

## AGRIFOOD SYSTEM IN INDIA - STATE FACT SHEET

# Odisha

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This factsheet provides a brief description of the economic structure and the size of the agrifood system of Odisha, an Indian state. The agrifood system comprises primary agriculture, food processing, agrifood trade, food services, and input supplies. We have constructed a multistate social accounting matrix (SAM) for the year 2017/18 to understand the size of Odisha's agrifood system in comparison with the rest of India.

### A. ODISHA AT A GLANCE

**Figure 1.** Map of India highlighting Odisha



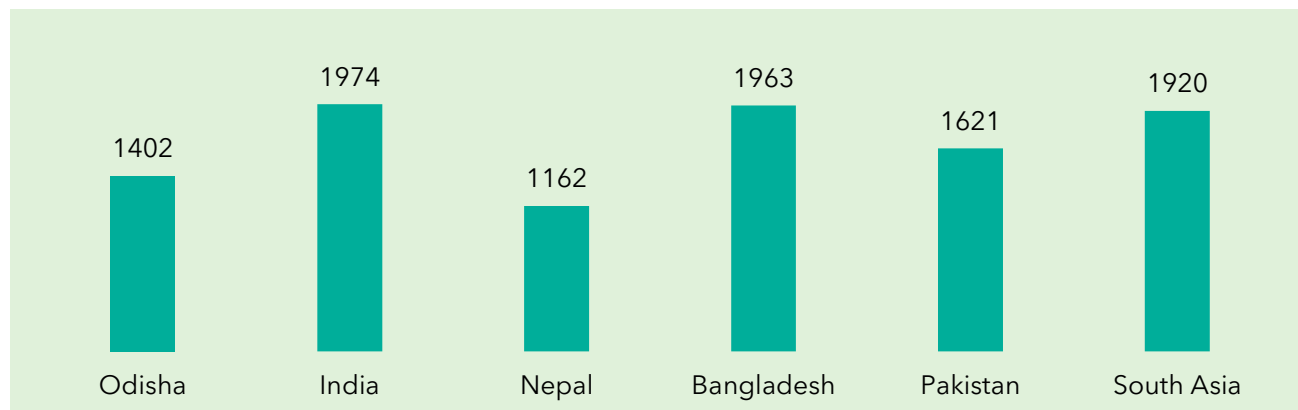
**Table 1.** Agricultural and socioeconomic profile

|                                              |                         |
|----------------------------------------------|-------------------------|
| Total area                                   | 155,707 km <sup>2</sup> |
| <b>For the year 2018/19</b>                  |                         |
| Gross cropped area (GCA)                     | 4,527,000 hectares      |
| Net sown area, as share of GCA               | 88%                     |
| Share of foodgrain in total crop production  | 95%                     |
| Important crops (based on land use)          | rice                    |
| <b>For the year 2020/21</b>                  |                         |
| GDP                                          | US\$72 billion          |
| Total population                             | 46 million              |
| Rural population (share of total population) | 85%                     |
| Sex ratio (women per 1000 men)               | 984                     |
| Literacy rate                                | 76%                     |

**Source:** GSVA/NSVA by economic activities and Statistical Year Book India (2018), Ministry of Statistics and Programme Implementation (MOSPI); Directorate of Economics & Statistics, Ministry of Agriculture and Farmers Welfare (2022); and Periodic Labour Force Survey (MOSPI), 2020/21.

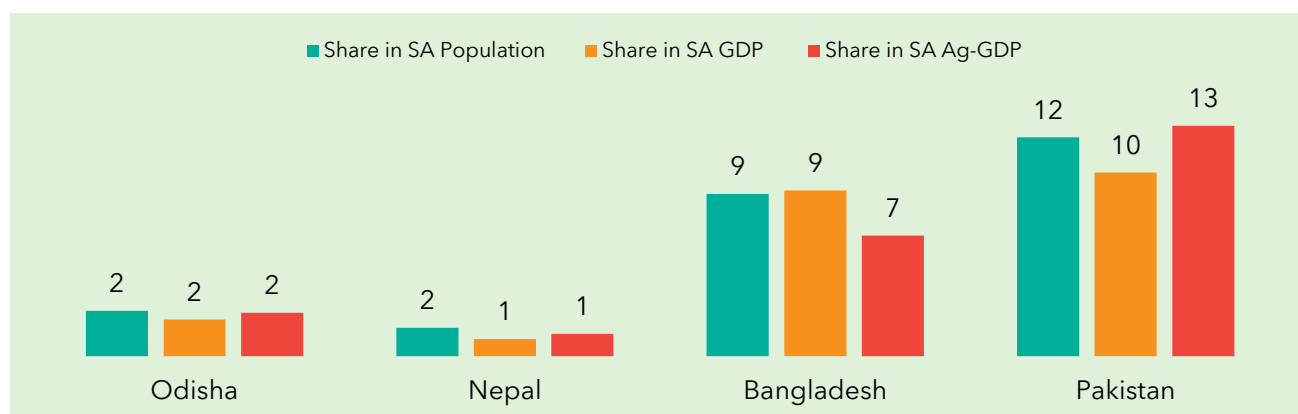
## B. ODISHA IN SOUTH ASIA

**Figure 2.** Per capita gross domestic product (in US dollars), 2018



**Source:** GSVA/NSVA by economic activities, Ministry of Statistics and Programme Implementation; and World Development Indicators DataBank (World Bank).

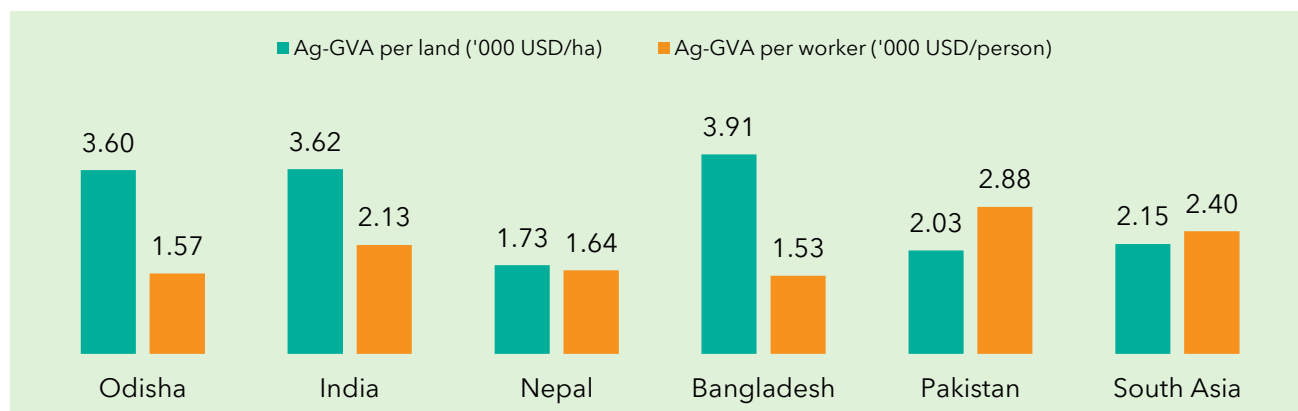
**Figure 3.** Economic importance of Odisha (in percent) in South Asia, 2018



**Source:** GSVA/NSVA by economic activities, Ministry of Statistics and Programme Implementation; and World Development Indicators DataBank (World Bank).

**Note:** SA = South Asia; GDP = gross domestic product; Ag-GDP = agricultural GDP.

**Figure 4.** Land and labour productivity in agriculture in Odisha and South Asia, 2018



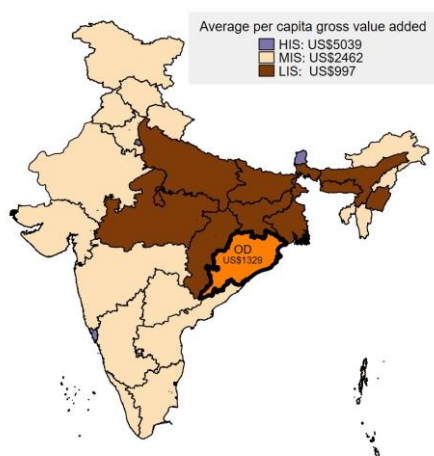
**Source:** GSVA/NSVA by economic activities, Ministry of Statistics and Programme Implementation; and World Development Indicators DataBank (World Bank).

**Note:** Ag-GVA = agricultural gross value added; USD = United States dollars; ha = hectares.

## C. ODISHA IN INDIA

Indian states and union territories (UTs) are grouped into 3 categories: low-income states (LIS), middle-income states (MIS), and high-income states (HIS), based on their level of gross value added (GVA) per capita. The per capita GVA for LIS is below US\$1450. States with a GVA per capita between US\$1450 and 3500 are MIS, while those with a GVA per capita higher than US\$3500 are HIS. The LIS include Assam, Bihar, Chhattisgarh, Jharkhand, Madhya Pradesh, Manipur, Meghalaya, Uttar Pradesh, and West Bengal. Odisha is also an LIS and its calculations are shown separately. Andaman and Nicobar Islands, Andhra Pradesh, Arunachal Pradesh, Gujarat, Haryana, Himachal Pradesh, Jammu and Kashmir, Karnataka, Kerala, Maharashtra, Mizoram, Nagaland, Puducherry, Punjab, Rajasthan, Tamil Nadu, Telangana, Tripura, and Uttarakhand are the MIS. HIS are small states and UTs, namely, Chandigarh, Delhi, Goa, and Sikkim.

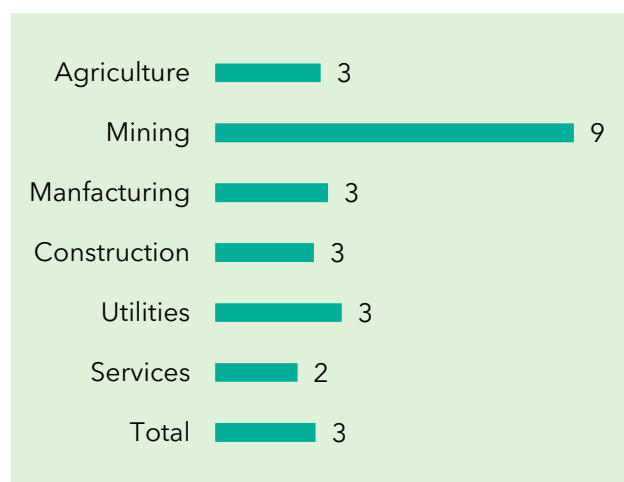
**Figure 5.** Per capita gross value added (in US dollars), 2017/18



**Source:** Authors' calculations using the 2017/18 India state-level SAM.

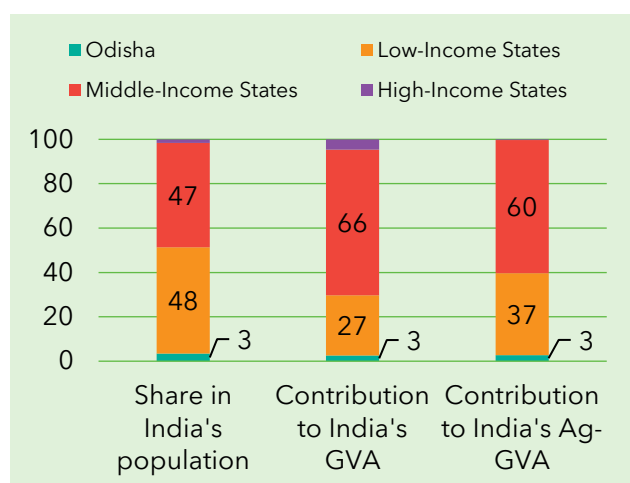
**Note:** OD = Odisha, HIS = high-income states, MIS = middle-income states, LIS = low-income states, and US\$ = United States dollar. No data for Daman & Diu, Dadra & Nagar Haveli, and Lakshadweep.

**Figure 6.** Contribution of Odisha to India's gross value added by economic activities (in percent), 2017/18



**Source:** Authors' calculations using the 2017/18 India state-level SAM.

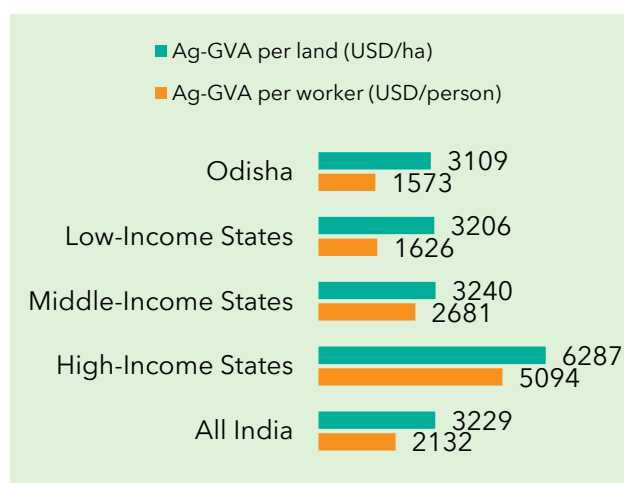
**Figure 7.** Economic importance of Odisha (in percent) in India, 2017/18



**Source:** Authors' calculations using the 2017/18 India state-level SAM.

**Note:** GVA = gross value added; Ag-GVA = agricultural GVA.

**Figure 8.** Land and labour productivity in agriculture in Odisha and other Indian states, 2017/18

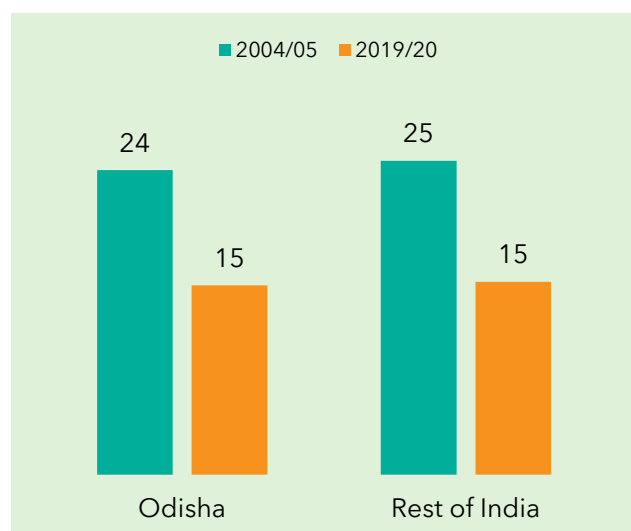


**Source:** Authors' calculations using the 2017/18 India state-level SAM.

**Note:** Ag-GVA = agricultural gross value added; USD = United States dollar; ha = hectares.

## D. ECONOMIC GROWTH AND STRUCTURAL CHANGE IN ODISHA AND REST OF INDIA

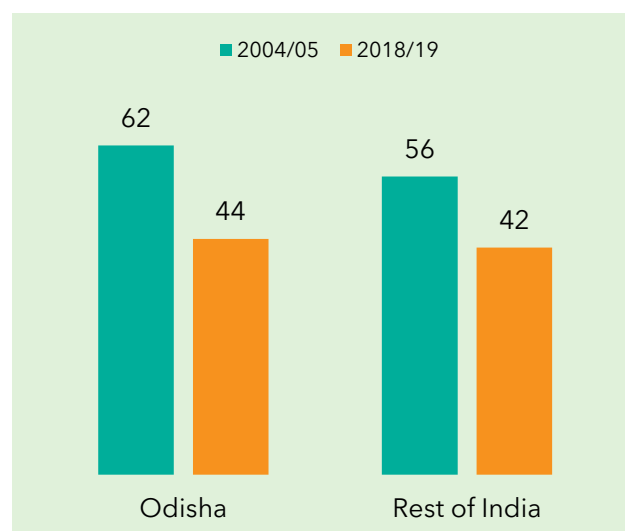
**Figure 9.** Share of agriculture (in percent) in gross value added



**Source:** National Accounts Statistics (various issues) and GSVA/NSVA by economic activities, Ministry of Statistics and Programme Implementation.

**Note:** Rest of India includes the remaining 32 Indian states and union territories (excluding Daman & Diu, Dadra & Nagar Haveli, and Lakshadweep).

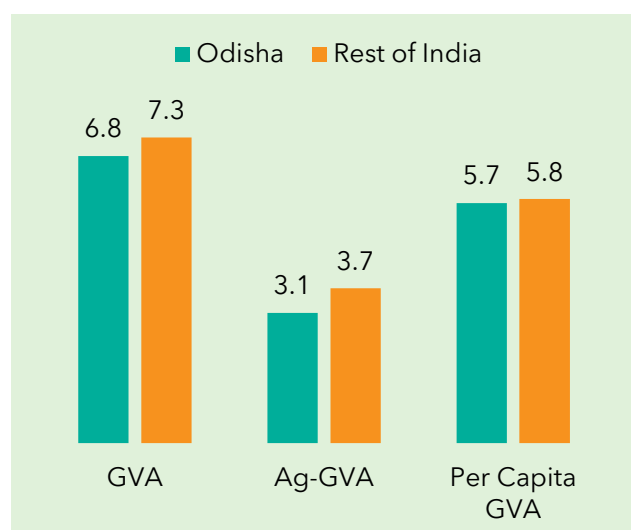
**Figure 10.** Share of agriculture (in percent) in total workers



**Source:** Employment data in National Sample Survey 2004/05 (61<sup>st</sup> round) and Periodic Labour Force Survey 2018/19, Ministry of Statistics and Programme Implementation.

**Note:** Rest of India includes the remaining 32 Indian states and union territories (excluding Daman & Diu, Dadra & Nagar Haveli, and Lakshadweep).

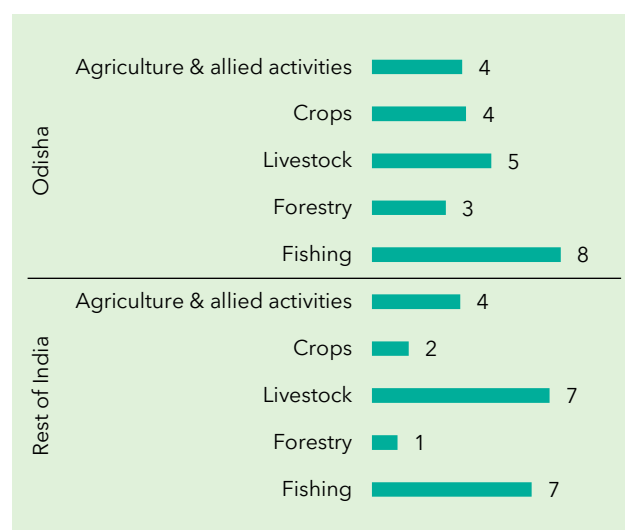
**Figure 11.** Average annual growth (in percent) between 2004/05 and 2019/20



**Source:** National Accounts Statistics (various issues) and GSVA/NSVA by economic activities, Ministry of Statistics and Programme Implementation.

**Note:** GVA = gross value added; Ag-GVA = agricultural GVA. Rest of India includes the remaining 32 Indian states and union territories (excluding Daman & Diu, Dadra & Nagar Haveli, and Lakshadweep).

**Figure 12.** Average growth (in percent) in value added of agriculture subsectors between 2004/05 and 2019/20

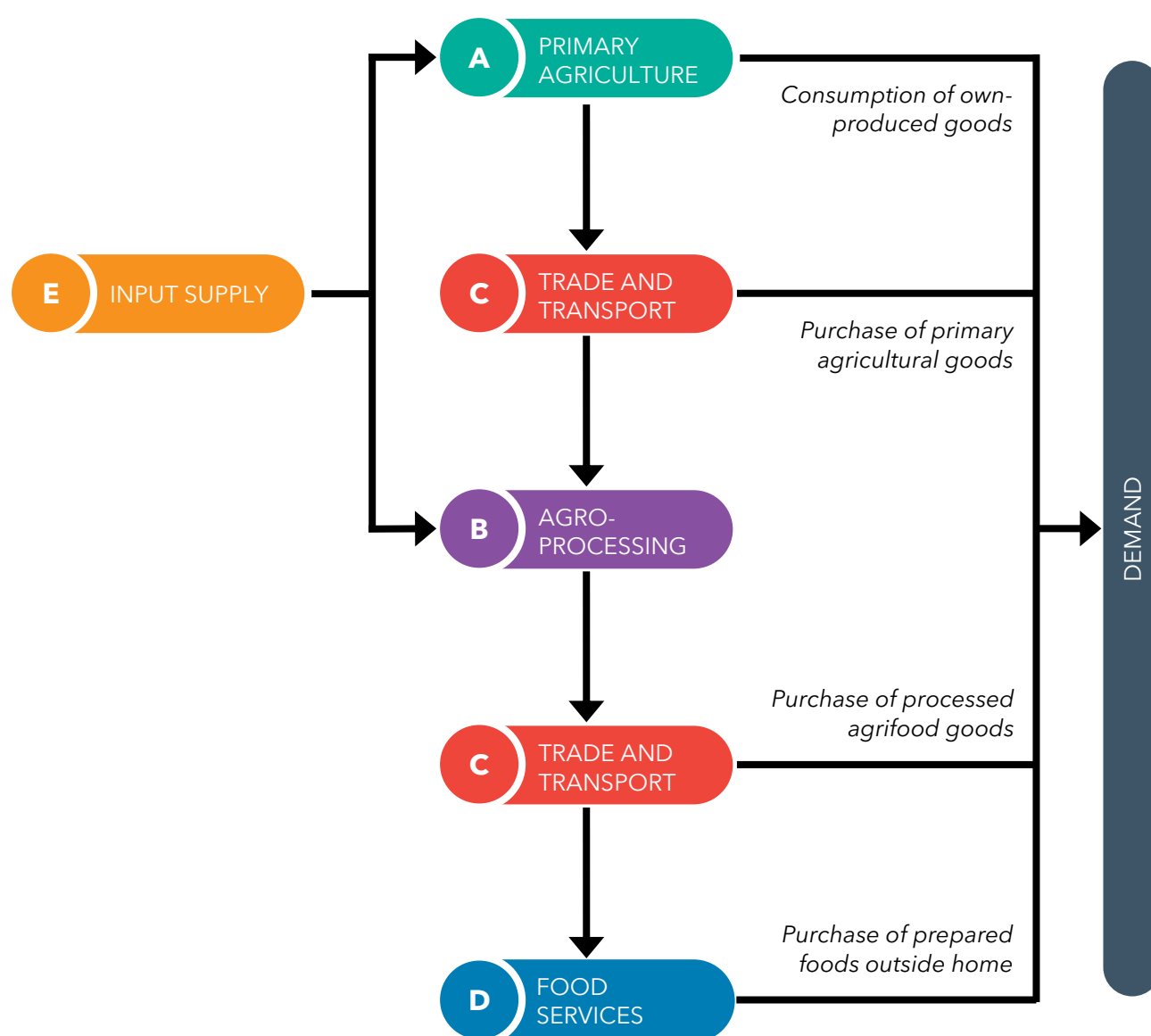


**Source:** National Accounts Statistics (various issues) and GSVA/NSVA by economic activities, Ministry of Statistics and Programme Implementation.

**Note:** Growth of crops and livestock is between 2011/12 and 2019/20.

## E. AGRIFOOD SYSTEMS – CONCEPT

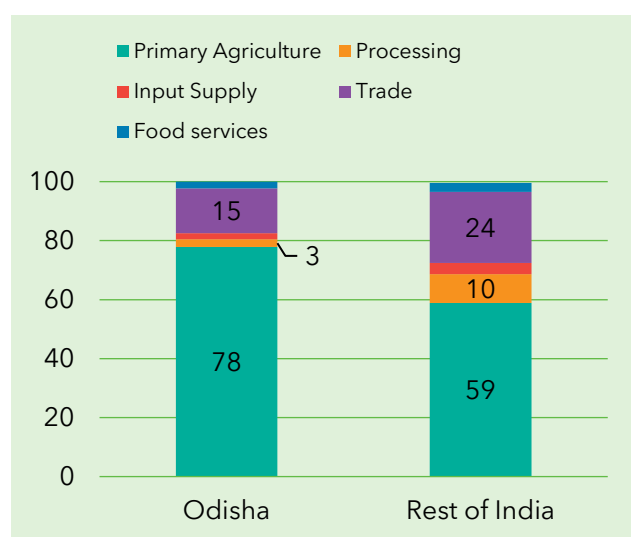
**Figure 13.** Components constituting agrifood systems



Primary agriculture (A) or on-farm activity is the first component of an agrifood system and includes the supply, demand, and trade of all agricultural products. These are often grouped as crops, livestock, fishing, and forestry. Agro-processing (B) includes only those manufacturing subsectors associated with processed food and other agriculture-related non-food products such as yarn and timber. Input supply (E) is the portion of intermediate inputs used directly in agricultural production and agro-processing (e.g., fertilizers and financial services). Inputs that are produced by farmers and processors themselves are excluded from this measure, since they are captured in components A and B. Trade and transport services (C) considers the portion of services associated with transporting, wholesaling, and retailing of agrifood products between farms, firms, and final points of sale (that is, either the domestic or foreign markets). Food services (D) are services provided in both food production and consumption, plus a portion of the hotels and accommodation sector. Producers of food services (that is, meals prepared outside the home) run stand-alone operations (e.g., restaurants or stalls), whereas hotels often operate restaurants in addition to providing accommodations and other services. Components B, C, D, and E together represent off-farm economic activities. In summary, an agrifood system is essentially the sum of all the relevant on-farm and off-farm economic activities and products across all the agricultural value chains within a country.

## F. AGRIFOOD SYSTEM IN ODISHA FOR 2017/18

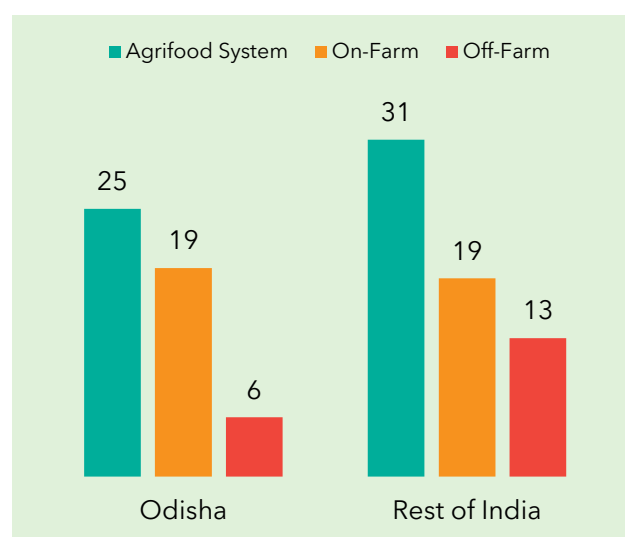
**Figure 14.** Share of agrifood system components (in percent)



**Source:** Authors' calculations using the 2017/18 India state-level SAM.

**Note:** Rest of India includes the remaining 32 Indian states and union territories (excluding Daman & Diu, Dadra & Nagar Haveli, and Lakshadweep).

**Figure 15.** Share of on-farm and off-farm activities (in percent) in gross value added



**Source:** Authors' calculations using the 2017/18 India state-level SAM.

**Note:** Rest of India includes the remaining 32 Indian states and union territories (excluding Daman & Diu, Dadra & Nagar Haveli, and Lakshadweep).

**Table 2.** Structure of agrifood system in Odisha and rest of India

| Agrifood value chains | Share of value chains (in percent) in total agrifood gross value added (GVA) |               | Share of off-farm activities (in percent) in the GVA of individual value chains |               |
|-----------------------|------------------------------------------------------------------------------|---------------|---------------------------------------------------------------------------------|---------------|
|                       | Odisha                                                                       | Rest of India | Odisha                                                                          | Rest of India |
| Agrifood GVA          | 100.0                                                                        | 100.0         |                                                                                 |               |
| Cereals               | 14.1                                                                         | 13.4          | 12.1                                                                            | 33.8          |
| Roots & Tubers        | 1.0                                                                          | 1.3           | 16.6                                                                            | 28.3          |
| Pulses                | 2.2                                                                          | 2.7           | 10.0                                                                            | 15.0          |
| Oilseeds              | 0.9                                                                          | 4.3           | 17.0                                                                            | 40.9          |
| Fruits & Vegetables   | 28.9                                                                         | 13.9          | 19.9                                                                            | 30.2          |
| Sugarcane             | 0.2                                                                          | 5.0           | 59.7                                                                            | 65.5          |
| Fibers                | 1.3                                                                          | 10.8          | 27.2                                                                            | 85.3          |
| Tea, Coffee & Cocoa   | 0.1                                                                          | 1.3           | 94.4                                                                            | 69.8          |
| Other cash crops      | 7.2                                                                          | 9.7           | 21.9                                                                            | 37.0          |
| Livestock             | 16.2                                                                         | 23.2          | 24.3                                                                            | 29.7          |
| Fisheries             | 15.3                                                                         | 6.9           | 41.7                                                                            | 45.8          |
| Forestry              | 12.7                                                                         | 7.1           | 13.4                                                                            | 34.7          |
| Other food            | 0.0                                                                          | 0.4           | 100.0                                                                           | 100.0         |

**Source:** Authors' calculations using the 2017/18 India state-level SAM.

**Note:** Rest of India includes the remaining 32 Indian states and union territories (excluding Daman & Diu, Dadra & Nagar Haveli, and Lakshadweep).

**Table 3.** Distribution of off-farm activities (in percent) across individual agrifood value chains in Odisha

| Agrifood value chain | Processing | Input supply | Trade | Food services | Total |
|----------------------|------------|--------------|-------|---------------|-------|
| Cereals              | 1          | 31           | 54    | 15            | 100   |
| Roots & Tubers       | 0          | 20           | 80    | 0             | 100   |
| Pulses               | 0          | 16           | 84    | 0             | 100   |
| Oilseeds             | 11         | 6            | 44    | 40            | 100   |
| Fruits & Vegetables  | 3          | 14           | 74    | 8             | 100   |
| Sugarcane            | 79         | 3            | 17    | 0             | 100   |
| Fibers               | 27         | 18           | 55    | 0             | 100   |
| Tea, Coffee & Cocoa  | 1          | 0            | 1     | 98            | 100   |
| Other cash crop      | 7          | 14           | 79    | 0             | 100   |
| Livestock            | 20         | 2            | 48    | 30            | 100   |
| Fisheries            | 18         | 3            | 75    | 3             | 100   |
| Forestry             | 7          | 8            | 85    | 0             | 100   |

**Source:** Authors' calculations using the 2017/18 India state-level SAM.

## G. EMPLOYMENT IN AGRIFOOD SYSTEM FOR 2017/18

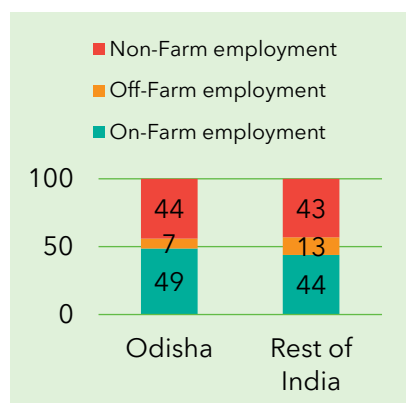
**Table 4.** Gender breakdown and demographic structure of employment in and outside of the agrifood system

|                                                        | Odisha    | Rest of India |
|--------------------------------------------------------|-----------|---------------|
| <b>Total employment (million persons)</b>              | <b>16</b> | <b>461</b>    |
| Percentage of women                                    | 21        | 23            |
| Percentage of youth (15-29 years)                      | 22        | 25            |
| <b>Employment in agrifood system (million persons)</b> | <b>9</b>  | <b>262</b>    |
| Percentage of women                                    | 24        | 27            |
| Percentage of youth (15-29 years)                      | 20        | 22            |
| <b>On-farm employment (million persons)</b>            | <b>8</b>  | <b>202</b>    |
| Percentage of women                                    | 24        | 30            |
| Percentage of youth (15-29 years)                      | 18        | 20            |
| <b>Off-farm employment (million persons)</b>           | <b>1</b>  | <b>60</b>     |
| Percentage of women                                    | 28        | 17            |
| Percentage of youth (15-29 years)                      | 30        | 27            |

**Source:** Authors' calculations using the 2017/18 India state-level SAM.

**Note:** "Employment in agrifood system" comprises "Off-farm employment" and "On-farm employment" (employment in agriculture). Rest of India includes the remaining 32 Indian states and union territories (excluding Daman & Diu, Dadra & Nagar Haveli and Lakshadweep).

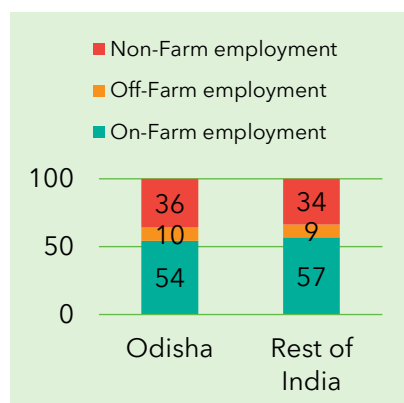
**Figure 16.** Distribution of employment (in percent) in and outside of the agrifood system



**Source:** Authors' calculations using the 2017/18 India state-level SAM.

**Note:** "Non-Farm employment" refers to employment outside of the agrifood system. Rest of India includes the remaining 32 Indian states and union territories (excluding Daman & Diu, Dadra & Nagar Haveli, and Lakshadweep).

**Figure 17.** Distribution of women's employment (in percent) in and outside of the agrifood system



**Source:** Authors' calculations using the 2017/18 India state-level SAM.

**Note:** "Non-Farm employment" refers to employment outside of the agrifood system. Rest of India includes the remaining 32 Indian states and union territories (excluding Daman & Diu, Dadra & Nagar Haveli, and Lakshadweep). Numbers may not add up to 100 due to rounding.

**Figure 18.** Distribution of youth employment (in percent) in and outside of the agrifood system



**Source:** Authors' calculations using the 2017/18 India state-level SAM.

**Note:** "Non-Farm employment" refers to employment outside of the agrifood system. Rest of India includes the remaining 32 Indian states and union territories (excluding Daman & Diu, Dadra & Nagar Haveli, and Lakshadweep). Numbers may not add up to 100 due to rounding.

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- Financial support was provided by the CGIAR Initiatives on [Foresight](#) and [National Policies and Strategies](#), as well as the Bill & Melinda Gates Foundation (BMGF). This publication has not been peer reviewed. The opinions expressed here belong to the authors, and do not necessarily reflect those of IFPRI, CGIAR, or BMGF.

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