	12921	20184
457	Maharashtra	Bhandara	4672915598	364233	434800	390786	12829	11958
458	Manipur	Tamenglong	158532625	12360	12615	41437	12826	3826
459	Jammu & Kashmir	Udhampur	897158299	70175	113608	235919	12785	3803
460	Orissa	Nawarangpur	2707099083	212333	284700	418129	12749	6474
461	Maharashtra	Sangli	7541867980	591667	690700	866868	12747	8700
462	Bihar	Lakhisarai	873364686	69188	78201	223584	12623	3906
463	Jammu & Kashmir	Baramulla	1038158983	83021	95770	103681	12505	10013

Rank	State	District	Value Output (Rs.)	NAS (Hectares)	GCA (Hectares)	Agri. Workers	Land Productivity	Labour Productivity
464	Chattisgarh	Janjgir	3255777168	261975	301250	479274	12428	6793
465	Madhya Pradesh	Balaghat	3405369509	274929	344377	570241	12386	5972
466	Orissa	Bolangir	4107906776	332000	425640	399816	12373	10274
467	Rajasthan	Sirohi	1724028266	139563	177745	173595	12353	9931
468	Maharashtra	Nagpur	6757289169	547267	591900	605432	12347	11161
469	Jharkhand	Seraikela	815799842	66223	76300	0	12319	3022
470	Orissa	Malkangiri	1646117486	134000	193057	206797	12284	7960
471	Jharkhand	Lohargada	565335423	46169	51019	124263	12245	4550
472	Mizoram	Saiha	167401990	13736	13736	19582	12187	8549
473	Dadra & Nagar Haveli	Dadra & Nagar Haveli	279564315	23000	30000	54185	12155	5159
474	Chattisgarh	Durg	6630957987	546650	733267	749675	12130	8845
475	Madhya Pradesh	Chhatarpur	4563651000	377575	465993	446854	12087	10213
476	Uttranachal	Rudraprayag	239573352	19838	31640	77025	12077	3110
477	Maharashtra	Gondia	2384276595	198000	240000	405072	12042	5886
478	Maharashtra	Yavatmal	10217151753	849300	977400	891894	12030	11456
479	Chattisgarh	Bilaspur	4393339805	367330	468678	627876	11960	6997
480	Maharashtra	Pune	11448124900	962500	1169400	1239962	11894	9233
481	Gujarat	Surendranagar	8138251082	687000	723873	402429	11846	20223
482	Madhya Pradesh	Betul	4721006655	399650	521745	489917	11813	9636
483	Bihar	Banka	1813510347	154128	161389	545772	11766	3323
484	Rajasthan	Sikar	5726503152	487575	667446	587941	11745	9740
485	Gujarat	Kutch	6996890630	596333	597390	193415	11733	36176
486	Maharashtra	Latur	6069763177	524667	726400	631623	11569	9610
487	Karnataka	Chitradurga	4834874442	419078	480755	520588	11537	9287
488	Madhya Pradesh	Rajgarh	4786332563	415685	526588	512898	11514	9332
489	Karnataka	Bangalore Rural	3325283946	289586	307406	553122	11483	6012
490	Rajasthan	Banswara	2640577875	230315	301990	610244	11465	4327
491	Orissa	Nawapara	1872574357	163333	226720	190435	11465	9833
492	Maharashtra	Chandrapur	5132921015	449133	531100	627741	11429	8177
493	Madhya Pradesh	Ashoknagar	1159545633	101541	120900	62170	11419	12450
494	Jharkhand	Simdega	1055867243	92485	97995	0	11417	6102
495	Andhra Pradesh	Mahaboobnagar	8784792558	770910	839245	1333130	11395	6590
496	Maharashtra	Jalna	6566330906	582300	740100	573153	11277	11457
497	Gujarat	Ahmedabad	5655260632	505733	560022	365381	11182	15478
498	Karnataka	Kolar	3610270971	323347	335000	792167	11165	4557
499	Madhya Pradesh	Rewa	4127069160	369826	499276	676184	11159	6103
500	Karnataka	Bangalore Urban	819158560	73484	82070	147057	11147	5570
501	Madhya Pradesh	Seoni	4044741454	365686	461729	473329	11061	8545
502	Rajasthan	Udaipur	2624163140	237397	282096	702773	11054	3734
503	Karnataka	Koppal	3590437576	326771	418252	405069	10988	8864
504	Uttar Pradesh	Mahoba	2608811195	239856	271572	233486	10877	11173
505	Madhya Pradesh	Sagar	5724804725	529907	693319	439285	10803	13032
506	Madhya Pradesh	Guna	5475019107	509296	609801	439697	10750	12450
507	Chattisgarh	Raipur	5869298948	549111	654739	794468	10689	7388
508	Madhya Pradesh	Mandla	2305991531	217295	276445	395655	10612	5828
509	Madhya Pradesh	Satna	3788647427	358151	471103	491683	10578	7705
510	Bihar	Jamui	813664993	77431	84002	375390	10508	2168
511	Bihar	Darbhanga	1796194726	171731	196287	774226	10459	2320
512	Rajasthan	Rajsamand	939680941	90415	102301	218274	10393	4305
513	Karnataka	Tumkur	5810343264	559207	599490	917354	10390	6334
514	Gujarat	Dahod	2038907335	196833	218860	674136	10359	3024

Rank	State	District	Value Output (Rs.)	NAS (Hectares)	GCA (Hectares)	Agri. Workers	Land Productivity	Labour Productivity
515	Madhya Pradesh	Damoh	3176939875	306716	382551	279645	10358	11361
516	Karnataka	Bidar	3839936847	372238	452153	349772	10316	10978
517	Arunachal Pradesh	West Siang	251292395	24367	28951	27965	10313	8986
518	Jharkhand	Gumla	1753848651	171757	181991	574885	10211	6102
519	Uttranachal	Pauri Garhwal	852783758	83629	127411	185535	10197	4596
520	Maharashtra	Nasik	8933858349	876667	958100	1396102	10191	6399
521	Orissa	Sundargarh	3088937044	304333	387697	439585	10150	7027
522	Gujarat	Panchmahal	2748579535	271600	295993	760944	10120	3612
523	Maharashtra	Dhule	4352468553	435433	483200	538737	9996	8079
524	Arunachal Pradesh	Upper Subansiri	79141997	7923	9395	15747	9989	5026
525	Maharashtra	Aurangabad	6919711423	694533	1033000	771498	9963	8969
526	Karnataka	Haveri	3497373380	351826	444549	496368	9941	7046
527	Uttranachal	Almora	817238794	83035	131455	223351	9842	3659
528	Chattisgarh	U.B. Kanker	2041575049	207501	219929	298250	9839	6845
529	Chattisgarh	Rajnandgaon	3537456722	359700	443541	518454	9834	6823
530	Arunachal Pradesh	Tirap	136369826	13893	19004	37237	9816	3662
531	Jharkhand	Ranchi	2438985409	251638	270376	683245	9692	3570
532	Karnataka	Raichur	5283598303	553161	614547	533008	9552	9913
533	Chattisgarh	Raigarh	2647945535	280463	307954	480312	9441	5513
534	Chattisgarh	Kabirdham	1732584768	184811	225572	254606	9375	6805
535	Chattisgarh	Mahasamund	2496931893	266610	286403	347282	9365	7190
536	Madhya Pradesh	Khargone	3811797208	409055	462656	574110	9319	6639
537	Rajasthan	Bhilwara	3257151280	354724	440923	601764	9182	5413
538	Jharkhand	West Singhbum	1204230662	134452	154913	668548	8957	3022
539	Madhya Pradesh	Burhanpur	307240449	34615	38923	0	8876	11455
540	Chattisgarh	Sarguja	4288995813	485884	561742	855113	8827	5016
541	Maharashtra	Ahmednagar	9831931499	1116367	1516400	1348560	8807	7291
542	Chattisgarh	Korba	1168987211	132934	143047	278660	8794	4195
543	Karnataka	Gulbarga	10241201877	1170079	1368501	908970	8753	11267
544	Madhya Pradesh	Katni	1699300133	196107	258786	280179	8665	6065
545	Madhya Pradesh	Barwani	2008663731	232344	261792	442397	8645	4540
546	Chattisgarh	Jagdalpur	3020629202	351523	360221	553172	8593	5461
547	Gujarat	Dang	480413095	56233	57455	79938	8543	6010
548	Madhya Pradesh	Panna	2041497950	243196	279421	293432	8394	6957
549	Chattisgarh	Koriya	891300932	106361	118667	201309	8380	4428
550	Madhya Pradesh	Sidhi	3015192512	360006	487977	622693	8375	4842
551	Rajasthan	Dungarpur	983161417	117918	147308	405113	8338	2427
552	Jammu & Kashmir	Kargil	79545227	9565	10445	26161	8316	3041
553	Maharashtra	Gadchiroli	1388772940	169900	181500	420263	8174	3305
554	Himachal Pradesh	Kinnaur	59940718	7424	8840	32106	8074	1867
555	Andhra Pradesh	Anantapur	8038004189	1006088	1043713	1205402	7989	6668
556	Jammu & Kashmir	Doda	506501047	63934	85044	218655	7922	2316
557	Jammu & Kashmir	Kupwara	344574124	43558	45695	127800	7911	2696
558	Chattisgarh	Jashpur	1989922265	251687	266820	349515	7906	5693
559	Madhya Pradesh	Jhabua	2836749280	358856	396312	639343	7905	4437
560	Rajasthan	Tonk	3083669670	398168	463372	367086	7745	8400
561	Maharashtra	Osmanabad	3727451138	489867	754500	526120	7609	7085
562	Madhya Pradesh	Dindori	1515630911	204006	266271	299131	7429	5067
563	Karnataka	Bijapur	5345771231	728544	819661	508838	7338	10506
564	Chattisgarh	D.B. Dantewara	2089065926	291102	295163	336125	7176	6215
565	Rajasthan	Nagaur	7767417478	1086052	1248449	815672	7152	9523
566	Maharashtra	Beed	5474860661	767400	936400	761993	7134	7185

Rank	State	District	Value Output (Rs.)	NAS (Hectares)	GCA (Hectares)	Agri. Workers	Land Productivity	Labour Productivity
567	Madhya Pradesh	Shahdol	1929782989	283088	328736	506275	6817	3812
568	Rajasthan	Jalore	4159787807	616410	755041	563005	6748	7389
569	Karnataka	Dharwar	2154165399	328778	481810	365386	6552	5896
570	Madhya Pradesh	Umaria	705652747	107748	138673	167749	6549	4496
571	Madhya Pradesh	Anupur	346364546	53875	64508		6429	4496
572	Rajasthan	Pali	3208447666	501586	544496	408111	6397	7862
573	Rajasthan	Jodhpur	5955890023	935653	998571	656274	6365	9075
574	Jammu & Kashmir	Leh	64206668	10166	10475	24689	6316	2601
575	Maharashtra	Solapur	6303988438	1027133	1133700	1116638	6137	5646
576	Rajasthan	Bikaner	6822597502	1112010	1203476	406513	6135	16783
577	Rajasthan	Ajmer	2147184418	373766	425675	410669	5745	5229
578	Karnataka	Gadag	1841717068	388166	451779	320066	4745	5754
579	Rajasthan	Churu	3786285696	955341	1028861	660235	3963	5735
580	Rajasthan	Jaisalmer	1043099031	378938	420221	116734	2753	8936
581	Rajasthan	Barmer	3776649745	1467508	1566135	716771	2574	5269

Appendix 5
All India Ranking of Districts by Levels of Development, 2001-04
(Base Labour Productivity)

Rank	State	District	Value Output (Rs.)	NAS (Hectares)	GCA (Hectares)	Agri. Workers	Land Productivity	Labour Productivity
1	Karnataka	Kodagu	7118069140	147135	148242	31179	48378	228297
2	Pondicherry	Mahe	27986267	630	633	235	44446	119090
3	Tamil Nadu	The Nilgiris	6668309285	78618	78702	62171	84819	107258
4	Punjab	Ludhiana	19556831230	305752	604681	226927	63963	86181
5	Punjab	Kapurthala	7890247321	136065	266581	94855	57989	83182
6	Punjab	Fatehgarh Sahib	5879634254	103159	192416	70688	56996	83177
7	Kerala	Kasaragod	4919505388	132964	152030	61814	36999	79586
8	Punjab	Jalandhar	12410601418	238648	414101	168140	52004	73811
9	Kerala	Kozhikode	6604150626	159894	227058	93016	41303	71000
10	Punjab	Sangrur	26723260791	445238	872429	382398	60020	69883
11	Punjab	Ferozepur	24930391422	474863	892608	367523	52500	67834
12	Kerala	Idukki	15886493479	227853	281730	235549	69723	67445
13	Punjab	Muktsar	11874862322	226339	440192	181864	52465	65295
14	Punjab	Patiala	17419919295	301137	588439	266819	57847	65287
15	Punjab	Moga	11796282548	199875	392342	188250	59018	62663
16	Punjab	Bhathinda	15404871493	298001	552015	255510	51694	60291
17	Kerala	Kottayam	8111569902	171712	218485	135041	47239	60067
18	Punjab	Mansa	9772855832	194183	365248	165914	50328	58903
19	Goa	Goa South	1833407775	55639	65750	32525	32952	56369
20	Kerala	Wayanad	8000078387	116321	202831	146520	68776	54601
21	Punjab	Nawanshahar	4666702777	98855	178122	85783	47208	54401
22	Haryana	Sirsa	15724718806	383384	672562	291231	41016	53994
23	Haryana	Kurukshetra	7659321733	149990	265917	143913	51065	53222
24	Haryana	Ambala	5144660536	133391	201624	97022	38568	53026
25	Punjab	Faridkot	6652817788	130512	246383	129296	50975	51454
26	Haryana	Yamunanagar	5362688558	124795	196083	104778	42972	51181
27	Punjab	Gurdaspur	12451121478	293333	493201	244726	42447	50878
28	Kerala	Kannur	7461417838	201331	263153	151852	37060	49136
29	Punjab	Amritsar	20394856861	450084	825065	431423	45313	47273
30	Tamil Nadu	Kanyakumari	4475676887	79829	93501	98066	56066	45639
31	Goa	Goa North	2458987497	85131	102884	54288	28885	45295
32	Kerala	Ernakulam	6592715487	166277	215071	147469	39649	44706
33	Haryana	Karnal	9948717351	194918	382661	229994	51041	43256
34	Assam	Dibrugarh	7254930876	137977	178293	174905	52581	41479
35	Haryana	Fatehabad	9901198012	223753	406774	245298	44251	40364
36	Haryana	Kaithal	9435592303	197177	383972	234773	47853	40190
37	Gujarat	Jamnagar	13920907305	600900	636951	346406	23167	40187
38	Kerala	Kollam	7082133364	141312	195303	177887	50117	39813
39	Punjab	Hoshiarpur	7911251928	207473	355499	208913	38131	37869
40	Punjab	Ropar	4883731939	122807	211483	129277	39767	37777
41	Kerala	Malappuram	7988439483	198614	270626	212908	40221	37521
42	Karnataka	Dakshina Kannada	3326139516	133765	161917	91575	24866	36321
43	Kerala	Pathanamthitta	4436859930	91521	116132	122256	48479	36292
44	Gujarat	Kutch	6996890630	596333	597390	193415	11733	36176
45	Andeman &Nikobar Island	Andeman &Nikobar Island	939739960	38000	45000	26630	24730	35289
46	Gujarat	Rajkot	15508897041	739900	780768	440861	20961	35179
47	Kerala	Thrissur	5623834827	142428	194403	161278	39485	34870
48	West Bengal	Jalpaiguri	16792182497	344742	519539	495462	48709	33892

Rank	State	District	Value Output (Rs.)	NAS (Hectares)	GCA (Hectares)	Agri. Workers	Land Productivity	Labour Productivity
49	Gujarat	Porbandar	3642579856	113233	128267	109493	32169	33268
50	Haryana	Hisar	12708939906	308459	600264	392351	41201	32392
51	Uttar Pradesh	Ghaziabad	7344555046	147771	237150	229148	49702	32052
52	Arunachal Pradesh	East Siang	621711405	25344	33611	19477	24531	31920
53	Assam	Tinsukia	5594188667	99450	141054	175405	56251	31893
54	Haryana	Panipat	4544742963	91416	184539	145252	49715	31289
55	Uttar Pradesh	Meerut	10329698737	199362	305585	331904	51814	31123
56	Rajasthan	Kota	6917157517	243471	356852	226353	28411	30559
57	Gujarat	Amreli	11559039822	541300	565273	382745	21354	30200
58	Maharashtra	Jalgaon	34209857279	852133	1325300	1144428	40146	29893
59	Haryana	Bhiwani	11515011383	401948	723805	391046	28648	29447
60	Kerala	Thiruvananthapuram	6183816547	142459	188864	215767	43408	28660
61	Madhya Pradesh	Hoshangabad	7016180703	294835	492867	245062	23797	28630
62	Uttranachal	U.S Nagar	6163838989	149576	248861	217729	41209	28310
63	West Bengal	Darjeeling	3969287567	144188	172739	140506	27528	28250
64	Nagaland	Wokha	1052107997	40760	48897	37295	25812	28210
65	Haryana	Jind	9823072537	241107	450789	348675	40742	28173
66	Gujarat	Bhavnagar	11633606633	550400	610696	424695	21137	27393
67	Uttar Pradesh	Bijnor	13902931818	342101	444344	509265	40640	27300
68	Uttranachal	Haridwar	4827906905	120844	171440	177689	39952	27171
69	Rajasthan	Ganganagar	11840012927	645156	891204	437425	18352	27068
70	Uttar Pradesh	Shahjahanpur	11515168682	350801	565517	428401	32825	26879
71	Uttar Pradesh	Pilibhit	8807421218	232917	381773	330833	37814	26622
72	Gujarat	Junagadh	16247673537	525233	601724	642025	30934	25307
73	Karnataka	Chickmagalur	6500307738	279950	297398	257736	23220	25221
74	West Bengal	Nadia	17411807209	308291	855733	693318	56479	25114
75	Assam	Sivasagar	4629541472	137619	152995	186140	33640	24871
76	Uttar Pradesh	Bagpat	5617643971	110534	174803	226502	50823	24802
77	Uttar Pradesh	Farrukhabad	7627020497	152531	216350	313886	50003	24299
78	Madhya Pradesh	Harda	4082880690	169915	290472	171214	24029	23847
79	Nagaland	Denapur	797913477	54093	65573	33674	14751	23695
80	Assam	Jorhat	4506105608	119933	171044	191220	37572	23565
81	Uttar Pradesh	Muzaffarnagar	16182506904	325770	475731	691794	49675	23392
82	Uttar Pradesh	Agra	9140106671	286684	408413	392857	31882	23266
83	Gujarat	Banaskantha	16866932120	734833	1063455	725724	22953	23242
84	Assam	Cachar	3711539792	115489	146219	159754	32138	23233
85	Uttar Pradesh	Ferozabad	6116121979	180134	279185	264643	33953	23111
86	Arunachal Pradesh	Dipnag Valley	360367209	9691	16475	15597	37186	23105
87	Uttar Pradesh	Hathras	5174495512	147137	229506	230519	35168	22447
88	Haryana	Sonipat	6212522865	159086	276213	278284	39051	22324
89	West Bengal	Burdwan	24284215620	469781	868880	1092247	51693	22233
90	Uttar Pradesh	J.B.Fule Nagar	6743991875	170005	261493	304175	39669	22171
91	Tamil Nadu	Thoothukudi	5261186048	156851	160169	238702	33543	22041
92	Rajasthan	Baran	7465428519	273726	382988	340432	27273	21929
93	Haryana	Rohtak	4176237412	141034	222799	190449	29612	21928
94	Assam	N Kachar Hills	829876063	28316	36095	38109	29308	21776
95	Kerala	Alappuzha	2750898242	94110	126684	127869	29231	21513
96	West Bengal	Hooghly	15567152110	225012	516862	725750	69184	21450
97	Gujarat	Navsari	6599411139	147233	174812	308641	44823	21382
98	Madhya Pradesh	Narsinghpur	6592997594	301016	402859	309809	21903	21281
99	Uttar Pradesh	Rampur	7648625687	193215	354965	360857	39586	21196
100	Gujarat	Bharuch	6649963564	329800	339072	314338	20164	21155

Rank	State	District	Value Output (Rs.)	NAS (Hectares)	GCA (Hectares)	Agri. Workers	Land Productivity	Labour Productivity
101	Madhya Pradesh	Vidisha	7122775009	536940	660897	336850	13265	21145
102	Madhya Pradesh	Sehore	7724569518	379981	564937	367632	20329	21012
103	Uttar Pradesh	Saharanpur	11143409744	274224	424997	531028	40636	20985
104	Haryana	Gurgaon	5340502400	172128	292816	254522	31026	20982
105	Uttar Pradesh	G.B. Nagar	2603284465	127726	140850	126707	20382	20546
106	Haryana	Faridabad	5719303308	146986	260954	281320	38911	20330
107	Madhya Pradesh	Raisen	5998657101	429224	506814	295076	13976	20329
108	Gujarat	Surendranagar	8138251082	687000	723873	402429	11846	20223
109	Rajasthan	Hanumangarh	9652082675	747004	1039947	478210	12921	20184
110	Uttar Pradesh	Kheri	16050371089	482810	712085	796645	33244	20147
111	West Bengal	Murshidabad	18639632977	405574	912618	930265	45959	20037
112	Maharashtra	Kolhapur	19559612941	427733	744300	979419	45729	19971
113	Tamil Nadu	Namakkal	8854455756	165143	227478	450157	53617	19670
114	Kerala	Palakkad	7957748856	202925	319993	404778	39215	19660
115	West Bengal	Howrah	4270334426	83459	174332	217643	51167	19621
116	Haryana	Panchkula	789831689	25275	45106	40743	31250	19386
117	Madhya Pradesh	Indore	5420573904	255497	399231	282149	21216	19212
118	Haryana	Rewari	3683510283	126516	192008	193713	29115	19015
119	Uttar Pradesh	Eath	11148996078	321803	520553	588136	34645	18956
120	Assam	Sonitpur	5605754005	165855	244006	296393	33799	18913
121	West Bengal	Birbhum	12772634325	319540	532384	676874	39972	18870
122	Assam	Karimganj	2244459879	68683	96269	119865	32679	18725
123	Madhya Pradesh	Bhopal	2535224538	152259	208906	135531	16651	18706
124	Maharashtra	Hingoli	7325709577	329500	521800	391924	22233	18692
125	Haryana	Jhajjar	4208262394	156005	233216	226629	26975	18569
126	Lakshadweep	All distrcits	106717617	2669	2800	5781	39984	18460
127	Uttar Pradesh	Aligarh	8865918809	301670	493752	480517	29389	18451
128	Uttar Pradesh	Jalaun	7288185928	347307	402502	395991	20985	18405
129	Uttar Pradesh	Mathura	8033991700	270213	405646	441922	29732	18180
130	Uttar Pradesh	Kannauj	5873790368	142656	227392	323309	41175	18168
131	Haryana	Mahendragarh	4181551419	141980	253901	232241	29452	18005
132	Uttar Pradesh	Etawah	4408069119	145262	233055	246051	30346	17915
133	Andhra Pradesh	W-West Godavari	20720437837	412876	636838	1164983	50186	17786
134	West Bengal	24-Parganas(N)	12375191987	266355	556503	698210	46461	17724
135	Assam	Golaghat	4002106109	117349	150561	226008	34104	17708
136	Andhra Pradesh	Guntur	25577167670	582288	777426	1466665	43925	17439
137	Gujarat	Surat	12802611590	429267	486100	739391	29824	17315
138	Madhya Pradesh	Dewas	7718986649	382380	542701	446274	20187	17297
139	Gujarat	Gandhinagar	3847249619	159567	199844	222653	24111	17279
140	Tamil Nadu	Perambalur	3780155747	196284	210572	219773	19259	17200
141	Uttar Pradesh	Bulandshahar	10553614918	293299	493047	613873	35982	17192
142	Tripura	North (Tripura)	1460346829	43948	69130	85531	33229	17074
143	Rajasthan	Bikaner	6822597502	1112010	1203476	406513	6135	16783
144	Uttar Pradesh	Badaun	11871300715	415493	676503	718830	28572	16515
145	Maharashtra	Washim	6464767029	379533	574500	392908	17033	16454
146	Gujarat	Mehsana	6499731084	346800	462853	397185	18742	16364
147	Assam	Hailakandi	1450878549	46027	64878	88802	31522	16338
148	Uttar Pradesh	Bareilly	10505768347	328550	523444	646035	31976	16262
149	Uttar Pradesh	Mainpuri	5566124863	190655	291908	343873	29195	16187
150	Orissa	Chenkanal	3450424802	164667	259937	213365	20954	16171
151	Maharashtra	Parbhani	7937277248	489967	825600	496852	16200	15975
152	Madhya Pradesh	Gwalior	3341249759	194696	238647	213751	17161	15632

Rank	State	District	Value Output (Rs.)	NAS (Hectares)	GCA (Hectares)	Agri. Workers	Land Productivity	Labour Productivity
153	Gujarat	Ahmedabad	5655260632	505733	560022	365381	11182	15478
154	Andhra Pradesh	East Godavari	18556894381	399797	703171	1207356	46416	15370
155	West Bengal	Midnapore (West)	21531570817	532327	852095	1421429	40448	15148
156	West Bengal	Midnapore (East)	12585596895	325131	556796	1554000	38709	15148
157	Tamil Nadu	Cuddalore	9745215494	216367	279100	645096	45040	15107
158	Gujarat	Narmada	3087979365	109533	113840	205130	28192	15054
159	Orissa	Sambalpur	3370328970	179000	244567	225039	18829	14977
160	Uttar Pradesh	Moradabad	9688156011	317478	536618	650938	30516	14883
161	Uttar Pradesh	Jhansi	5810550805	338570	419292	393122	17162	14781
162	Assam	Darrang	4888837001	205111	294319	332458	23835	14705
163	Gujarat	Patan	5004033755	384933	441390	340850	13000	14681
164	Uttar Pradesh	Kanpur (D)	5848815586	222620	312355	398496	26273	14677
165	Daman & Diu	All distrcits	77988374	4000	5000	5357	19497	14558
166	Orissa	Phulbani	3073804630	118667	173783	212570	25903	14460
167	Assam	Nagaon	6124191431	234633	354801	424849	26101	14415
168	Orissa	Jharsuguda	1266634764	79667	104403	88417	15899	14326
169	Andhra Pradesh	Krishna	15411255573	436500	640448	1090697	35306	14130
170	Rajasthan	Bharatpur	8914822370	391133	556419	633572	22792	14071
171	Pondicherry	Yaman	34837651	678	1272	2478	51383	14059
172	Tamil Nadu	Coimbatore	8079052529	310740	323255	574825	25999	14055
173	Orissa	Bargarh	6259308191	329667	436057	447564	18987	13985
174	Jammu & Kashmir	Jammu	2267854719	112210	201464	162306	20211	13973
175	Nagaland	Phek	739248424	42608	48307	53455	17350	13829
176	Tamil Nadu	Thiruvallur	4525177108	108054	145220	328273	41879	13785
177	Uttar Pradesh	Auraiya	3954060342	143042	223310	287573	27643	13750
178	Uttar Pradesh	Hamirpur	4325504533	299769	338807	314863	14429	13738
179	Maharashtra	Wardha	5305933477	365567	384100	388813	14514	13646
180	Orissa	Angul	3591008980	192000	307947	263254	18703	13641
181	Uttar Pradesh	Kanpur (C)	5047922906	191551	268616	371240	26353	13597
182	Maharashtra	Amravati	10651781171	750067	1031100	793250	14201	13428
183	West Bengal	Bankura	12626096005	362869	510441	943017	34795	13389
184	West Bengal	Uttar Dinajpur	8631336170	273432	513841	647706	31567	13326
185	Karnataka	Bagalkote	6212410325	422694	458378	470447	14697	13205
186	Pondicherry	Pondicherry	810064776	13759	26465	61600	58874	13150
187	Orissa	Nayagareh	2356986622	133333	219273	179523	17677	13129
188	West Bengal	Dakshin Dinajpur	5400738138	193195	302438	411516	27955	13124
189	Madhya Pradesh	Datia	3234056830	194323	222471	247266	16643	13079
190	Madhya Pradesh	Sagar	5724804725	529907	693319	439285	10803	13032
191	Rajasthan	Bundi	4286730320	226948	334191	329481	18889	13011
192	West Bengal	Malda	8957013944	227951	454033	689178	39294	12997
193	Assam	Nalbari	2560697130	153545	211064	197740	16677	12950
194	Tripura	West (Tripura)	2925023948	121339	130535	226119	24106	12936
195	Tamil Nadu	Erode	10170461435	260123	273554	787023	39099	12923
196	Assam	Kamrup	3648251828	179913	251388	282724	20278	12904
197	Madhya Pradesh	Ujjain	6564121658	485551	674351	511249	13519	12839
198	Madhya Pradesh	Neemach	3362318515	188310	240626	262399	17855	12814
199	Maharashtra	Akola	5753938721	436867	547200	449369	13171	12804
200	Manipur	Imphal East	695651741	34675	34710	54574	20062	12747
201	Madhya Pradesh	Bhind	4822396371	323814	352516	380268	14892	12682
202	Sikkim	North	142160203	9740	11493	11271	14596	12613
203	Uttar Pradesh	Sitapur	11227652418	432795	622550	891409	25942	12595
204	Rajasthan	Dholpur	3034954642	145913	195413	242895	20800	12495

Rank	State	District	Value Output (Rs.)	NAS (Hectares)	GCA (Hectares)	Agri. Workers	Land Productivity	Labour Productivity
205	Madhya Pradesh	Ashoknagar	1159545633	101541	120900	73099	11419	12450
206	Madhya Pradesh	Guna	5475019107	509296	609801	439697	10750	12450
207	Karnataka	Udupi	2294436605	100062	125400	184434	22930	12440
208	Tamil Nadu	Tirunelveli	6314847468	135514	157907	508268	46599	12424
209	Tamil Nadu	Theni	4155524882	108127	116755	335068	38432	12402
210	Rajasthan	Jhalawar	5583657032	303022	419643	450351	18427	12398
211	Arunachal Pradesh	Lohit	472756040	20057	36184	38710	23571	12213
212	Tamil Nadu	Tiruchirapalli	6756651238	153956	166345	554380	43887	12188
213	Andhra Pradesh	Khammam	10885746949	394083	417891	895217	27623	12160
214	Karnataka	Davanagere	6230715705	356479	413213	514822	17478	12103
215	West Bengal	Cooch Behar	7817404548	260192	478594	647285	30045	12077
216	Gujarat	Kheda	6443275627	305867	366092	533742	21066	12072
217	Karnataka	Chamarajanagar	3853980786	155063	194877	319349	24854	12068
218	Uttar Pradesh	Barabanki	9378062337	263525	468293	779445	35587	12032
219	Mizoram	Kolasib	263047717	17063	17063	21950	15417	11984
220	Orissa	Jagatsingpur	2153881691	98667	182067	179734	21830	11984
221	Maharashtra	Bhandara	4672915598	364233	434800	390786	12829	11958
222	Orissa	Khurda	2070378916	134000	218167	173894	15451	11906
223	Uttar Pradesh	Hardoi	10263013266	417875	627654	863047	24560	11892
224	Manipur	Bishnupur	511527799	21300	21300	43153	24015	11854
225	Uttar Pradesh	Chandauli	4048622940	137216	241219	342380	29505	11825
226	Tripura	South (Tripura)	2319022984	88266	101654	196233	26273	11818
227	Madhya Pradesh	Ratlam	4815960794	328168	405694	409220	14675	11769
228	Maharashtra	Sindhudurg	3182661353	140300	159000	271915	22685	11705
229	Rajasthan	Jaipur	8904634003	620446	867364	766459	14352	11618
230	Tamil Nadu	Thanjavur	6533395290	176501	223348	563970	37016	11585
231	Maharashtra	Jalna	6566330906	582300	740100	573153	11277	11457
232	Maharashtra	Yavatmal	10217151753	849300	977400	891894	12030	11456
233	Madhya Pradesh	Khandwa	6168062185	394733	470779	565262	15626	11455
234	Madhya Pradesh	Burhanpur	307240449	34615	38923	0	8876	11455
235	Madhya Pradesh	Shajapur	5841237723	448058	593894	511666	13037	11416
236	Orissa	Sonepur	2089084839	109667	173743	183053	19049	11412
237	Maharashtra	Buldhana	9574572274	686333	851800	840424	13950	11393
238	Madhya Pradesh	Damoh	3176939875	306716	382551	279645	10358	11361
239	Orissa	Jajpur	2828445090	150333	258663	249092	18814	11355
240	Meghalaya	East Khasi Hills	871073418	27641	36234	76748	31514	11350
241	Bihar	Rohtas	6214117712	254293	361554	549024	24437	11318
242	Madhya Pradesh	Morena	4564733418	257322	314826	403310	17739	11318
243	Assam	Barpeta	3321110452	180112	277095	293531	18439	11314
244	Tamil Nadu	Kancheepuram	4809402451	132010	164685	425258	36432	11309
245	Andhra Pradesh	Karimnagar	11607499222	359603	499116	1026540	32279	11307
246	Meghalaya	RI BHOI	769713455	26911	29377	68217	28602	11283
247	Karnataka	Gulbarga	10241201877	1170079	1368501	908970	8753	11267
248	Rajasthan	Jhunjhunu	5947501091	395462	572641	529220	15039	11238
249	Madhya Pradesh	Chhindwara	6518051845	477866	566928	580004	13640	11238
250	Orissa	Bhadrak	2937640847	168000	213847	261656	17486	11227
251	Andhra Pradesh	Nellore	8499701609	316588	350177	758330	26848	11208
252	Andhra Pradesh	Warangal	11958739940	456267	565203	1068502	26210	11192
253	Uttar Pradesh	Mahoba	2608811195	239856	271572	233486	10877	11173
254	Maharashtra	Nagpur	6757289169	547267	591900	605432	12347	11161
255	Andhra Pradesh	Nizamabad	7323195485	220626	325194	657799	33193	11133
256	Andhra Pradesh	Adilabad	7654432440	538110	559037	687714	14225	11130

Rank	State	District	Value Output (Rs.)	NAS (Hectares)	GCA (Hectares)	Agri. Workers	Land Productivity	Labour Productivity
257	Madhya Pradesh	Jabalpur	3568545985	271676	365031	321076	13135	11114
258	Madhya Pradesh	Sheopur kalan	2065266241	117745	146616	186660	17540	11064
259	Andhra Pradesh	Kurnool	13175195158	847131	928830	1192770	15553	11046
260	Andhra Pradesh	Prakasam	11607633094	532022	571880	1051912	21818	11035
261	Maharashtra	Nanded	10018987223	706167	822500	912158	14188	10984
262	Karnataka	Bidar	3839936847	372238	452153	349772	10316	10978
263	Rajasthan	Alwar	11292619590	495188	759707	1035554	22805	10905
264	Uttranachal	Dehradun	1117802950	51500	77825	102653	21705	10889
265	Assam	Karbi Anglong	2618403267	126206	194316	241293	20747	10852
266	Tamil Nadu	Salem	7526239880	218955	286936	694641	34373	10835
267	Assam	Dhubri	3095052736	143797	220427	287460	21524	10767
268	Uttar Pradesh	Ambedker Nagar	5544316115	164525	279734	515129	33699	10763
269	Assam	Bongaigaon	1767278929	94908	156397	166352	18621	10624
270	Karnataka	Hassan	6411789322	376458	437475	604542	17032	10606
271	Karnataka	Mysore	6853191615	352829	462342	649803	19424	10547
272	Karnataka	Bijapur	5345771231	728544	819661	508838	7338	10506
273	West Bengal	24-Parganas(S)	9881960582	381803	542936	941326	25882	10498
274	Jammu & Kashmir	Srinagar	485658163	22680	28631	46704	21414	10399
275	Uttranachal	Nainital	1468056523	48812	81813	141717	30076	10359
276	Madhya Pradesh	Dhar	6852026565	506202	661814	663603	13536	10325
277	Gujarat	Sabarkantha	6112546801	439100	520614	592504	13921	10316
278	Assam	Goalpara	1550814339	79264	108467	150862	19565	10280
279	Orissa	Bolangir	4107906776	332000	425640	399816	12373	10274
280	Arunachal Pradesh	Papumpare	125527160	6498	14037	12255	19318	10243
281	Orissa	Deogarh	1012992881	66333	98057	99078	15271	10224
282	Rajasthan	Dausa	4083375444	207436	314022	399761	19685	10215
283	Madhya Pradesh	Chhatarpur	4563651000	377575	465993	446854	12087	10213
284	Orissa	Cuttak	3493798651	166667	306240	342500	20963	10201
285	Orissa	Ganjam	8397980529	388333	649230	824466	21626	10186
286	Madhya Pradesh	Mandsaur	4653162516	354946	439032	457223	13109	10177
287	Gujarat	Valsad	3448787607	161300	180828	339232	21381	10166
288	Madhya Pradesh	Shivpuri	5498189851	366192	465610	541072	15015	10162
289	Uttar Pradesh	Lalitpur	3461064335	252804	348361	341038	13691	10149
290	Orissa	Keonjhar	4361124254	294333	426867	430796	14817	10123
291	Bihar	Bhabhua	3699289997	153365	199726	366318	24121	10099
292	Karnataka	Bellary	6220961719	426278	493684	616307	14594	10094
293	Uttar Pradesh	Banda	4778558761	347692	419585	473894	13744	10084
294	Rajasthan	Chittore	7260595793	401977	526127	720867	18062	10072
295	Orissa	Koraput	4194014475	282333	377467	416432	14855	10071
296	Maharashtra	Satara	9345963367	556700	701900	929278	16788	10057
297	Uttar Pradesh	Bahraich	7134961803	331212	505695	710202	21542	10046
298	Jammu & Kashmir	Baramulla	1038158983	83021	95770	103681	12505	10013
299	Uttar Pradesh	Mirzapur	4526989497	208903	304645	453727	21670	9977
300	Rajasthan	Sirohi	1724028266	139563	177745	173595	12353	9931
301	Sikkim	West	395186064	16630	34590	39844	23763	9918
302	Karnataka	Raichur	5283598303	553161	614547	533008	9552	9913
303	Uttar Pradesh	Sultanpur	7577765406	283359	426470	768487	26743	9861
304	Orissa	Nawapara	1872574357	163333	226720	190435	11465	9833
305	Uttar Pradesh	Gonda	7686053555	294649	458673	784653	26085	9795
306	Rajasthan	S. Madhopur	3330983262	231597	303573	340304	14383	9788
307	Jammu & Kashmir	Kathua	1126898788	62689	123267	115456	17976	9760
308	Rajasthan	Sikar	5726503152	487575	667446	587941	11745	9740

Rank	State	District	Value Output (Rs.)	NAS (Hectares)	GCA (Hectares)	Agri. Workers	Land Productivity	Labour Productivity
309	Karnataka	Shimoga	4315031855	215618	239689	443526	20012	9729
310	Orissa	Puri	2623868693	139333	247677	270536	18832	9699
311	Rajasthan	Karoli	3331166876	177056	265767	344344	18814	9674
312	Uttar Pradesh	Fatehpur	6599257164	292139	401467	682988	22589	9662
313	Madhya Pradesh	Betul	4721006655	399650	521745	489917	11813	9636
314	Uttar Pradesh	Mau	3508428504	125665	209197	364483	27919	9626
315	Maharashtra	Latur	6069763177	524667	726400	631623	11569	9610
316	Uttar Pradesh	Ghazipur	6664832653	256118	413421	693809	26022	9606
317	Uttar Pradesh	Maharalganj	6906385747	202232	358633	719497	34151	9599
318	Manipur	Imphal West	514149064	20975	20975	53586	24512	9595
319	Gujarat	Vadodara	7718774634	516600	570371	808316	14941	9549
320	Rajasthan	Nagaur	7767417478	1086052	1248449	815672	7152	9523
321	Uttar Pradesh	Ballia	5356392524	217359	350140	562964	24643	9515
322	Madhya Pradesh	Tikamgarh	4388706521	253257	383642	461859	17329	9502
323	Orissa	Balasore	4094561688	234333	321090	433982	17473	9435
324	Uttar Pradesh	S.Rabidas Nagar	1511297146	69116	99291	160321	21866	9427
325	Sikkim	South	482408712	17500	33250	51202	27566	9422
326	Orissa	Kalahandi	4653568739	347667	498010	496393	13385	9375
327	Tamil Nadu	Ramanathapuram	2846175263	184105	184105	304045	15460	9361
328	Andhra Pradesh	Medak	8177894816	434353	540233	874377	18828	9353
329	Orissa	Kendrapara	2446366388	138667	237780	262010	17642	9337
330	Madhya Pradesh	Rajgarh	4786332563	415685	526588	512898	11514	9332
331	Uttar Pradesh	Lucknow	3223820791	137164	207988	345753	23503	9324
332	Karnataka	Belgaum	12048197794	732946	893204	1295798	16438	9298
333	Karnataka	Chitradurga	4834874442	419078	480755	520588	11537	9287
334	Tripura	Dhalai	759875545	26447	41700	81829	28732	9286
335	Maharashtra	Pune	11448124900	962500	1169400	1239962	11894	9233
336	Uttar Pradesh	Azamgarh	8107769079	299105	493650	879356	27107	9220
337	Uttar Pradesh	Unnao	6444828439	294878	439013	702230	21856	9178
338	Uttar Pradesh	Varanasi	2781848948	113778	157391	305230	24450	9114
339	Uttar Pradesh	Deoria	5168359433	198307	321393	568650	26062	9089
340	Rajasthan	Jodhpur	5955890023	935653	998571	656274	6365	9075
341	Maharashtra	Raigad	4128764606	188500	215500	457840	21903	9018
342	Arunachal Pradesh	West Siang	251292395	24367	28951	27965	10313	8986
343	Maharashtra	Aurangabad	6919711423	694533	1033000	771498	9963	8969
344	Mizoram	Mamit	192569287	13316	13316	21479	14461	8965
345	Rajasthan	Jaisalmer	1043099031	378938	420221	116734	2753	8936
346	Orissa	Boudh	1186219875	85333	121393	133438	13901	8890
347	Tamil Nadu	Vellore	5707424286	185582	223910	643894	30754	8864
348	Karnataka	Koppal	3590437576	326771	418252	405069	10988	8864
349	Chattisgarh	Durg	6630957987	546650	733267	749675	12130	8845
350	Orissa	Rayagada	2631237951	152000	229963	298295	17311	8821
351	Uttar Pradesh	Kushi Nagar	7291376039	222049	337106	828554	32837	8800
352	Assam	Marigaon	1683233409	92422	124352	191759	18212	8778
353	Uttar Pradesh	Basti	5234938709	207587	304046	601545	25218	8702
354	Uttar Pradesh	Allahabad	8184176752	347435	517431	940655	23556	8701
355	Maharashtra	Sangli	7541867980	591667	690700	866868	12747	8700
356	Maharashtra	Ratnagiri	4461465258	244900	255600	514982	18217	8663
357	Andhra Pradesh	Visakhapatnam	7386759296	292737	372824	854539	25233	8644
358	Mizoram	Saiha	167401990	13736	13736	19582	12187	8549
359	Madhya Pradesh	Seoni	4044741454	365686	461729	473329	11061	8545
360	Orissa	Gajapati	1837666824	79667	132473	215295	23067	8536

Rank	State	District	Value Output (Rs.)	NAS (Hectares)	GCA (Hectares)	Agri. Workers	Land Productivity	Labour Productivity
361	Meghalaya	West Garo Hills	1296961907	64328	85489	152508	20162	8504
362	Meghalaya	East Garo Hills	760010715	32117	39414	89519	23664	8490
363	Sikkim	East	390473084	18122	27183	46044	21547	8480
364	Tamil Nadu	Virudhunagar	2385420949	140100	144695	282202	17027	8453
365	Tamil Nadu	Villupuram	9455632987	293127	337503	1120328	32258	8440
366	Nagaland	Mokokchun	608857428	36608	42892	72258	16632	8426
367	Rajasthan	Tonk	3083669670	398168	463372	367086	7745	8400
368	Karnataka	Mandya	5126437928	212835	249766	619920	24086	8270
369	Andhra Pradesh	Cuddapah	6080173432	367380	430305	738756	16550	8230
370	Tamil Nadu	Dharmapuri	8159166852	298710	348171	994167	27315	8207
371	Maharashtra	Chandrapur	5132921015	449133	531100	627741	11429	8177
372	Uttar Pradesh	Chitrakoot	2285632213	171249	190367	279905	13347	8166
373	Uttar Pradesh	Jaunpur	7230097420	282968	440188	886254	25551	8158
374	Uttar Pradesh	Sant Kabir Nagar	3268714116	117766	205900	404286	27756	8085
375	Maharashtra	Dhule	4352468553	435433	483200	538737	9996	8079
376	Bihar	Buxar	2518038073	138795	149001	311822	18142	8075
377	Meghalaya	South Garo Hills	281295648	18314	23041	35037	15360	8029
378	Tamil Nadu	Nagapattinam	3054080600	137701	212359	382246	22179	7990
379	Maharashtra	Nandurbar	4017860724	296367	325300	503385	13557	7982
380	Orissa	Malkangiri	1646117486	134000	193057	206797	12284	7960
381	Tamil Nadu	Dindigul	4792244740	228087	234070	606955	21011	7896
382	Rajasthan	Pali	3208447666	501586	544496	408111	6397	7862
383	Arunachal Pradesh	Tawang	77906914	4148	7018	9968	18782	7816
384	West Bengal	Purulia	5909741870	310640	329511	758939	19024	7787
385	Bihar	Bhojpur	3781960534	185845	237120	486531	20350	7773
386	Himachal Pradesh	Sirmaur	1296351182	40621	74778	167626	31913	7734
387	Madhya Pradesh	Satna	3788647427	358151	471103	491683	10578	7705
388	Nagaland	Kohima	611910765	35042	39297	79444	17462	7702
389	Arunachal Pradesh	Lower Subabsiri	262051409	18208	28371	34044	14392	7697
390	Uttar Pradesh	Sonbhadra	3019688303	191885	273895	394574	15737	7653
391	Andhra Pradesh	Ranga reddy	4384123439	265223	287374	576390	16530	7606
392	Uttar Pradesh	Gorakhpur	5708884806	253152	388358	750876	22551	7603
393	Orissa	Mayurbhanj	5166212127	394667	472753	684278	13090	7550
394	Manipur	Churachandpur	494446585	28825	28885	65509	17153	7548
395	Uttar Pradesh	Balrampur	4709257284	206892	304966	624371	22762	7542
396	Bihar	Aurangabad	4023529796	190147	282277	533821	21160	7537
397	Tamil Nadu	Pudukottai	3588412990	137015	139012	477901	26190	7509
398	Manipur	Ukhrul	365739940	19500	19500	48788	18756	7497
399	Uttar Pradesh	Raibareli	5977444956	268789	409490	800490	22238	7467
400	Rajasthan	Jalore	4159787807	616410	755041	563005	6748	7389
401	Chattisgarh	Raipur	5869298948	549111	654739	794468	10689	7388
402	Andhra Pradesh	Srikakulam	6035515796	286594	387347	822348	21059	7339
403	Uttar Pradesh	Pratapgarh	5316813720	218268	327898	727177	24359	7312
404	Maharashtra	Ahmednagar	9831931499	1116367	1516400	1348560	8807	7291
405	Andhra Pradesh	Vizianagaram	5844765702	303184	408097	802491	19278	7283
406	Assam	Kokrajhar	1649442910	84876	135574	226858	19434	7271
407	Gujarat	Anand	3222171751	162867	224366	444083	19784	7256
408	Karnataka	Uttara Kannada	1646266530	108863	118988	228071	15122	7218
409	Chattisgarh	Mahasamund	2496931893	266610	286403	347282	9365	7190
410	Maharashtra	Beed	5474860661	767400	936400	761993	7134	7185
411	Chattisgarh	Dhamtari	1996004586	133883	195902	281106	14909	7101
412	Uttar Pradesh	Siddarthanagar	4821349118	240309	342133	679834	20063	7092

Rank	State	District	Value Output (Rs.)	NAS (Hectares)	GCA (Hectares)	Agri. Workers	Land Productivity	Labour Productivity
413	Maharashtra	Osmanabad	3727451138	489867	754500	526120	7609	7085
414	Karnataka	Haveri	3497373380	351826	444549	496368	9941	7046
415	Uttar Pradesh	Shrawashtri	2877159155	142759	216297	408859	20154	7037
416	Orissa	Sundargarh	3088937044	304333	387697	439585	10150	7027
417	Pondicherry	Karaikal	133838037	6900	9083	19066	19397	7020
418	Chattisgarh	Bilaspur	4393339805	367330	468678	627876	11960	6997
419	Uttar Pradesh	Faizabad	4333648234	146107	225758	621268	29661	6975
420	Madhya Pradesh	Panna	2041497950	243196	279421	293432	8394	6957
421	Andhra Pradesh	Chittoor	8003497163	364896	408019	1162410	21934	6885
422	Chattisgarh	U.B. Kanker	2041575049	207501	219929	298250	9839	6845
423	Tamil Nadu	Madurai	3132025848	121929	127689	458141	25687	6836
424	Chattisgarh	Rajnandgaon	3537456722	359700	443541	518454	9834	6823
425	Arunachal Pradesh	East kameng	130166115	7699	12653	19100	16907	6815
426	Chattisgarh	Kabirdham	1732584768	184811	225572	254606	9375	6805
427	Chattisgarh	Janjgir	3255777168	261975	301250	479274	12428	6793
428	Arunachal Pradesh	Upper Siang	77702481	5716	9225	11544	13594	6731
429	Tamil Nadu	Karur	1980066496	87214	88435	294457	22704	6724
430	Andhra Pradesh	Anantapur	8038004189	1006088	1043713	1205402	7989	6668
431	Madhya Pradesh	Khargone	3811797208	409055	462656	574110	9319	6639
432	Jammu & Kashmir	Pulwama	934543039	55207	81480	140828	16928	6636
433	Andhra Pradesh	Mahaboobnagar	8784792558	770910	839245	1333130	11395	6590
434	Uttar Pradesh	Kaushambi	2633580940	130196	173308	402616	20228	6541
435	Orissa	Nawarangpur	2707099083	212333	284700	418129	12749	6474
436	Jammu & Kashmir	Rajouri	977379714	51865	96227	151551	18845	6449
437	Maharashtra	Nasik	8933858349	876667	958100	1396102	10191	6399
438	Andhra Pradesh	Nalgonda	6870956125	460239	534751	1081104	14929	6355
439	Karnataka	Tumkur	5810343264	559207	599490	917354	10390	6334
440	Himachal Pradesh	Una	792665623	40797	72202	126714	19430	6256
441	Tamil Nadu	Thiruvarur	2214763748	134274	197662	354407	16494	6249
442	Chattisgarh	D.B. Dantewara	2089065926	291102	295163	336125	7176	6215
443	Tamil Nadu	Thiruvannamalai	4763202710	202411	256090	772091	23532	6169
444	Meghalaya	Jainta Hills	592955766	32395	32759	96402	18304	6151
445	Arunachal Pradesh	Changlang	277876966	15669	21962	45208	17734	6147
446	Bihar	Gopalganj	3196742272	151384	235041	523384	21117	6108
447	Madhya Pradesh	Rewa	4127069160	369826	499276	676184	11159	6103
448	Jharkhand	Simdega	1055867243	92485	97995	0	11417	6102
449	Jharkhand	Gumla	1753848651	171757	181991	574885	10211	6102
450	Madhya Pradesh	Katni	1699300133	196107	258786	280179	8665	6065
451	Tamil Nadu	Krishnagiri	1635978862	60059	66604	270231	27239	6054
452	Himachal Pradesh	Lahul Spiti	69532331	3311	3395	11537	21000	6027
453	Karnataka	Bangalore Rural	3325283946	289586	307406	553122	11483	6012
454	Gujarat	Dang	480413095	56233	57455	79938	8543	6010
455	Madhya Pradesh	Balaghat	3405369509	274929	344377	570241	12386	5972
456	Bihar	Chamaparan(West)	5768249549	280367	375512	972093	20574	5934
457	Karnataka	Dharwar	2154165399	328778	481810	365386	6552	5896
458	Bihar	Kishanganj	2069246424	129930	188029	351114	15926	5893
459	Maharashtra	Gondia	2384276595	198000	240000	405072	12042	5886
460	Uttranachal	Champawat	381266871	23780	38498	64859	16033	5878
461	Madhya Pradesh	Mandla	2305991531	217295	276445	395655	10612	5828
462	Himachal Pradesh	Mandi	1962212053	86839	158258	336722	22596	5827
463	Maharashtra	Thane	4182233310	244600	260600	718322	17098	5822
464	Karnataka	Gadag	1841717068	388166	451779	320066	4745	5754

Rank	State	District	Value Output (Rs.)	NAS (Hectares)	GCA (Hectares)	Agri. Workers	Land Productivity	Labour Productivity
465	Rajasthan	Churu	3786285696	955341	1028861	660235	3963	5735
466	Chattisgarh	Jashpur	1989922265	251687	266820	349515	7906	5693
467	Himachal Pradesh	Kangra	2120041589	116628	219058	373639	18178	5674
468	Maharashtra	Solapur	6303988438	1027133	1133700	1116638	6137	5646
469	Bihar	Patna	4425878561	206746	257732	788261	21407	5615
470	Jharkhand	East Singhbhum	1777763337	91274	176269	318835	19477	5576
471	Karnataka	Bangalore Urban	819158560	73484	82070	147057	11147	5570
472	Chattisgarh	Raigarh	2647945535	280463	307954	480312	9441	5513
473	Assam	Lakhimpur	2062946333	99930	171929	374951	20644	5502
474	Bihar	Siwan	3013960157	164041	250433	548957	18373	5490
475	Chattisgarh	Jagdalpur	3020629202	351523	360221	553172	8593	5461
476	Assam	Dhemaji	1115187001	63049	102097	204376	17688	5457
477	Rajasthan	Bhilwara	3257151280	354724	440923	601764	9182	5413
478	Himachal Pradesh	Solan	799706942	38766	62884	150156	20629	5326
479	Rajasthan	Barmer	3776649745	1467508	1566135	716771	2574	5269
480	Arunachal Pradesh	West Kameng	71095256	4981	7461	13539	14273	5251
481	Uttranachal	Pithoragarh	718177110	45788	82377	136811	15685	5249
482	Jammu & Kashmir	Anantnag	1084214566	77311	99906	207013	14024	5237
483	Rajasthan	Ajmer	2147184418	373766	425675	410669	5745	5229
484	Manipur	Thoubal	576099448	29975	29975	111596	19219	5162
485	Dadra & Nagar Haveli	Dadra & Nagar Haveli	279564315	23000	30000	54185	12155	5159
486	Uttranachal	Uttar Kashi	533416447	29552	45594	104480	18050	5105
487	Bihar	Katihar	3829664956	162389	270964	750957	23583	5100
488	Himachal Pradesh	Bilaspur	598122906	30138	57534	117567	19846	5088
489	Madhya Pradesh	Dindori	1515630911	204006	266271	299131	7429	5067
490	Arunachal Pradesh	Upper Subansiri	79141997	7923	9395	15747	9989	5026
491	Chattisgarh	Sarguja	4288995813	485884	561742	855113	8827	5016
492	Himachal Pradesh	Shimla	1216680037	68287	95439	248112	17817	4904
493	Meghalaya	West Khasi Hills	546836754	27335	32004	111739	20005	4894
494	Madhya Pradesh	Sidhi	3015192512	360006	487977	622693	8375	4842
495	Tamil Nadu	Sivagangai	1594816771	109940	110032	331165	14506	4816
496	Bihar	Supaul	3024771330	153456	260819	656923	19711	4604
497	Uttranachal	Pauri Garhwal	852783758	83629	127411	185535	10197	4596
498	Bihar	Vaishali	2607711524	128086	195446	570470	20359	4571
499	Karnataka	Kolar	3610270971	323347	335000	792167	11165	4557
500	Jharkhand	Lohargada	565335423	46169	51019	124263	12245	4550
501	Madhya Pradesh	Barwani	2008663731	232344	261792	442397	8645	4540
502	Bihar	Madhupura	2761370130	133037	220901	613353	20756	4502
503	Madhya Pradesh	Umaria	705652747	107748	138673	167749	6549	4496
504	Madhya Pradesh	Anupur	346364546	53875	64508		6429	4496
505	Bihar	Saran	2837269221	197002	238965	631843	14402	4490
506	Mizoram	Aizwal	289445029	19385	19385	64650	14931	4477
507	Bihar	Saharasra	2214101634	111380	204843	497610	19879	4449
508	Madhya Pradesh	Jhabua	2836749280	358856	396312	639343	7905	4437
509	Chattisgarh	Koriya	891300932	106361	118667	201309	8380	4428
510	Himachal Pradesh	Hamirpur	645447320	35244	70144	147167	18314	4386
511	Nagaland	Mon	499296937	34514	39858	114119	14467	4375
512	Bihar	Purnea	3620207131	218838	307952	830832	16543	4357
513	Bihar	Araria	3226107268	179529	282112	744186	17970	4335
514	Rajasthan	Banswara	2640577875	230315	301990	610244	11465	4327
515	Rajasthan	Rajsamand	939680941	90415	102301	218274	10393	4305

Rank	State	District	Value Output (Rs.)	NAS (Hectares)	GCA (Hectares)	Agri. Workers	Land Productivity	Labour Productivity
516	Bihar	Muzafarpur	3478266973	205774	326989	811124	16903	4288
517	Bihar	Begusarai	2122818940	118574	176201	495529	17903	4284
518	Uttranachal	Tehri garhwal	797700866	56847	88672	188610	14033	4229
519	Manipur	Chandel	156212088	10980	11000	36995	14227	4223
520	Himachal Pradesh	Chamba	716540204	42156	66961	170034	16997	4214
521	Chattisgarh	Korba	1168987211	132934	143047	278660	8794	4195
522	Jammu & Kashmir	Poonch	493557043	27555	46158	118044	17912	4181
523	Bihar	Champaran(east)	4407072589	294198	344353	1058377	14980	4164
524	Uttranachal	Chamoli	436806720	30530	46474	105265	14307	4150
525	Bihar	Khagaria	1562263635	85435	134827	376526	18286	4149
526	Manipur	Senapati	652597183	35305	35625	158049	18485	4129
527	Jammu & Kashmir	Budgam	697899846	52680	57131	169426	13248	4119
528	Jharkhand	Pakur	851818027	61312	69148	207489	13893	4105
529	Uttranachal	Vageshwar	379173469	23763	41477	92443	15957	4102
530	Himachal Pradesh	Kullu	685877053	36900	60982	170748	18588	4017
531	Bihar	Sheikhpura	618801364	41206	52884	155168	15017	3988
532	Bihar	Jahanabad	1848245957	104543	138733	466768	17679	3960
533	Jharkhand	Jamtara	756458073	47713	49483	0	15854	3948
534	Jharkhand	Godda	1348599166	77180	83810	342060	17473	3943
535	Bihar	Lakhisarai	873364686	69188	78201	223584	12623	3906
536	Bihar	Nalanda	2694326533	180618	221632	703450	14917	3830
537	Bihar	Samastipur	3209172455	185374	250849	838141	17312	3829
538	Manipur	Tamenglong	158532625	12360	12615	41437	12826	3826
539	Madhya Pradesh	Shahdol	1929782989	283088	328736	506275	6817	3812
540	Jammu & Kashmir	Udhampur	897158299	70175	113608	235919	12785	3803
541	Rajasthan	Udaipur	2624163140	237397	282096	702773	11054	3734
542	Arunachal Pradesh	Tirap	136369826	13893	19004	37237	9816	3662
543	Uttranachal	Almora	817238794	83035	131455	223351	9842	3659
544	Gujarat	Panchmahal	2748579535	271600	295993	760944	10120	3612
545	Mizoram	Lunglei	176017678	11005	11005	48983	15995	3593
546	Jharkhand	Ranchi	2438985409	251638	270376	683245	9692	3570
547	Bihar	Bhagalpur	2056720848	146996	177249	584729	13992	3517
548	Nagaland	Thensang	555914576	41439	46646	158657	13415	3504
549	Jharkhand	Latehar	701460872	45428	56073	0	15441	3483
550	Jharkhand	Palamu	1506752272	101115	124807	634040	14901	3483
551	Bihar	Nawadha	1894631894	111387	149217	545267	17009	3475
552	Bihar	Monghyr	651336594	43640	61175	192321	14925	3387
553	Jharkhand	Deoghar	947296124	72578	76316	279999	13052	3383
554	Jharkhand	Koderma	368632098	17658	24228	110062	20876	3349
555	Bihar	Sitamari	2268780215	122051	209748	677387	18589	3349
556	Bihar	Banka	1813510347	154128	161389	545772	11766	3323
557	Bihar	Gaya	3317614321	197575	265566	1001463	16792	3313
558	Maharashtra	Gadchiroli	1388772940	169900	181500	420263	8174	3305
559	Jharkhand	Chatra	797228032	47090	50920	245707	16930	3245
560	Bihar	Sivhar	460130290	25940	45652	142116	17738	3238
561	Jharkhand	Dhanbad	493113580	37749	43809	157735	13063	3126
562	Uttranachal	Rudraprayag	239573352	19838	31640	77025	12077	3110
563	Jammu & Kashmir	Kargil	79545227	9565	10445	26161	8316	3041
564	Gujarat	Dahod	2038907335	196833	218860	674136	10359	3024
565	Jharkhand	Seraikela	815799842	66223	76300	0	12319	3022
566	Jharkhand	West Singhbum	1204230662	134452	154913	668548	8957	3022
567	Jharkhand	Garhwa	1017002773	63097	90149	341535	16118	2978

Rank	State	District	Value Output (Rs.)	NAS (Hectares)	GCA (Hectares)	Agri. Workers	Land Productivity	Labour Productivity
568	Jharkhand	Hazaribag	1443385436	97953	109615	488404	14735	2955
569	Bihar	Madhubani	3026130052	225953	318838	1025155	13393	2952
570	Jharkhand	Dumka	1761033772	116813	121148	637637	15076	2948
571	Jharkhand	Sahibganj	677281202	46108	54482	248024	14689	2731
572	Jammu & Kashmir	Kupwara	344574124	43558	45695	127800	7911	2696
573	Jharkhand	Giridh	1277407724	85858	117443	479829	14878	2662
574	Jammu & Kashmir	Leh	64206668	10166	10475	24689	6316	2601
575	Rajasthan	Dungarpur	983161417	117918	147308	405113	8338	2427
576	Bihar	Darbhanga	1796194726	171731	196287	774226	10459	2320
577	Jammu & Kashmir	Doda	506501047	63934	85044	218655	7922	2316
578	Jharkhand	Bokaro	524850544	36264	50692	227877	14473	2303
579	Bihar	Jamui	813664993	77431	84002	375390	10508	2168
580	Mizoram	Chhimtuipui	223074959	12663	12663	104011	17616	2145
581	Himachal Pradesh	Kinnaur	59940718	7424	8840	32106	8074	1867

Appendix- 6

District wise Growth of Agricultural Production, 1990-93 to 2001-04

Sr No	State	District	Growth Rate (% per year)
1	Andhra Pradesh	Adilabad	7.62
2	Andhra Pradesh	Anantapur	-2.58
3	Andhra Pradesh	Chittoor	-2.00
4	Andhra Pradesh	Cuddapah	1.10
5	Andhra Pradesh	East Godavari	0.42
6	Andhra Pradesh	Guntur	0.73
7	Andhra Pradesh	Karimnagar	0.83
8	Andhra Pradesh	Khammam	1.00
9	Andhra Pradesh	Krishna	0.10
10	Andhra Pradesh	Kurnool	0.54
11	Andhra Pradesh	Mahaboobnagar	1.33
12	Andhra Pradesh	Medak	5.43
13	Andhra Pradesh	Nalgonda	-1.45
14	Andhra Pradesh	Nellore	-0.57
15	Andhra Pradesh	Nizamabad	1.81
16	Andhra Pradesh	Prakasam	-0.74
17	Andhra Pradesh	Ranga Reddy	3.06
18	Andhra Pradesh	Srikakulam	-2.01
19	Andhra Pradesh	Visakhapatnam	-2.34
20	Andhra Pradesh	Vizianagaram	-0.31
21	Andhra Pradesh	Warangal	4.93
22	Andhra Pradesh	W-West Godavari	2.08
23	Assam	Barpeta	-0.24
24	Assam	Bongaigaon	0.45
25	Assam	Cachar	0.52
26	Assam	Darrang	-2.15
27	Assam	Dhemaji	0.41
28	Assam	Dhubri	3.53
29	Assam	Dibrugarh	-2.19
30	Assam	Goalpara	0.12
31	Assam	Golaghat	3.01
32	Assam	Hailakandi	-0.42
33	Assam	Jorhat	2.87
34	Assam	Kamrup	1.19
35	Assam	Karbi Anglong	0.73
36	Assam	Karimganj	3.11
37	Assam	Kokrajhar	2.51
38	Assam	Lakhimpur	-1.21
39	Assam	Marigaon	2.22
40	Assam	N Kachar Hills	0.95
41	Assam	Nagaon	1.81
42	Assam	Nalbari	0.51
43	Assam	Sivasagar	-1.19
44	Assam	Sonitpur	4.75
45	Assam	Tinsukia	8.01
46	Bihar	Araria	3.98

Sr No	State	District	Growth Rate (% per year)
47	Bihar	Aurangabad	3.46
48	Bihar	Begusarai	0.22
49	Bihar	Bhagalpur	1.66
50	Bihar	Bhojpur	-2.95
51	Bihar	Champaran(east)	-0.84
52	Bihar	Champaran(west)	1.38
53	Bihar	Darbhanga	-0.11
54	Jharkhand	Deoghar	1.99
55	Jharkhand	Dhanbad	8.75
56	Jharkhand	Dumka	4.96
57	Jharkhand	East Singhbhum	6.30
58	Bihar	Gaya	2.00
59	Jharkhand	Giridh	3.40
60	Jharkhand	Godda	7.08
61	Bihar	Gopalganj	-2.35
62	Jharkhand	Gumla	2.19
63	Jharkhand	Hazaribag	4.44
64	Bihar	Jahanabad	-2.18
65	Bihar	Katihar	3.41
66	Bihar	Khagaria	2.54
67	Bihar	Kishanganj	3.82
68	Jharkhand	Lohargada	2.61
69	Bihar	Madhubani	1.14
70	Bihar	Madhupura	3.33
71	Bihar	Monghyr	-0.96
72	Bihar	Muzafarpur	1.14
73	Bihar	Nalanda	-1.10
74	Bihar	Nawadha	1.75
75	Jharkhand	Palamu	5.04
76	Bihar	Patna	1.93
77	Bihar	Purnea	1.77
78	Jharkhand	Ranchi	2.61
79	Bihar	Rohtas	2.33
80	Bihar	Saharsa	6.83
81	Jharkhand	Sahibganj	2.41
82	Bihar	Samastipur	1.32
83	Bihar	Saran	-0.21
84	Bihar	Sitamarhi	2.14
85	Bihar	Siwan	-1.30
86	Bihar	Vaishali	4.59
87	Jharkhand	West Singhbum	4.14
88	Gujarat	Ahmedabad	0.59
89	Gujarat	Amreli	7.18
90	Gujarat	Banaskantha	5.05
91	Gujarat	Bharuch	4.30
92	Gujarat	Bhavnagar	5.60
93	Gujarat	Dang	2.68
94	Gujarat	Gandhinagar	13.76
95	Gujarat	Jamnagar	11.14
96	Gujarat	Junagadh	7.33
97	Gujarat	Kheda	-1.10
98	Gujarat	Kutch	1.32

Sr No	State	District	Growth Rate (% per year)
99	Gujarat	Mehsana	-1.53
100	Gujarat	Panchmahal	0.12
101	Gujarat	Rajkot	7.50
102	Gujarat	Sabarkantha	0.16
103	Gujarat	Surat	1.02
104	Gujarat	Surendranagar	1.15
105	Gujarat	Vadodara	-0.52
106	Gujarat	Valsad	2.38
107	Haryana	Ambala	2.93
108	Haryana	Bhiwani	5.10
109	Haryana	Faridabad	2.85
110	Haryana	Gurgaon	3.82
111	Haryana	Hisar	1.49
112	Haryana	Jind	2.25
113	Haryana	Kaithal	1.43
114	Haryana	Karnal	2.34
115	Haryana	Kurukshetra	1.62
116	Haryana	Mahendragarh	3.54
117	Haryana	Panipat	-0.14
118	Haryana	Rewari	3.29
119	Haryana	Rohtak	1.47
120	Haryana	Sirsa	2.23
121	Haryana	Sonipat	2.99
122	Haryana	Yamunanagar	1.27
123	Himachal Pradesh	Bilaspur	0.36
124	Himachal Pradesh	Chamba	0.43
125	Himachal Pradesh	Hamirpur	-0.41
126	Himachal Pradesh	Kangra	0.14
127	Himachal Pradesh	Kinnaur	-2.82
128	Himachal Pradesh	Kullu	-0.32
129	Himachal Pradesh	Lahul Spiti	-6.28
130	Himachal Pradesh	Mandi	2.13
131	Himachal Pradesh	Shimla	-0.62
132	Himachal Pradesh	Sirmaur	-0.21
133	Himachal Pradesh	Solan	-0.01
134	Himachal Pradesh	Una	1.47
135	Jammu & Kashmir	Anantnag	-1.70
136	Jammu & Kashmir	Baramulla	-0.77
137	Jammu & Kashmir	Budgam	-0.91
138	Jammu & Kashmir	Doda	-2.24
139	Jammu & Kashmir	Jammu	1.49
140	Jammu & Kashmir	Kargil	9.82
141	Jammu & Kashmir	Kathua	1.57
142	Jammu & Kashmir	Kupwara	-3.44
143	Jammu & Kashmir	Leh	3.52
144	Jammu & Kashmir	Poonch	1.98
145	Jammu & Kashmir	Pulwama	-2.01
146	Jammu & Kashmir	Rajouri	0.66
147	Jammu & Kashmir	Srinagar	0.56
148	Jammu & Kashmir	Udhampur	-0.51
149	Karnataka	Bangalore Rural	-2.60
150	Karnataka	Belgaum	-1.33

Sr No	State	District	Growth Rate (% per year)
151	Karnataka	Bellary	0.78
152	Karnataka	Bidar	1.78
153	Karnataka	Bijapur	1.54
154	Karnataka	Chickmagalur	1.13
155	Karnataka	Chitradurga	-1.88
156	Karnataka	Dakshina Kannada	-2.54
157	Karnataka	Dharwar	-2.60
158	Karnataka	Gulbarga	3.57
159	Karnataka	Hassan	0.66
159	Karnataka	Kodagu	2.75
160	Karnataka	Kolar	-4.31
161	Karnataka	Mandya	-1.30
162	Karnataka	Mysore	2.31
163	Karnataka	Raichur	-0.53
164	Karnataka	Shimoga	-2.67
165	Karnataka	Tumkur	-1.64
166	Karnataka	Uttara Kannada	-3.87
167	Kerala	Alappuzha	-2.48
168	Kerala	Ernakulam	0.55
169	Kerala	Idukki	6.68
170	Kerala	Kannur	0.30
171	Kerala	Kasaragod	2.07
172	Kerala	Kollam	0.81
173	Kerala	Kottayam	3.32
174	Kerala	Kozhikode	2.44
175	Kerala	Malappuram	2.43
176	Kerala	Palakkad	1.83
177	Kerala	Pathanamthitta	1.93
178	Kerala	Thiruvananthapuram	0.61
179	Kerala	Thrissur	0.69
180	Kerala	Wayanad	5.30
181	Madhya Pradesh	Balaghat	1.17
182	Madhya Pradesh	Betul	1.18
183	Madhya Pradesh	Bhind	1.50
184	Madhya Pradesh	Bhopal	3.13
185	Chattisgarh	Bilaspur	1.21
186	Madhya Pradesh	Chhatarpur	2.07
187	Madhya Pradesh	Chhindwara	-0.51
188	Madhya Pradesh	Damoh	2.80
189	Madhya Pradesh	Datia	6.14
190	Madhya Pradesh	Dewas	3.39
191	Madhya Pradesh	Dhar	2.13
192	Chattisgarh	Durg	1.65
193	Madhya Pradesh	Guna	2.50
194	Madhya Pradesh	Gwalior	-0.83
195	Madhya Pradesh	Hoshangabad	4.17
196	Madhya Pradesh	Indore	-0.33
197	Madhya Pradesh	Jabalpur	1.92
198	Chattisgarh	Jagdalpur	2.15
199	Madhya Pradesh	Jhabua	0.72
200	Madhya Pradesh	Khandwa	-4.17
201	Madhya Pradesh	Khargone	1.75

Sr No	State	District	Growth Rate (% per year)
202	Madhya Pradesh	Mandla	2.33
203	Madhya Pradesh	Mandsaur	-0.18
204	Madhya Pradesh	Morena	-0.52
205	Madhya Pradesh	Narsinghpur	2.36
206	Madhya Pradesh	Panna	0.85
207	Chattisgarh	Raigarh	2.14
208	Chattisgarh	Raipur	-1.03
209	Madhya Pradesh	Raisen	1.23
210	Madhya Pradesh	Rajgarh	1.86
211	Chattisgarh	Rajnandgaon	2.01
212	Madhya Pradesh	Ratlam	-0.14
213	Madhya Pradesh	Rewa	2.28
214	Madhya Pradesh	Sagar	2.41
215	Chattisgarh	Sarguja	1.79
216	Madhya Pradesh	Satna	2.48
217	Madhya Pradesh	Sehore	2.75
218	Madhya Pradesh	Seoni	2.35
219	Madhya Pradesh	Shahdol	1.02
220	Madhya Pradesh	Shajapur	-2.39
221	Madhya Pradesh	Shivpuri	1.69
222	Madhya Pradesh	Sidhi	2.06
223	Madhya Pradesh	Tikamgarh	0.86
224	Madhya Pradesh	Ujjain	-1.61
225	Madhya Pradesh	Vidisha	3.31
226	Maharashtra	Ahmednagar	1.75
227	Maharashtra	Akola	4.23
228	Maharashtra	Amravati	4.40
229	Maharashtra	Aurangabad	0.20
230	Maharashtra	Beed	0.12
231	Maharashtra	Bhandara	5.47
232	Maharashtra	Buldhana	3.82
233	Maharashtra	Chandrapur	3.75
234	Maharashtra	Dhule	1.44
235	Maharashtra	Gadchiroli	-0.09
236	Maharashtra	Jalgaon	7.06
237	Maharashtra	Jalna	3.13
238	Maharashtra	Kolhapur	6.11
239	Maharashtra	Latur	3.14
240	Maharashtra	Nagpur	4.42
241	Maharashtra	Nanded	5.52
242	Maharashtra	Nasik	1.67
243	Maharashtra	Osmanabad	-1.60
244	Maharashtra	Parbhani	6.42
245	Maharashtra	Pune	3.28
246	Maharashtra	Raigad	8.69
247	Maharashtra	Ratnagiri	5.94
248	Maharashtra	Sangli	3.26
249	Maharashtra	Satara	2.40
250	Maharashtra	Sindhudurg	12.26
251	Maharashtra	Solapur	-0.48
252	Maharashtra	Thane	5.30
253	Maharashtra	Wardha	4.11

Sr No	State	District	Growth Rate (% per year)
254	Maharashtra	Yavatmal	3.67
255	Orissa	Balasore	2.34
256	Orissa	Bbolangir	-2.62
257	Orissa	Cuttack	-5.00
258	Orissa	Dhenkanal	2.69
259	Orissa	Gajapati	-7.14
260	Orissa	Ganjam	5.85
261	Orissa	Kalahandi	-1.09
262	Orissa	Keonjhar	2.35
263	Orissa	Koraput	-1.16
264	Orissa	Malkangiri	-10.00
265	Orissa	Mayurbhanj	-1.12
266	Orissa	Nawarangpur	-5.89
267	Orissa	Phulbani	-3.50
268	Orissa	Puri	-1.92
269	Orissa	Rayagada	-8.20
270	Orissa	Sambalpur	-1.24
271	Orissa	Sundargarh	-3.10
272	Punjab	Amritsar	1.14
273	Punjab	Bhathinda	1.46
274	Punjab	Faridkot	1.34
275	Punjab	Fatehgarh Sahib	0.89
276	Punjab	Ferozepur	0.97
277	Punjab	Gurdaspur	2.14
278	Punjab	Hoshiarpur	2.78
279	Punjab	Jalandhar	0.92
280	Punjab	Kapurthala	2.40
281	Punjab	Ludhiana	1.41
282	Punjab	Patiala	1.25
283	Punjab	Ropar	1.16
284	Punjab	Sangrur	0.92
285	Rajasthan	Ajmer	0.07
286	Rajasthan	Alwar	3.15
287	Rajasthan	Banswara	0.04
288	Rajasthan	Baran	9.49
289	Rajasthan	Barmer	2.43
290	Rajasthan	Bharatpur	2.87
291	Rajasthan	Bhilwara	-2.40
292	Rajasthan	Bikaner	7.48
293	Rajasthan	Bundi	0.37
294	Rajasthan	Chittore	0.29
295	Rajasthan	Churu	0.58
296	Rajasthan	Dausa	5.05
297	Rajasthan	Dholpur	4.22
298	Rajasthan	Dungarpur	-2.25
299	Rajasthan	Ganganagar	-1.38
300	Rajasthan	Jaipur	4.30
301	Rajasthan	Jaisalmer	11.74
302	Rajasthan	Jalore	2.58
303	Rajasthan	Jhalawar	3.38
304	Rajasthan	Jhunjhunu	8.96
305	Rajasthan	Jodhpur	3.89

Sr No	State	District	Growth Rate (% per year)
306	Rajasthan	Kota	5.48
307	Rajasthan	Nagaur	3.15
308	Rajasthan	Pali	-0.91
309	Rajasthan	Rajsamand	1.19
310	Rajasthan	S. Madhopur	-0.03
311	Rajasthan	Sikar	8.02
312	Rajasthan	Sirohi	-0.76
313	Rajasthan	Tonk	-1.87
314	Rajasthan	Udaipur	-0.10
315	Tamil Nadu	Coimbatore	-5.42
316	Tamil Nadu	Cuddalore	0.14
317	Tamil Nadu	Dharmapuri	-1.40
318	Tamil Nadu	Dindigul	-2.30
319	Tamil Nadu	Erode	-0.46
320	Tamil Nadu	Kanyakumari	-3.58
321	Tamil Nadu	Madurai	-3.36
322	Tamil Nadu	Nagapattinam	-4.46
323	Tamil Nadu	Pudukottai	1.04
324	Tamil Nadu	Ramanathapuram	-0.12
325	Tamil Nadu	Salem	2.56
326	Tamil Nadu	Sivagangai	-4.87
327	Tamil Nadu	Thanjavur	0.18
328	Tamil Nadu	The Nilgiris	-1.30
329	Tamil Nadu	Thiruvallur	-0.89
330	Tamil Nadu	Thiruvannamalai	0.54
331	Tamil Nadu	Thoothukudi	-1.86
332	Tamil Nadu	Tiruchirapalli	-2.80
333	Tamil Nadu	Tirunelveli	0.78
334	Tamil Nadu	Vellore	-1.43
335	Tamil Nadu	Virudhunagar	-4.77
336	Uttar Pradesh	Agra	5.89
337	Uttar Pradesh	Aligarh	2.49
338	Uttar Pradesh	Allahabad	1.12
339	Uttranachal	Almora	-1.80
340	Uttar Pradesh	Azamgarh	2.27
341	Uttar Pradesh	Badaun	3.40
342	Uttar Pradesh	Bahraich	2.81
343	Uttar Pradesh	Ballia	1.55
344	Uttar Pradesh	Banda	1.62
345	Uttar Pradesh	Barabanki	3.16
346	Uttar Pradesh	Bareilly	1.77
347	Uttar Pradesh	Basti	1.98
348	Uttar Pradesh	Bijnor	1.28
349	Uttar Pradesh	Bulandshahar	1.16
350	Uttranachal	Chamoli	-2.45
351	Uttranachal	Dehradun	-0.83
352	Uttar Pradesh	Deoria	0.16
353	Uttar Pradesh	Eath	2.74
354	Uttar Pradesh	Etawah	1.61
355	Uttar Pradesh	Faizabad	0.96
356	Uttar Pradesh	Farrukhabad	2.19
357	Uttar Pradesh	Fatehpur	1.32

Sr No	State	District	Growth Rate (% per year)
358	Uttar Pradesh	Ferozabad	6.94
359	Uttar Pradesh	Ghaziabad	1.46
360	Uttar Pradesh	Ghazipur	0.30
361	Uttar Pradesh	Gonda	3.23
362	Uttar Pradesh	Gorakhpur	1.18
363	Uttar Pradesh	Hamirpur	1.14
364	Uttar Pradesh	Hardoi	2.21
365	Uttranachal	Haridwar	1.21
366	Uttar Pradesh	Jalaun	3.13
367	Uttar Pradesh	Jaunpur	0.51
368	Uttar Pradesh	Jhansi	2.86
369	Uttar Pradesh	Kanpur (C)	1.12
370	Uttar Pradesh	Kanpur (D)	0.56
371	Uttar Pradesh	Kheri	3.35
372	Uttar Pradesh	Lalitpur	2.03
373	Uttar Pradesh	Lucknow	1.11
374	Uttar Pradesh	Maharalganj	1.98
375	Uttar Pradesh	Mainpuri	5.64
376	Uttar Pradesh	Mathura	3.06
377	Uttar Pradesh	Mau	0.76
378	Uttar Pradesh	Meerut	1.01
379	Uttar Pradesh	Mirzapur	2.76
380	Uttar Pradesh	Moradabad	0.37
381	Uttar Pradesh	Muzaffarnagar	0.63
382	Uttranachal	Nainital	0.04
383	Uttranachal	Pauri Garhwal	-1.64
384	Uttar Pradesh	Pilibhit	1.69
385	Uttranachal	Pithoragarh	-0.91
386	Uttar Pradesh	Pratapgarh	1.63
387	Uttar Pradesh	Raibareli	1.70
388	Uttar Pradesh	Rampur	1.63
389	Uttar Pradesh	Saharanpur	0.34
390	Uttar Pradesh	Shahjahanpur	1.89
391	Uttar Pradesh	Siddarthanagar	1.78
392	Uttar Pradesh	Sitapur	3.80
393	Uttar Pradesh	Sonbhadra	5.42
394	Uttar Pradesh	Sultanpur	2.25
395	Uttranachal	Tehri Garhwal	-2.68
396	Uttar Pradesh	Unnao	2.75
397	Uttranachal	Uttar Kashi	0.62
398	Uttar Pradesh	Varanasi	0.57
399	West Bengal	24-Parganas(N)	3.00
400	West Bengal	24-Parganas(S)	3.07
401	West Bengal	Bankura	2.99
402	West Bengal	Birbhum	3.47
403	West Bengal	Burdwan	2.79
404	West Bengal	Cooch Behar	-0.99
405	West Bengal	Darjeeling	3.69
406	West Bengal	Hooghly	2.38
407	West Bengal	Howrah	2.34
408	West Bengal	Jalpaiguri	9.11
409	West Bengal	Malda	-1.30

Sr No	State	District	Growth Rate (% per year)
410	West Bengal	Midnapore (East)	2.98
411	West Bengal	Midnapore (West)	5.91
412	West Bengal	Murshidabad	7.42
413	West Bengal	Nadia	4.00
414	West Bengal	Purulia	4.76
415	West Bengal	Uttar Dinajpur	3.44

Appendix - 7

State-wise Number of Drought Affected Districts During 2002

S. No	State	Districts Declared Drought Affected		%age area under irrigation	%age of Districts with decline in GCA
		Number	% of total		
1.	Andhra Pradesh	22	100	39	77
2.	Chhattisgarh	16	100	21	86
3.	Gujarat	14	56	31	37
4.	Haryana	19	100	86	13
5.	Himachal Pradesh	12	100	18	67
6.	Jharkhand	22	100	11	76
7.	Karnataka	24	89	24	74
8.	Kerala	11	79	14	76
9.	Madhya Pradesh	33	69	26	21
10.	Maharashtra	33	100	18	35
11.	Orissa	30	100	28	76
12.	Punjab	17	100	97	15
13.	Rajasthan	32	100	40	50
14.	Tamil Nadu	28	97	55	76
15.	Uttaranchal	13	100	43	89
16.	Uttar Pradesh	70	100	71	37
17.	West Bengal	3	17	52	12

Note:1. Contrary to drought in most part of the country, floods caused severe damage in 24 of 38 districts in Bihar and 22 of 24 districts in Assam during 2002 monsoons.

2. Correlation between area under irrigation and proportion of districts showing decline in Gross cropped area during 1990-3 to 2001-4 is -0.57 and that of drought affected and % experiencing decline in GCA is 0.45.