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AGRICULTURE AND ALLIED SECTORS IN CHANDIGARH

paryavaran patra

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AGRICULTURE AND ALLIED SECTORS IN CHANDIGARH

Agriculture and allied sectors form an essential backbone for any region, contributing to food security, economic growth and development in the region. These sectors not only support the livelihoods of farmers and small-scale entrepreneurs but also complement the demands of the area by providing fresh produce, dairy products, and other agricultural goods. In 2022-23 share of GVA of agriculture and allied sectors in total economy (%) at current prices for the country was 18.3 (Ministry of Agriculture & Farmers Welfare, 2023).

Chandigarh, union territory is known for its urban planning and modern infrastructure. While the city itself is primarily urbanized, agriculture and allied sectors play role in supporting its economy and surrounding rural areas. The region's fertile soil, favorable climate, and efficient irrigation systems create opportunities for agricultural activities, especially in peri-urban and rural zones near the city.

The agricultural landscape of Chandigarh is characterized by the cultivation of major crops such as wheat, paddy, and maize, which thrive due to the semi-arid to subtropical climatic conditions. Additionally, horticulture and vegetable farming have gained prominence, catering to the city's growing demand for fresh produce.

The allied sectors, including dairy farming, poultry and fisheries, complement the agricultural activities in Chandigarh. These sectors not only contribute to the local economy but also provide livelihoods for small-scale farmers and entrepreneurs.

With an increasing focus on urban-rural integration, sustainable agriculture, and technological adoption, Chandigarh is evolving as a model for balancing urban growth with agricultural development.

AGRICULTURE IN CHANDIGARH

AGRICULTURAL LAND HOLDINGS

In Chandigarh, there are a total of 911 operational land holdings, the majority of which are less than 1 hectare (648). These are followed by land holdings between 1 and 2.5 hectares (235), and only 28 land holdings are between 2.5 and 5 hectares (Table 1).

Table 1: Number of Operational Holdings by Size Group

Size Class of Land Holding	Unit	2019-20	2020-21	2021-22	2022-23
Less than 1 Hectare	Nos.	648	648	648	648
1 to 2.5 Hectare	Nos.	235	235	235	235
2.5 to 5 Hectare	Nos.	28	28	28	28
5 to 10 Hectare	Nos.	–	–	–	–
10 to more Hectare	Nos.	–	–	–	–
Total		911	911	911	911

Source: Director of Economics and Statistics, Chandigarh Administration (2023)

Table 2: Agriculture Crop Area Pattern

Year	Total Crop Area	Kharif Area	Rabi Area	Area Under Rice	Area Under Wheat	Area Under Fodder Crops	Others Vegetables & Fruits	Area Under Non Foodgrains
Unit: Hectares (Ha)								
2019-20	634	88	546	80	546	972	35	-
2020-21	1043	318	725	301	725	544	143	-
2021-22	1031	91	547	82	547	350	43	-
2022-23	3762	492	547	84	547	492	43	43
2023-24	3768	94	547	84	547	497	44	44

Source: Director Agriculture, U.T., Chandigarh

Although the area under Kharif crops is smaller than that of Rabi crops, the yield of Kharif crops has been higher than that of Rabi crops from 2019 to 2023-24 (Table 3). Additionally, the total crop yield has increased from 10,000 to 13,500 metric tons per annum during the same period.

Table 3: Crop Yield

Year	Yield of Kharif Crops	Yield of Rabi Crops	Total	Unit
2019	5500	4500	10000	Metric Tons/ Annum
2020	8500	4500	13000	Metric Tons/ Annum
2021	8375	5000	13375	Metric Tons/ Annum
2022-23	8500	5000	13500	Metric Tons/ Annum
2023-24	8500	5000	13500	Metric Tons/ Annum

Source: Director Agriculture, U.T., Chandigarh

Table 4 presents data on the production of paddy, maize, and wheat (in tons) over four years, from 2019-20 to 2022-23. Paddy production showed a consistent upward trend, indicating increased cultivation efforts or improved yields. Maize production also grew, particularly in the last two years, suggesting a shift in focus or the adoption of enhanced agricultural practices. Meanwhile, wheat production remained stable, with minimal fluctuations, reflecting consistent cultivation practices.

Table 4: Paddy, Maize and Wheat Production

Year	Paddy	Maize	Wheat	Unit
2019-20	440	24	2730	Tons
2020-21	451	24	2735	Tons
2021-22	451	26	2735	Tons
2022-23	462	30	2735	Tons

Source: Director Agriculture, U.T., Chandigarh

AREA UNDER FRUIT AND VEGETABLE PRODUCTION

Table 5 presents data on the cultivation area (in hectares) for various fruits over five years, from 2019-20 to 2023-24. Fruits such as Guava, Bair, and Peach exhibited relatively stable trends, although some fluctuations were observed for Mango and Kinnow.

Table 5: Area under fruit production

Year	Kinnow	Mango	Litchi	Guava	Pear	Grape	Bair	Peach	Unit
2019-20	01	05	-	04	-	-	01	01	Hectare
2020-21	01	05	-	04	-	-	01	01	Hectare
2021-22	01	06	-	04	-	-	01	01	Hectare
2022-23	02	06	-	04	-	-	01	01	Hectare
2023-24	02	06	-	04	-	-	01	01	Hectare

Source: Director of Economics and Statistics, Chandigarh Administration (2023) and Director Agriculture, U.T., Chandigarh

Table 6 presents data on fruit production over a five-year period, from 2019-20 to 2023-24. Kinnow production saw considerable growth, while Mango production remained almost steady. Guava and Bair production experienced fluctuations while Peach production displayed stable pattern.

Table 6: Fruit production

Year	Kinnow	Mango	Guava	Bair	Peach	Unit
2019-20	08	135	75	08	08	Metric Tons
2020-21	08	136	75	09	08	Metric Tons
2021-22	08	137	76	09	08	Metric Tons
2022-23	16	137	76	09	08	Metric Tons
2023-24	16	137	76	09	08	Metric Tons

Source: Director of Economics and Statistics, Chandigarh Administration (2023) and Director Agriculture, U.T., Chandigarh

Vegetables

The table (7) shows the cultivation area (in hectares) for Potato, Onion, and Other Vegetables over five years, from 2019-20 to 2023-24. Area under Potato production was stable for all the five years while area under Onion and Other Vegetables saw an increase during 2021-22 and 2020-21 respectively. Potato and Other Vegetables maintained the largest cultivation areas.

Table 7: Area under vegetable production

Year	Potato	Onion	Other Vegetables	Unit
2019-20	10	03	15	Hectare
2020-21	10	03	16	Hectare
2021-22	10	04	16	Hectare
2022-23	10	04	16	Hectare
2023-24	10	04	16	Hectare

Source: Director of Economics and Statistics, Chandigarh Administration (2023)

The table (8) provides data on the production of Potato, Onion, and Other Vegetables over five years, from 2019-20 to 2023-24. Production for all three categories—Potato, Onion, and Other Vegetables—showed a gradual upward trend over the years, with consistent growth in each successive year. Among the categories, Other Vegetables consistently recorded the highest production, followed by Potato and then Onion.

Table 8: Vegetable production

Year	Potato	Onion	Other vegetables	Unit
2019-20	160	63	390	Metric Tons
2020-21	170	64	416	Metric Tons
2021-22	170	68	416	Metric Tons
2022-23	172	69	417	Metric Tons
2023-24	172	69	417	Metric Tons

Source: Director of Economics and Statistics, Chandigarh Administration (2023)

USE OF FERTILIZERS AND OTHER CHEMICALS IN CHANDIGARH

AGRICULTURE CONSUMPTION OF PESTICIDES

In Chandigarh, the use of agro-chemicals is generally quite low. The table 9 provides data on the usage of agricultural chemicals, including Insecticides, Fungicides, Weedicides, and Rodenticides, measured in metric tons over five years, from 2019-20 to 2023-24. The use of Insecticides and Rodenticides shows consistency after initial increases in 2020-21, indicating a stabilized application rate over the years. The absence of Fungicides and Weedicides suggests a potential focus on alternative methods or limited pest and weed issues requiring chemical intervention. The overall quantities of chemicals used are minimal, reflecting either a low dependency on chemical inputs or efficient pest and weed management practices in Chandigarh.

Table 9: Consumption of Pesticides in Agriculture

Year	Insecticide	Fungicide	Weedicides	Rodenticide	Unit
2019-20	0.14	0	0	0.02	Metric Tons
2020-21	0.16	0	0	0.04	Metric Tons
2021-22	0.16	0	0	0.04	Metric Tons
2022-23	0.16	0	0	0.04	Metric Tons
2023-24	0.16	0	0	0.04	Metric Tons

Source: Director Agriculture, U.T., Chandigarh

Table 10 presents data on the usage of three types of fertilizers—Nitrogenous (N), Phosphatic, and Potassic—measured in metric tons over five years, from 2019-20 to 2023-24. Nitrogenous (N) fertilizers were used in the highest quantities across all five years, indicating their importance in the agricultural practices of the region. Phosphatic and Potassic fertilizers were used in significantly smaller quantities. The year 2020-21 saw a temporary increase in the usage of all three fertilizers, followed by a return to the 2019-20 levels from 2021-22 onward.

Table 10: Agriculture Consumption of Chemical Fertilizers

Year	Nitrogenous(N)	Phosphatic	Potassic	Unit
2019-20	17	4	0.03	Metric Tons
2020-21	20	06	0.05	Metric Tons
2021-22	17	04	0.03	Metric Tons
2022-23	17	04	0.03	Metric Tons
2023-24	17	04	0.03	Metric Tons

Source: Director Agriculture, U.T., Chandigarh

LIVESTOCK-BASED PRODUCTIONS

MILK PRODUCTION

The Milk Production saw a steep rise from 2020-2021 to 2022-2023. For the year 2022-2023 it saw a small dip from previous year (Table 11).

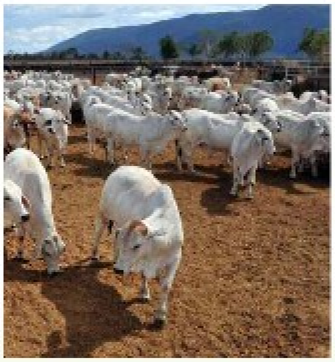


Table 11: Milk Production in Tonnes ('000)

	2020-2021	2021-2022	2022-2023
Milk Produced in Tonnes ('000)	52.29	57.07	56.19

Source: Director of Economics and Statistics, Chandigarh Administration (2023)

Table 12: Recognized slaughter houses and animals slaughtered therein

	2020-2021	2021-2022	2022-2023
Number of Recognized Slaughter Houses	1	1	1
Animal Slaughtered (Sheep and Goats)	36044	38024	36187
Animal Slaughtered (Pigs)	4091	3984	3214
Total	40135	42008	39401

Source: Director of Economics and Statistics, Chandigarh Administration (2023)

MEAT PRODUCTION

Table 12 provides data on the number of recognized slaughterhouses and the number of animals slaughtered (Sheep, Goats, and Pigs) over three years, from 2020-2021 to 2022-2023. The number of recognized slaughterhouses remained constant during this period. While the slaughter of sheep and goats showed a slight increase in 2021-2022, it declined in 2022-2023, aligning closely with the 2020-2021 figures. The slaughter of pigs exhibited a consistent decline over the three years, contributing to the overall reduction in total animals slaughtered in 2022-2023.The total number of animals slaughtered peaked in 2021-2022 and then decreased in 2022-2023, suggesting a potential shift in demand or production strategies.

The table (13) provides data on fisheries, covering the total area under fish culture, fish seed production, and fish production (accrual) over three years, from 2020-2021 to 2022-2023. The total area under fish culture and fish seed production remained unchanged over the three years, suggesting stable fish farming operations without any significant expansion or reduction in capacity. Fish production remained steady for the first two years but saw a slight decline in the third year, which could be attributed to environmental factors, resource availability, or management practices.

Table 13: Total Area under Fish Culture, Fish seed production and Fish production

Fisheries	Unit	2020-2021	2021-2022	2022-2023
Total area under fish culture	Hectare	275	275	275
Fish Seed production	(In lakh)	8	8	8
Fish Production (Accural)	Tonnes	138	138	137

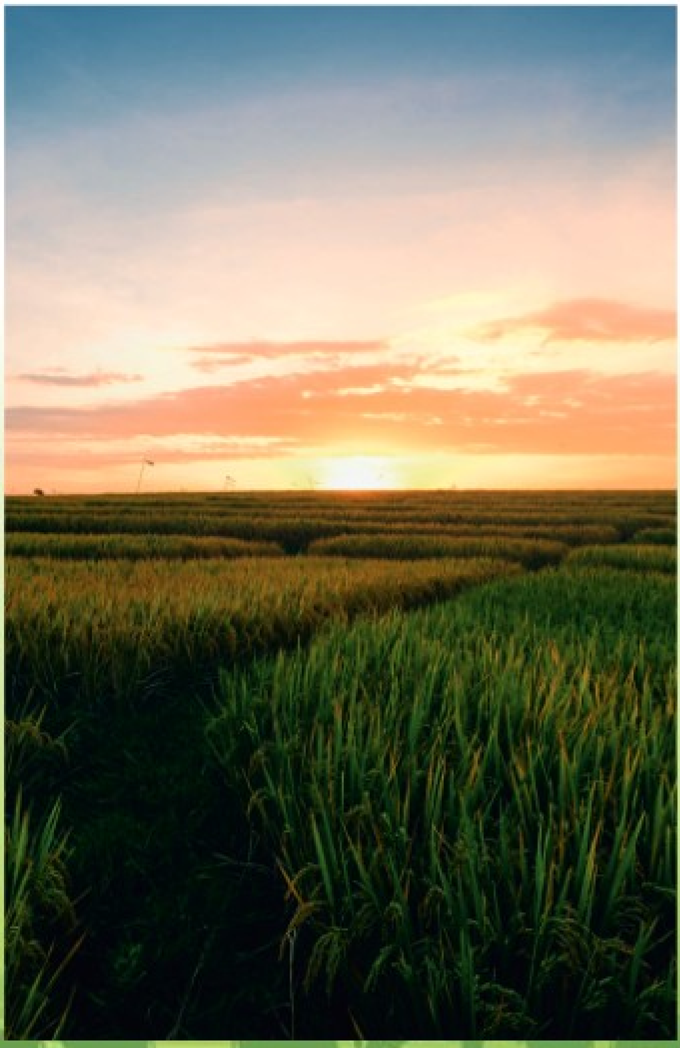
Source: Director of Economics and Statistics, Chandigarh Administration (2023)

CONCLUSION

The data reflects the region's steady progress and commitment to sustainable agricultural and allied practices. Key sectors such as crop production, horticulture, livestock management, and fisheries have maintained consistent outputs over the years, demonstrating stability and resilience.

The controlled use of fertilizers and pesticides, coupled with stable fish farming and slaughterhouse operations, highlights a focus on efficient resource utilization and environmental stewardship. While there have been occasional fluctuations, such as the slight decline in fish and pig production, the overall trends indicate balanced growth and adaptation to challenges.

Moving forward, a continued emphasis on sustainable practices, infrastructure expansion, and innovation will be essential to further enhance productivity and ensure long-term agricultural development in the region.



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