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Patterns in Growth of Agriculture and Allied Activities across States

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I. Introduction

Given the relatively large share of employment in agriculture and allied activities, the sector remains central to India's overall growth trajectory. Agriculture and allied activities continue to be a key source of livelihoods for a substantial proportion of the population and contribute significantly to national income and employment generation. Over the past decade, however, there has been considerable variation in the growth of agricultural and allied Gross State Domestic Product across states. Understanding the reasons behind these differences is particularly important in the context of structural transformation within the sector. While the key feature of economic development is a gradual employment shift towards manufacturing and services, this transition requires structural transformation within the agriculture and allied sectors, where higher-value allied activities such as livestock, fisheries, and horticulture play an increasingly important role (Negi et al, 2021). This note examines the growth performance of agriculture and allied activities across states over the last decade and a half and examines the contribution of sub-sectors to overall growth. The note goes on to discuss potential factors that may help explain why growth has been faster in some states than in others.

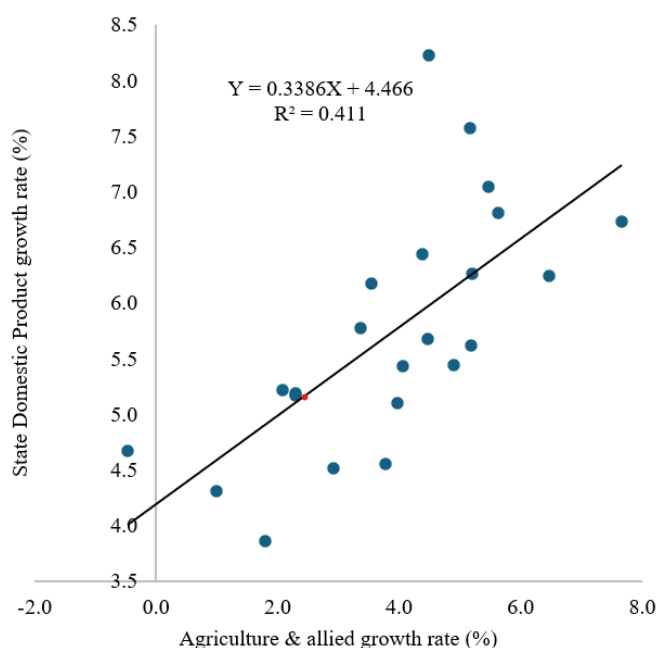
The analysis uses the State Domestic Product (SDP) series from 2011-12 to 2024-25, published by the Ministry of Statistics and Programme Implementation, Government of India. The sub-sectors are crop (agriculture), livestock, forestry, and fisheries. I compute annual growth rates using this series. In addition, I also calculate the contribution of each sub-sector to overall growth in agriculture and allied activities using the sub-sector SDP data. This note summarizes the cross-state growth experience over the past 14 years and decomposes aggregate agriculture and allied growth into sectoral drivers using a baseline-share weighted formula. Each sub-sector's

contribution is calculated as the product of its baseline share and its estimated growth rate. I use 2013 as the baseline year for sectoral decomposition. I group the northeastern states, i.e., Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim, and Tripura, into a single composite category in the analysis.

II. Growth patterns across states

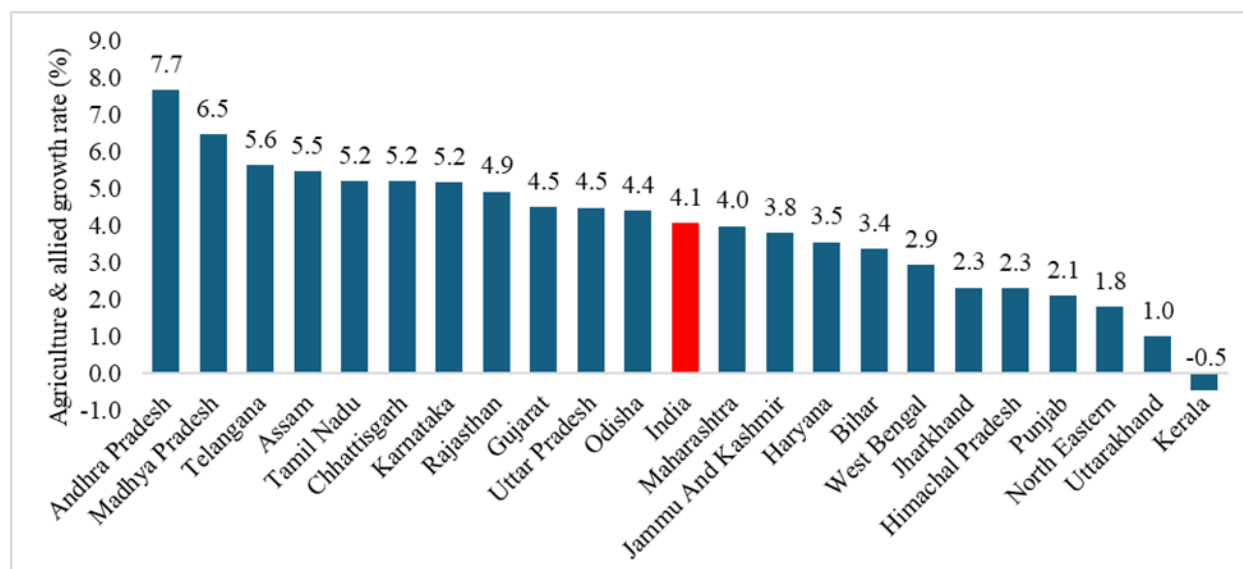
I begin by documenting the well-established empirical fact that state-level growth in total domestic product is positively associated with growth in agriculture and allied activities. Despite the declining share of agriculture in aggregate output, the agriculture and allied sector continues to play a critical role in driving overall income growth across states. Figure 1 illustrates this positive relationship, showing that states experiencing faster growth in agriculture and allied domestic product also tend to record higher growth in overall state GDP. This pattern shows the continued importance of agricultural performance for overall economic growth at the state level.

Figure 1: Relationship between growth in total domestic product and growth in agriculture and allied activities across states



Notes: The figure presents the annual growth in total State Domestic Product and growth in sectoral Agriculture and Allied Gross State Domestic Product (GSDP) across states. Growth rates are computed as compound annual growth rates over the 14-year period from 2011–12 to 2024–25, using the State Domestic Product (SDP) series published by the Ministry of Statistics and Programme Implementation (MoSPI).

Figure 2: Growth in agriculture and allied State Domestic Product across states



Notes: Figure presents the average annual growth rate of Agriculture and Allied Gross State Domestic Product (GSDP) across states, measured at constant 2011–12 prices. Growth rates are computed for the 14 years from 2011-12 to 2024-25 using the State Domestic Product (SDP) series published by the Ministry of Statistics and Programme Implementation (MoSPI) and represent compound annual growth rates over the 14 years.

Figure 2 shows that there is substantial variation in the growth rates of agriculture and allied activities across states. While the all-India average is around 4 percent, states like Andhra Pradesh (7.7 percent), Madhya Pradesh (6.5 percent), Telangana (5.6 percent), and Assam (5.5 percent) turn out to be top performers with a relatively high growth in the range of about 5 to 8 percent per annum. Another group of states, such as Chhattisgarh, Karnataka, and Tamil Nadu, has experienced good growth of around 5 to 5.2 percent. A larger set of states has recorded moderate growth in the range of 3 to 5 per cent, including Gujarat, Odisha, Rajasthan, Uttar Pradesh, Maharashtra, Bihar, West Bengal, Jammu and Kashmir, Haryana, and Bihar. At the lower end, some states like Kerala, Uttarakhand, and the Northeastern states have exhibited negligible or low growth over the period, while Punjab (2.1 per cent) and a few other states have seen relatively muted growth.

III. Sectoral composition of growth

Table 1: Sectoral contribution to agriculture and allied growth by states

States	Growth contribution to Agriculture and Allied activities				Agriculture and Allied growth rate (%)
	Agriculture	Fishing	Forestry	Livestock	
Andhra Pradesh	32%	36%	0%	31%	7.7
Madhya Pradesh	71%	2%	6%	21%	6.5
Assam	66%	19%	-1%	15%	5.5
Tamil Nadu	23%	3%	4%	70%	5.2
Chhattisgarh	50%	18%	19%	13%	5.2
Karnataka	44%	6%	8%	42%	5.2
Rajasthan	30%	1%	8%	62%	4.9
Gujarat	50%	4%	19%	27%	4.5
Uttar Pradesh	63%	3%	5%	29%	4.5
Odisha	46%	17%	18%	19%	4.4
India	41%	11%	8%	41%	4.1
Maharashtra	50%	1%	18%	31%	4.0
Jammu and Kashmir	44%	2%	18%	37%	3.8
Haryana	18%	3%	5%	75%	3.5
Bihar	17%	16%	10%	56%	3.4
West Bengal	31%	17%	5%	47%	2.9
Jharkhand	14%	16%	14%	56%	2.3
Himachal Pradesh	11%	2%	49%	38%	2.3

Punjab	26%	3%	8%	63%	2.1
Northeastern	25%	21%	53%	1%	1.8
Uttarakhand	-30%	2%	61%	67%	1.0
Kerala	120%	-39%	-20%	38%	-0.5

Notes: The table presents the percentage contribution of individual sub-sectors to growth in Agriculture and Allied Gross State Domestic Product (GSDP) across states, along with the average growth rate of the Agriculture and Allied sector. All estimates are measured at constant 2011–12 prices. Growth rates are computed as compound annual growth rates over the 14 years from 2011–12 to 2024–25, using the State Domestic Product (SDP) series published by the Ministry of Statistics and Programme Implementation (MoSPI). Sub-sectoral contributions are calculated using a baseline-share weighted decomposition, wherein each sub-sector’s contribution is obtained as the product of its baseline share (2013) and the estimated growth rate. Northeastern states, i.e., Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim, and Tripura, are grouped into a single composite category.

Table 1 reports the contributions of different sub-sectors to overall growth in the agriculture and allied sector. A key finding is that allied activities like livestock and fisheries have been an important contributor to growth in many states, and their contribution often exceeds the contribution from the crop sector. This aligns with the broader picture that diversification and high-value agriculture will become central to agricultural growth in the future (Birthal et al., 2014; Balaji et al., 2025). It is also consistent with the well documented shift in demand patterns where future growth in demand for agricultural commodities would be driven by high-value commodities such as milk and dairy products, meat, fish, eggs, fruits, and vegetables, rather than by cereals (Singh, 2025). Rising incomes, urbanization, and dietary diversification are therefore likely to amplify the role of livestock and fisheries as engines of agricultural growth, while the relative importance of food crops will continue to decline (Balaji et al, 2025).

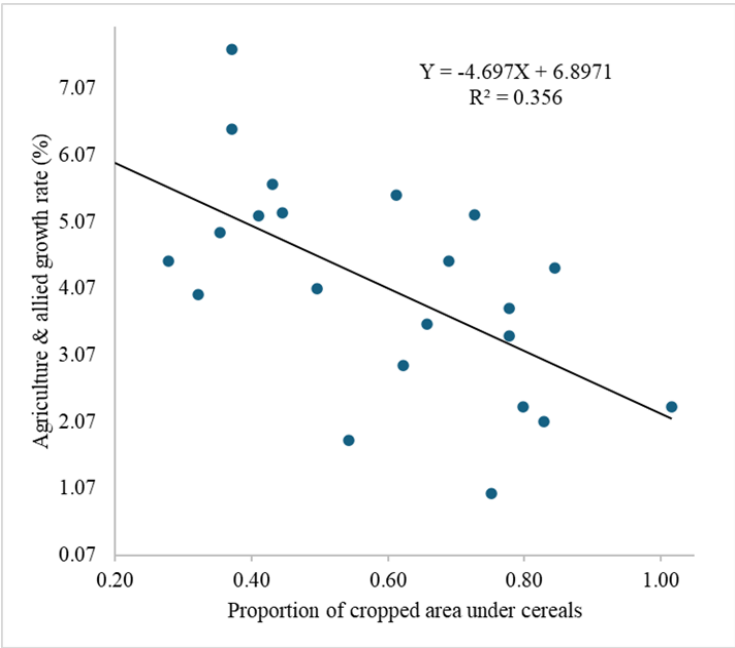
A decomposition of growth shows that states with higher overall growth in agriculture and allied activities are also those where livestock and fisheries sectors have made a

larger contribution to growth. Livestock has emerged as a particularly important driver of growth in top growing states like Andhra Pradesh, Telangana, Madhya Pradesh, and Rajasthan. The expansion of dairy and animal husbandry has provided a relatively stable source of income, contributing significantly to overall agricultural growth.

Fisheries and aquaculture, while geographically concentrated, have played an important role in some states. States like Andhra Pradesh, Assam, and Odisha, in particular, have recorded strong growth in agriculture and allied activities alongside a rapidly expanding fisheries sector. Despite employing a smaller share of the workforce, fisheries have contributed substantially to growth due to higher productivity and greater domestic and foreign demand.

Forestry has played an important role in some hill and north-eastern states. Forestry has contributed substantially in the Northeastern states, Himachal Pradesh, and Uttarakhand. This partly reflects the fact that these states have relatively large forest resources and therefore have a larger baseline share of forestry value-added in the total agriculture and allied sector.

Figure 2: Relationship between agriculture and allied growth and share of area under cereals



Notes: The figure presents the annual growth in Agriculture and Allied Gross State Domestic Product (GSDP) across states on the vertical axis, along with the proportion of cropped area under cereals in 2013 on the horizontal axis. The state of Kerala is excluded in this figure as an outlier because of its low area under cereals and negligible growth in Agriculture and Allied Gross State Domestic Product over the selected period. Growth rates are computed as compound annual growth rates over the 14-year period from 2011–12 to 2024–25, using the State Domestic Product (SDP) series published by the Ministry of Statistics and Programme Implementation (MoSPI).

In general, the contribution of the crop sector has been relatively modest across many states. Figure 2 reinforces this pattern, showing a negative association between agriculture and allied sector growth and the baseline (2013) share of cropped area under cereals. States with a higher degree of specialization in cereal cultivation tend to exhibit lower overall growth in agriculture and allied activities. This pattern is particularly evident in states with cereal-dominated systems, such as Punjab and Haryana, where crop-sector growth has remained low over the period. The persistence of cereal-centric production in these states is also associated with a relatively high dependence on public procurement mechanisms (Negi et al., 2021; Negi, 2025).

The exception is Madhya Pradesh, where relatively high growth in agriculture and allied activities (6.5 per cent) is largely accounted for by the crop sector. The pattern observed for Madhya Pradesh is consistent with evidence from the literature, which attributes this crop sector-led growth to factors such as expanded irrigation coverage (including canals and tube wells), improved availability of power, and relatively supportive procurement and market conditions (Gulati et al., 2017).

Taken together, these patterns suggest that states with a high concentration in cereal-centric cropping systems have experienced relatively slower growth, while diversification towards non-cereal crops and allied activities has been associated with stronger overall growth in agriculture and allied activities.

IV. Discussion and implications

India's agricultural growth has increasingly been associated with diversification away from staple cereals toward high-value sectors such as livestock, fisheries, and horticulture. This structural shift has been driven by rising incomes, rapid urbanization, and dietary change, along with supply-side investments and technological improvements in production, marketing, and value chains (Birthal et al., 2014; Birthal et al., 2020; Negi et al., 2021). The key observation is that states that have been able to expand allied sectors in line with their natural and geographical advantages have experienced faster growth. Prominent examples include forestry-led growth in hilly and northeastern states, as well as the expansion of fisheries and aquaculture in coastal states and those endowed with favorable water and marine resources.

In contrast, states where agricultural growth has historically been driven by the cereal sector have generally observed moderate or low growth and now face an increasing need to diversify into high-value crops and greater investment in the livestock sector. Livestock often complements the crop sector through the use of crop residues as feed and manure for soil fertility, while providing income flows. Therefore, livestock and animal husbandry are not merely a supplementary activity to agriculture but are central to enhancing rural incomes and reducing vulnerability, particularly for smallholders (Birthal & Negi, 2012).

States where fisheries have emerged as a major contributor tend to be those that have successfully scaled aquaculture, developed marketing and logistics infrastructure, and integrated with domestic and export markets. Evidence from Andhra Pradesh illustrates

how aquaculture commercialization can add to growth in agriculture and allied value-added.

Finally, lower agriculture and allied growth in major agricultural states like Punjab and Haryana is consistent with the view that the rice-wheat production system faces severe constraints, particularly groundwater depletion and rising costs. The literature documents how procurement-linked cereal systems in north-west India have contributed to environmental stress, reinforcing the need for crop and activity diversification (Negi, 2025).

V. References

- Balaji, S. J., BIRTHAL, P. S., Pal, B. D., Thurlow, J., Gotor, E., Sharma, P., Srivastava, S. K., Kingsly, I. T., & Naresha, N. (2025). *The future of food in India: A 2050 perspective* (Policy Paper No. 51). ICAR–National Institute of Agricultural Economics and Policy Research (NIAP).
- BIRTHAL, P. S., & Negi, D. S. (2012). Livestock for higher, sustainable and inclusive agricultural growth. *Economic and Political Weekly*, 47(26–27), 89–99.
- BIRTHAL, P. S., Hazrana, J., & Negi, D. S. (2020). Diversification in Indian agriculture towards high-value crops: Multilevel determinants and policy implications. *Land Use Policy*, 91, Article 104427. <https://doi.org/10.1016/j.landusepol.2019.104427>
- BIRTHAL, P. S., Joshi, P. K., Negi, D. S., & Agarwal, S. (2014). *Changing sources of growth in Indian agriculture: Implications for regional priorities for accelerating agricultural growth* (IFPRI Discussion Paper No. 1325). International Food Policy Research Institute.
- Gulati, A., Rajkhowa, P., & Sharma, P. (2017). *Making rapid strides—Agriculture in Madhya Pradesh: Sources, drivers, and policy lessons* (ICRIER Working Paper No. 339). Indian Council for Research on International Economic Relations.
- Negi, D. (2025). *Environmental costs of price supports: Evidence from India's agricultural price policies*. SSRN. <https://ssrn.com/abstract=5588237>
- Negi, D. S., BIRTHAL, P. S., Roy, D., & Hazrana, J. (2021). Crop choices in Indian agriculture: Role of market access and price policy. *Economic Bulletin*, 41(4), 2249–2256.
- Singh, K. (2025). *Growing more, eating less: India's cereal consumption patterns*. Centre for Economic Data and Analysis (CEDA), Ashoka University. <https://ceda.ashoka.edu.in>



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