



भारतीय कृषि एवं खाद्य परिषद्
INDIAN COUNCIL OF FOOD AND AGRICULTURE

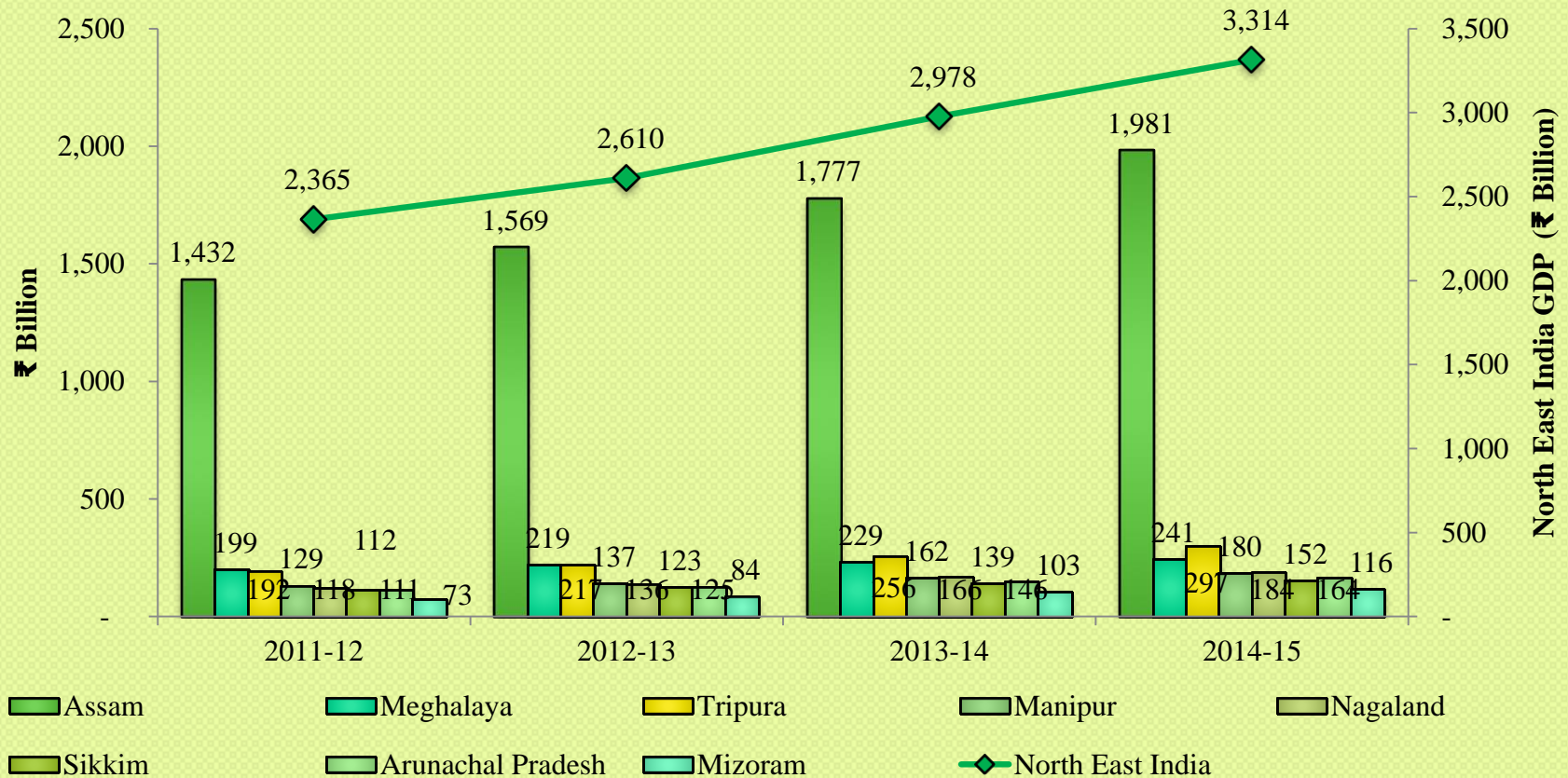


NORTH EASTERN REGION OF INDIA
UNTAPPED POTENTIAL

NER ECONOMIC PROFILE

Gross State Domestic Product

North Eastern Region States Gross State Domestic Product; 2011-15

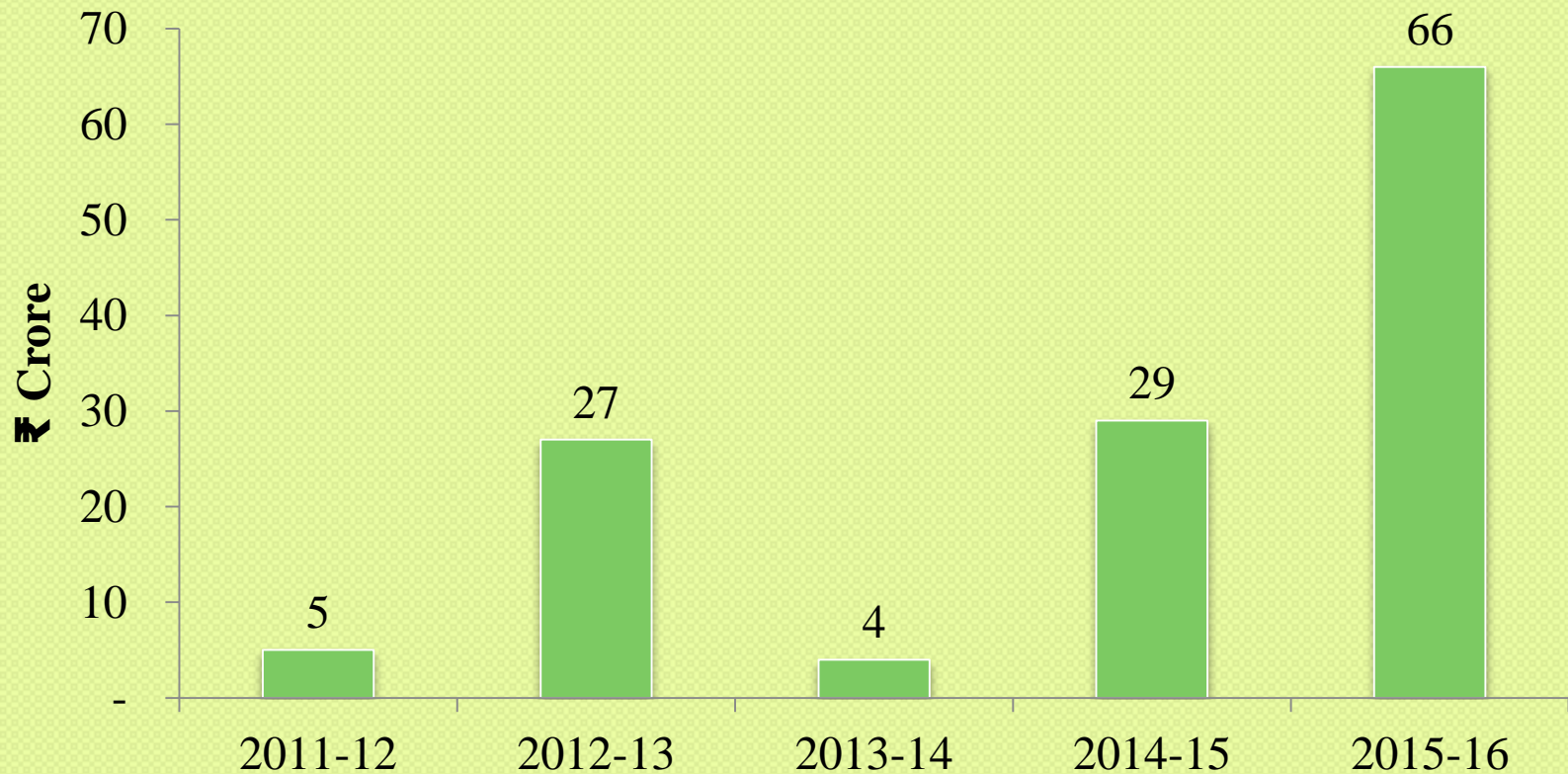


Source: MOSPI

NER ECONOMIC PROFILE

FDI Inflow

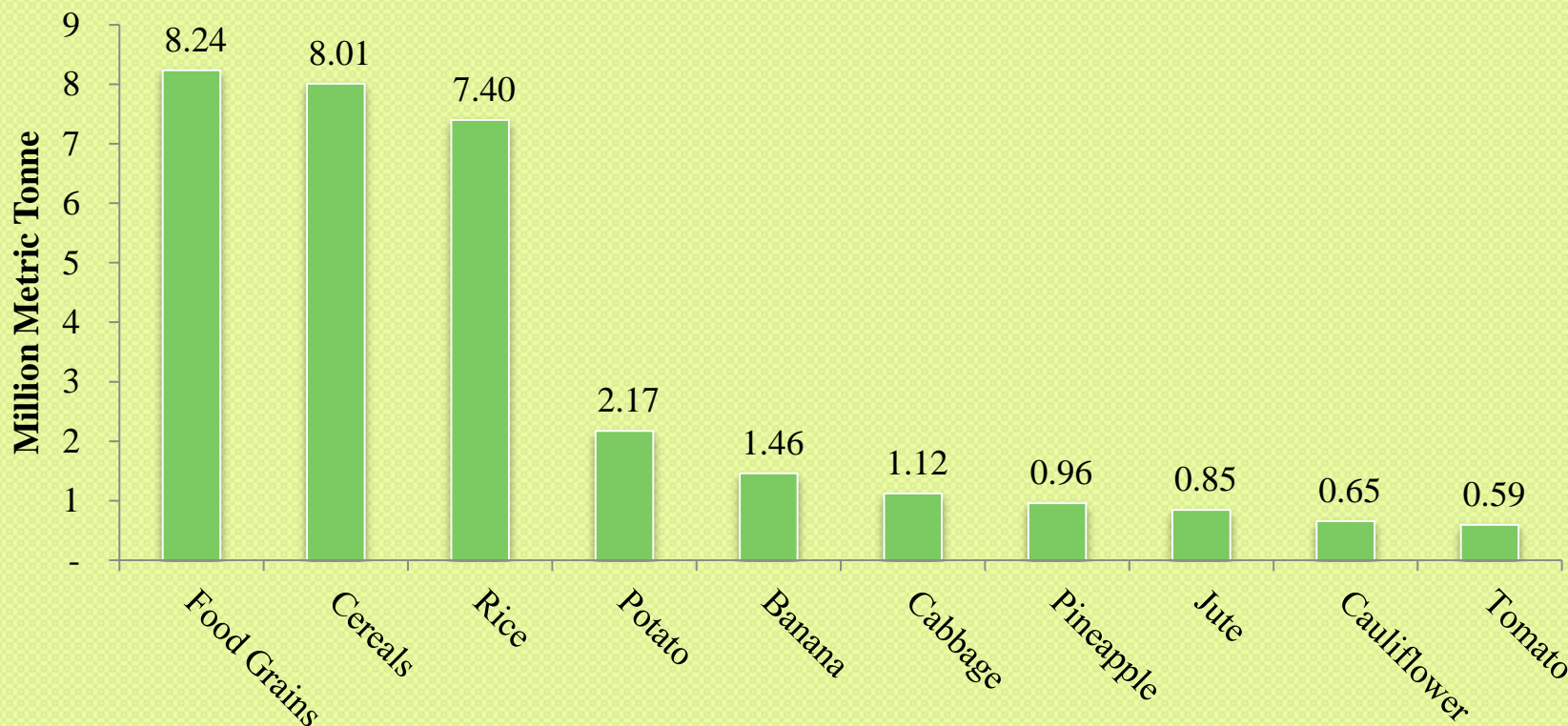
North Eastern Region Total FDI Inflow; 2011-16



Source: Department of Industrial Policy and Promotion
Note: Excluding Sikkim

NER AGRICULTURAL SECTOR SCENARIO

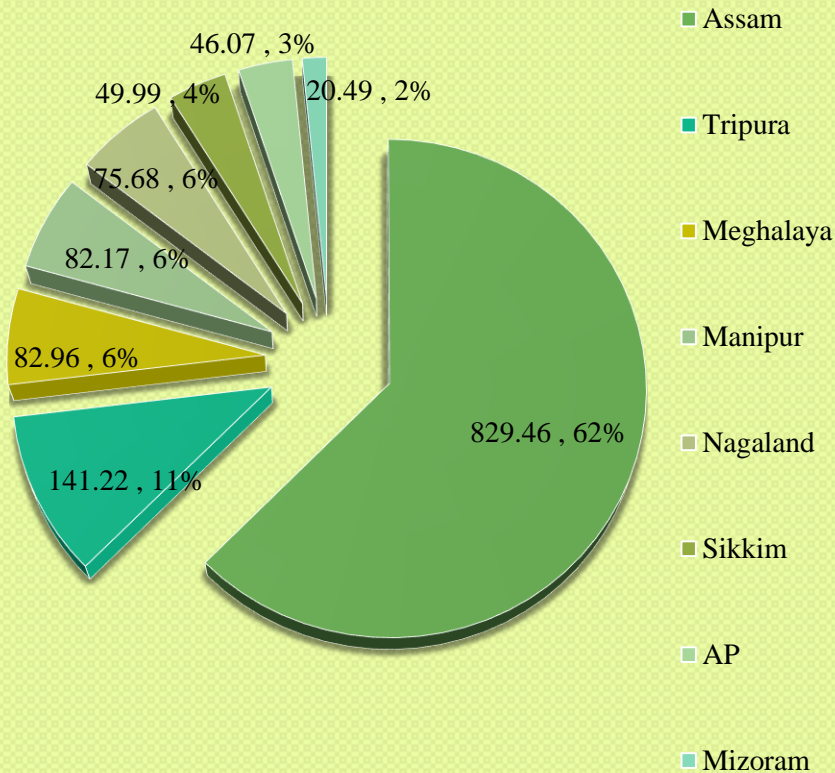
Top 10 Crops Produced in the North Eastern Region of India; 2014-15



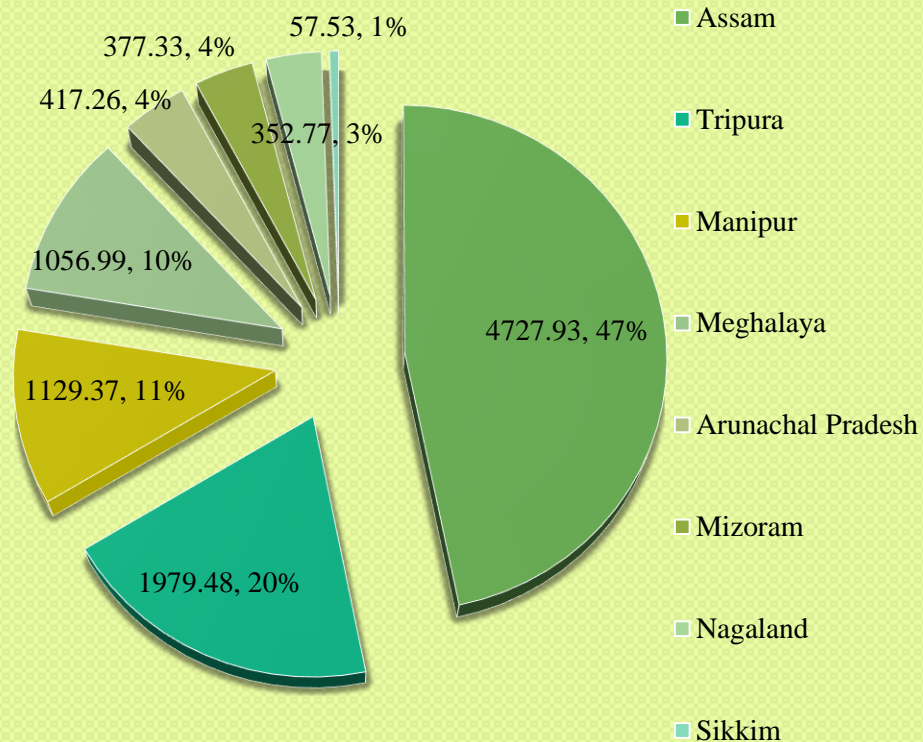
Source: NEDFi Databank

NER Animal Husbandry Sector Scenario

Milk Production in the North Eastern Region of India; 2014-15 (000' Tonne)



Egg Production in the North Eastern Region of India; 2014-15 (Lakh)

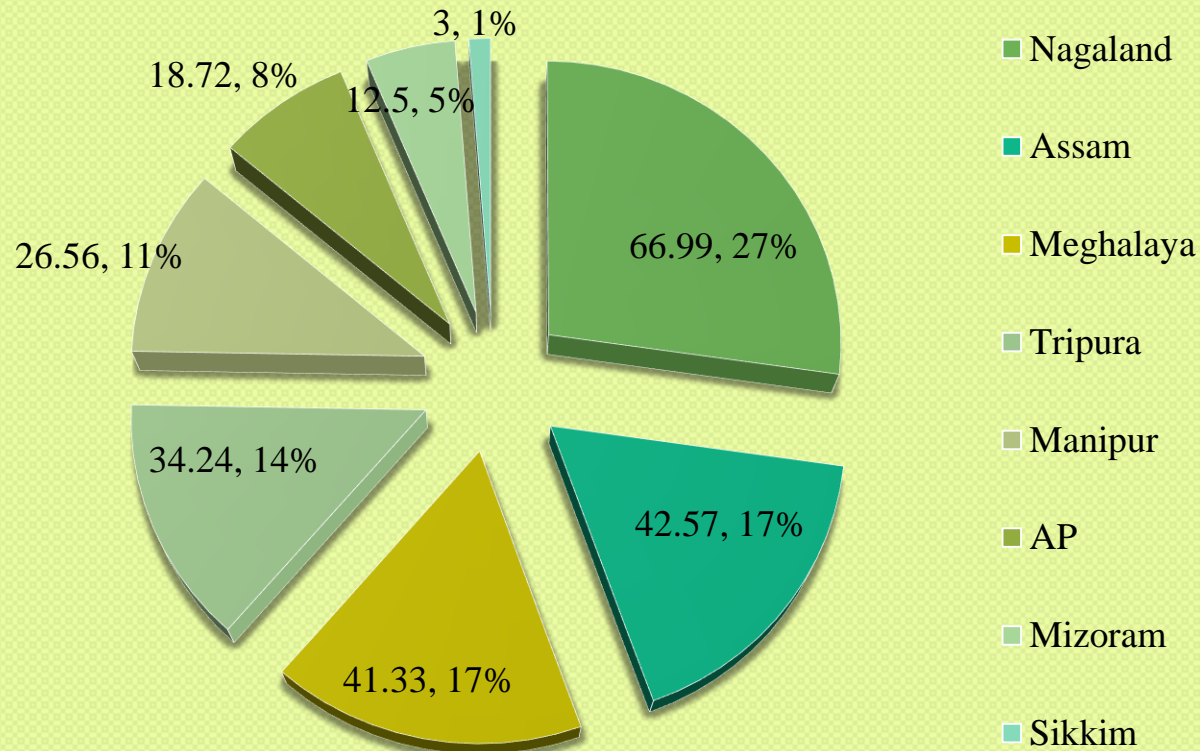


Source: Department of Animal Husbandry, Dairying and Fisheries

Source: Department of Animal Husbandry, Dairying and Fisheries

NER Animal Husbandry Sector Scenario

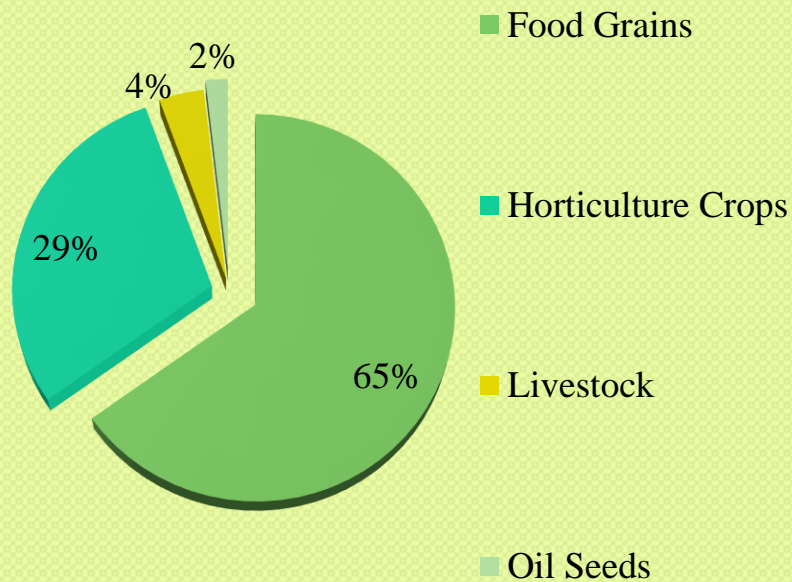
Meat Production in the North Eastern Region of India; 2014-15 (Thousand Tonne)



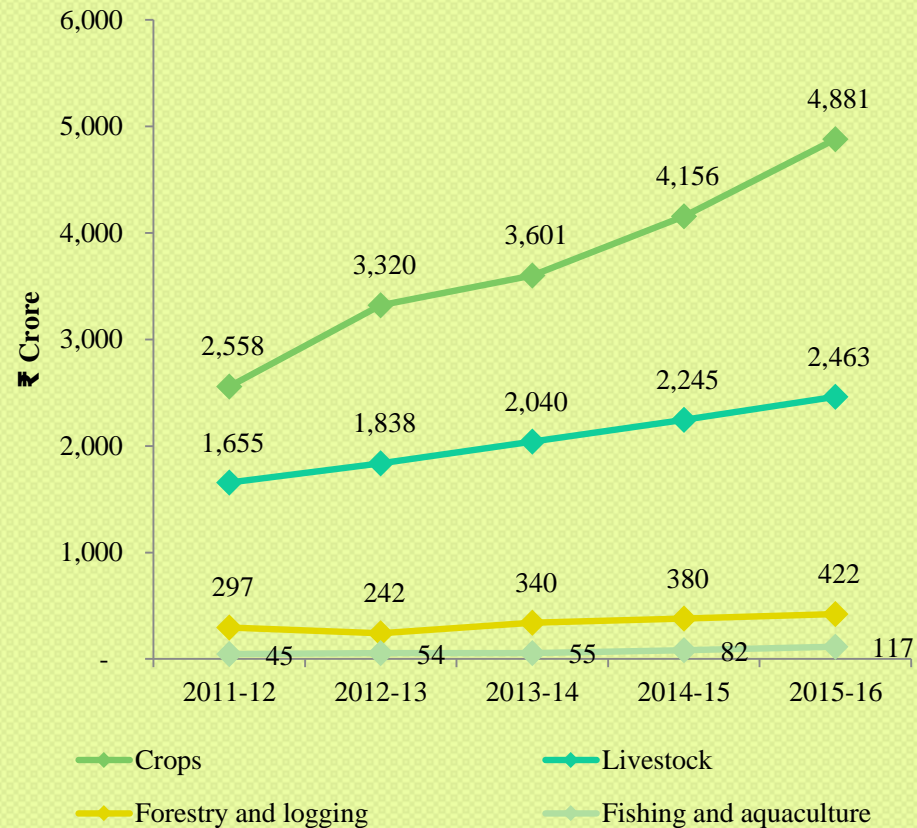
Source: Department of Animal Husbandry, Dairying and Fisheries

Arunachal Pradesh

Arunachal Pradesh Agriculture and Allied Sector; 2014-15



Arunachal Pradesh Agriculture and Allied Sector; 2014-15

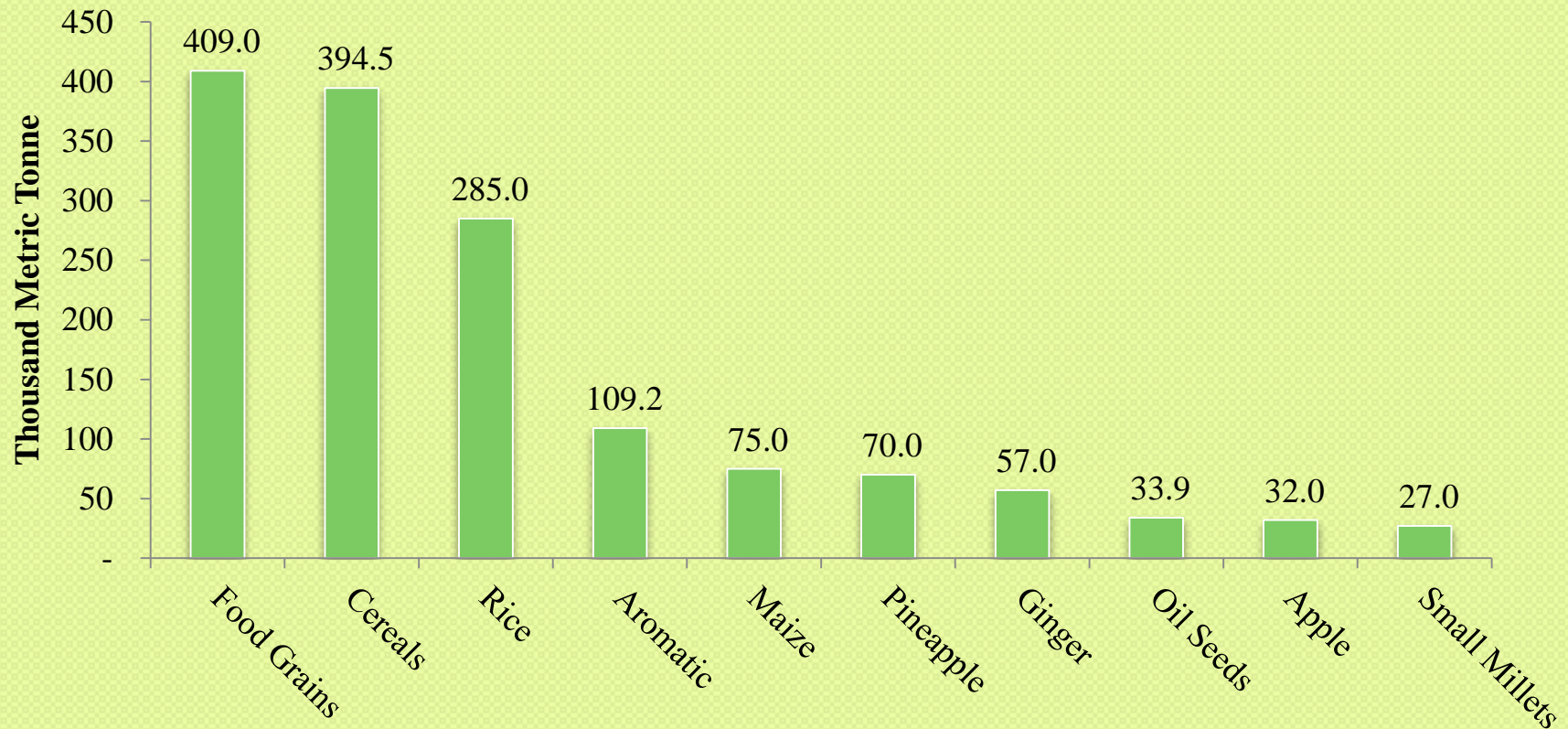


Source: NER Databank, DAHD – GOI and Dept. of Agriculture and Farmers Welfare – GOI
 Note: Livestock does not include egg production.

Source: MOSPI

Arunachal Pradesh

Top 10 Crops Produced in Arunachal Pradesh; 2014-15



Source: NEDFi Databank

Arunachal Pradesh

Priority Sectors

- The resources, policy incentives & climate in state support investments in tissue culture & floriculture, plantation crops (tea, rubber, etc.) & agro-based industries.
- Horticulture has a vast potential, owing to good agro-climatic conditions and topography, for the development of varied varieties of fruits and vegetables.
- Tourism is another conceivable sector with eco and adventure tourism, cultural tourism and religious tourism being the major areas of interest.
- The state's location provides opportunities for international trade with South Asian countries such as Myanmar, Bhutan and China.

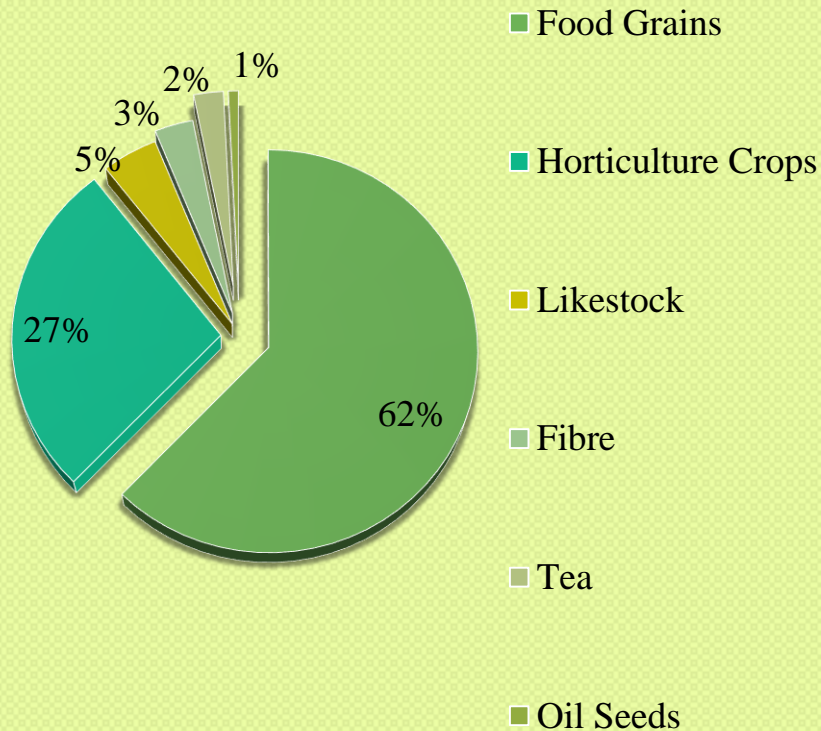
Arunachal Pradesh

Priority Sectors

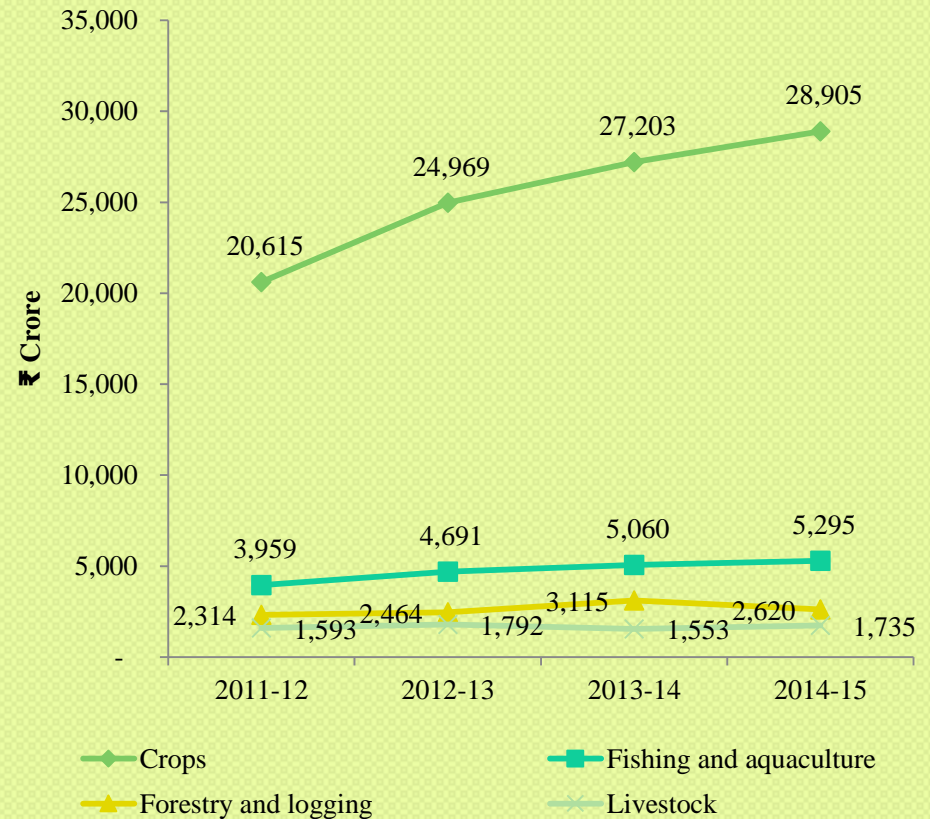
- Based on the availability of resources, the identified thrust areas for industrial development are:
 - Industries based on agricultural, horticultural and plantation produce.
 - Industries based on non-timber forest produce such as bamboo, cane (rattan), medicinal plants/herbs, aromatic grass, tea and coffee.
 - Textiles (handlooms and power-looms), handicrafts and sericulture.
 - Food processing industries.
 - Industries based on locally available raw-materials, except timber.

Assam

Assam Agriculture and Allied Sector; 2014-15



Assam GSDP from Agriculture and Allied Sector; 2011-15

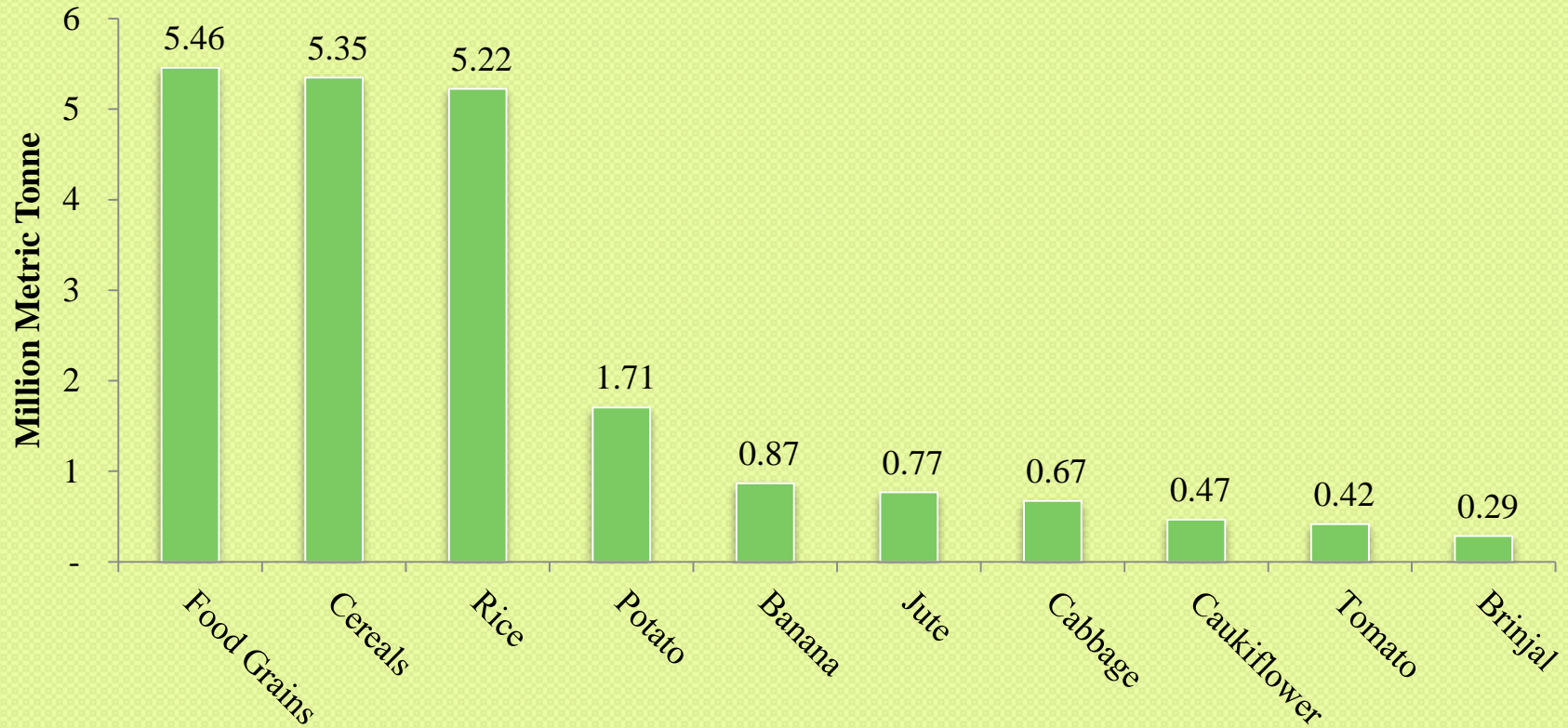


Source: NER Databank, DAHD – GOI and Dept. of Agriculture and Farmers Welfare – GOI, Tea Board of India
 Note: Livestock does not include egg production.

Source: MOSPI

Assam

Top 10 Crops Produced in Assam; 2014-15



Source: NEDFi Databank

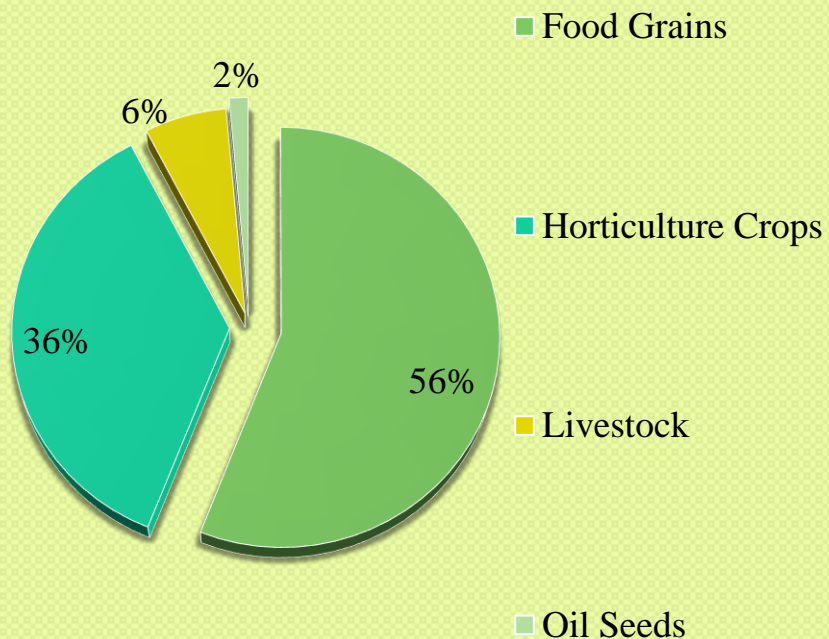
Assam

Priority Sectors

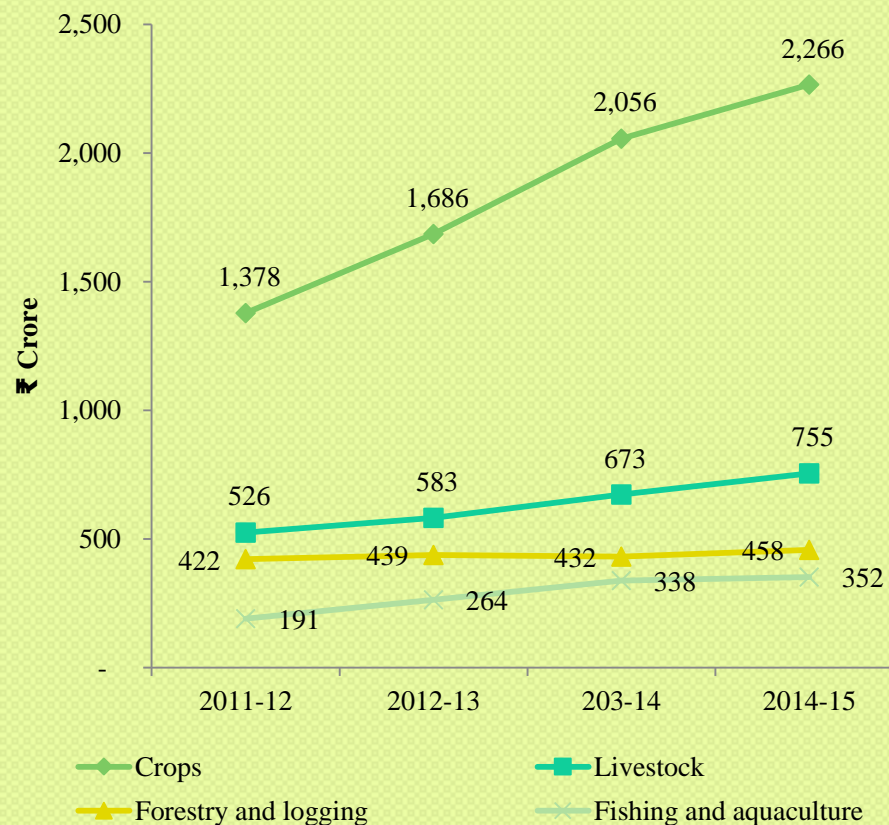
- There is a potential for wildlife tourism in the state as state has various national parks and wildlife sanctuaries.
- The agro-climatic conditions of the state favor growing of a variety of fruits, vegetables/ spices. With better quality planting material, organic farming, adequate research support and better know-how, the state could easily cause a major boom in horticulture and food processing sector.
- Bamboo, which is the fastest growing plant and generates large bio-mass, holds the potential to replace wood on many grounds. Bamboo based industries could prove profitable in the state.
- With its vast hills and forests, Assam is the home of a variety of medicinal herbs and plants. There is a scope for Extraction and Value Addition of Herbal Medicinal and Aromatic Plants.

Manipur

Manipur Agriculture and Allied Sector; 2014-15



Manipur GSDP from Agriculture and Allied Sector; 2011-15

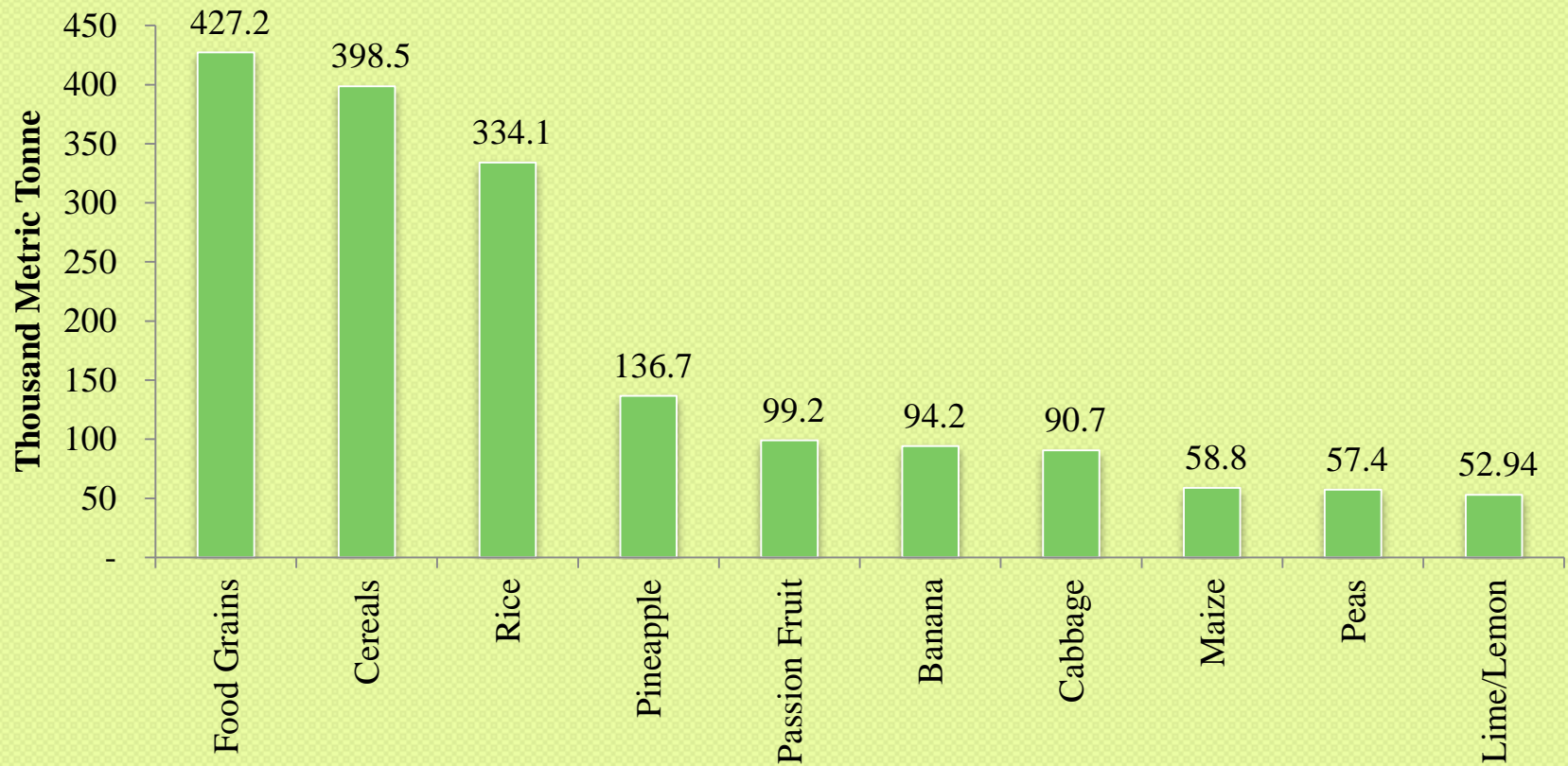


Source: NER Databank, DAHD – GOI and Dept. of Agriculture and Farmers Welfare – GOI, Tea Board of India
 Note: Livestock does not include egg production.

Source: MOSPI

Manipur

Top 10 Crops Produced in Manipur; 2014-15



Source: NEDFi Databank

Manipur

Priority Sectors

- Production and trading units can flourish, taking advantage of the expanding international trade of various agricultural products from the region.
- The food processing industry is a major thrust sector of Manipur. The state's agro climatic conditions are most suited for food processing industry.
- Bamboo shoot production units have potential for bamboo cultivation and marketing of processed bamboo shoots and products for the local as well as international markets.
- Manipur has a pleasant climate, exotic greenery and varied flora, besides a rich tribal culture, which makes tourism as one of the major potential areas of the state.

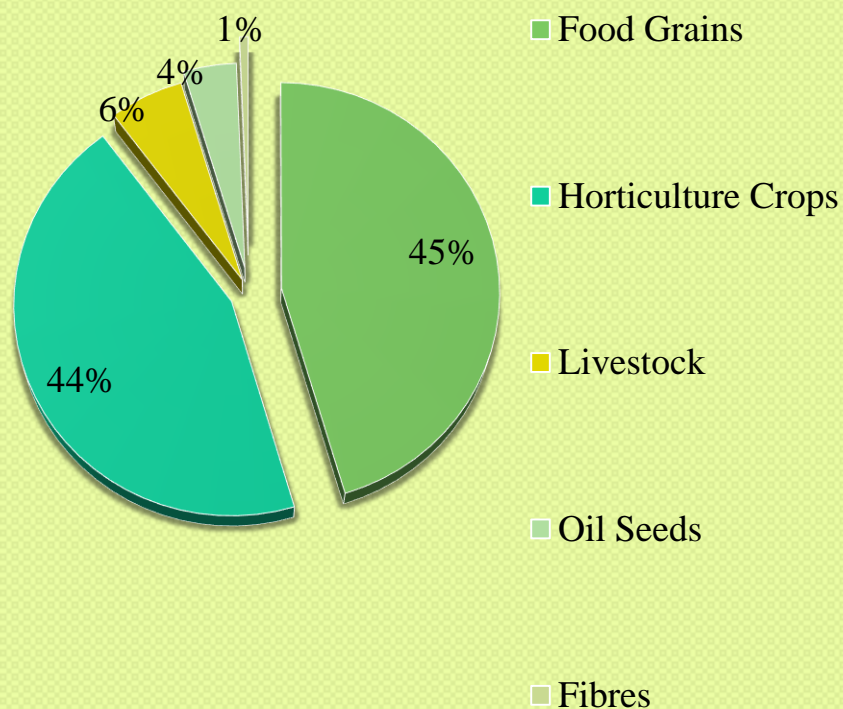
Manipur

Priority Sectors

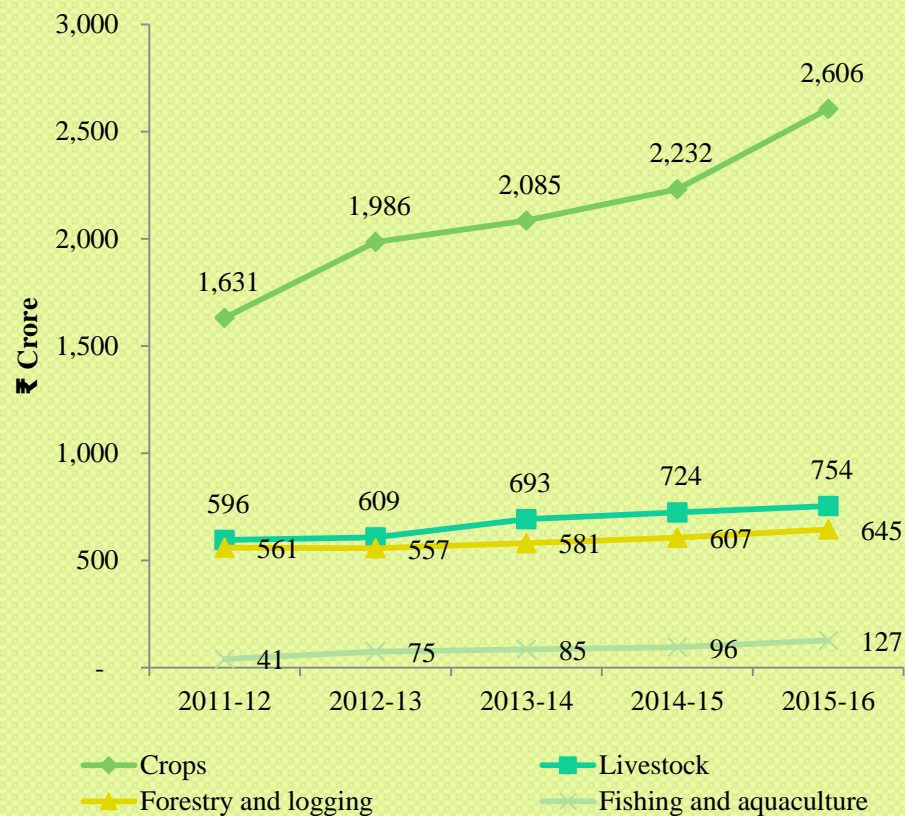
- The potential industries in the agriculture sector are integrated rice parboiling, hulling/dehusking/milling, bran stabilizing and captive power generation (based on rice husk biomass gasified dual fuel) unit, Non-flavored potato chip projects.
- The potential industries in the horticulture plantation sectors are Multi-fruit juice project, Orange Squash & Jam/Marmalade, Pineapple/Mixed Fruits Jam and Jelly, Tomato sauce, Ginger oleoresin Extraction as the major crops grown the state include the orange, pineapple, tomato, ginger and etc.

Meghalaya

Meghalaya Agriculture and Allied Sector; 2014-15



Meghalaya GSDP from Agriculture and Allied Sector; 2011-15

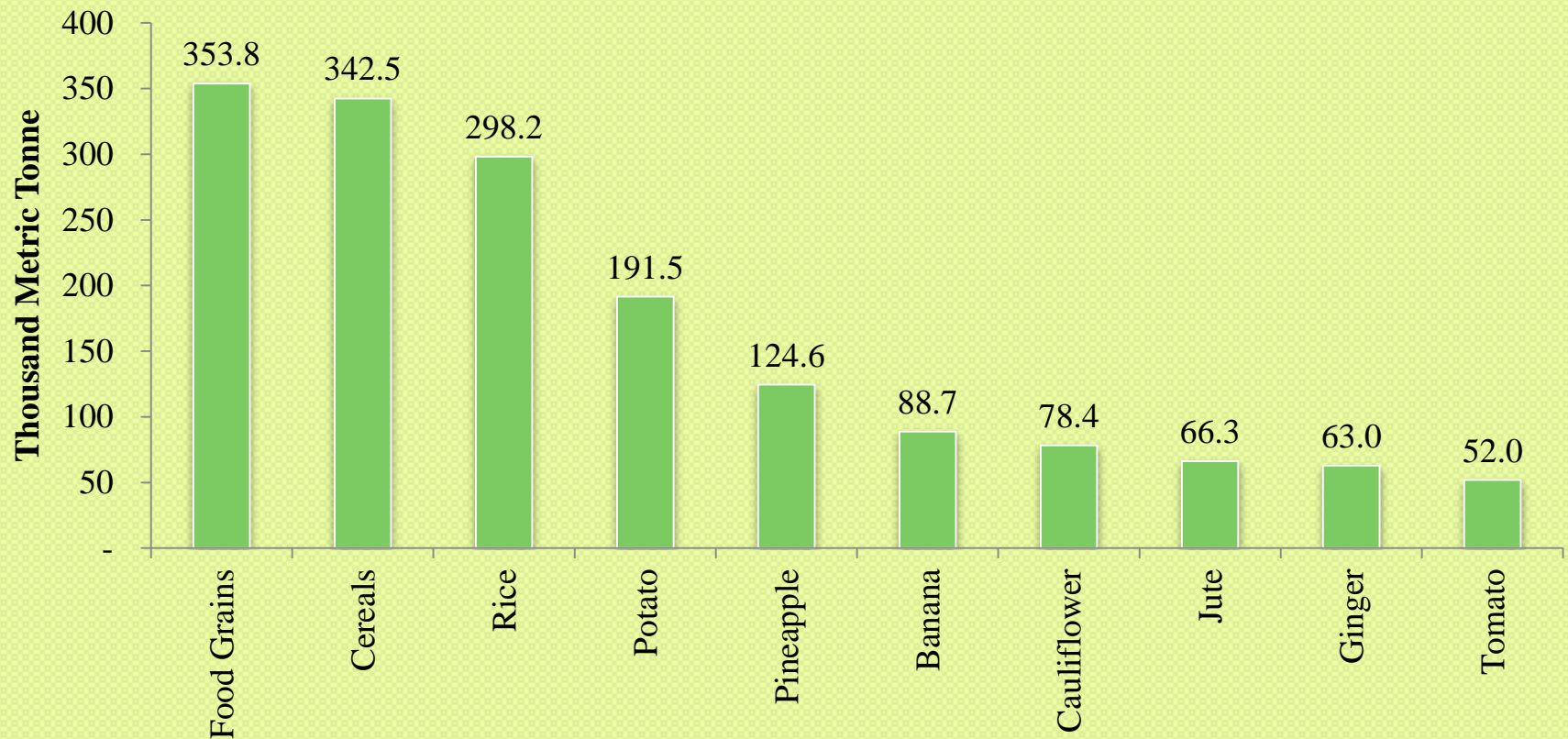


Source: NER Databank, DAHD – GOI and Dept. of Agriculture and Farmers Welfare – GOI, Tea Board of India
 Note: Livestock does not include egg production.

Source: MOSPI

Meghalaya

Top 10 Crops Produced in Meghalaya; 2014-15



Source: NEDFi Databank

Meghalaya

Priority Sectors

- Horticulture Based Units have high potential, which include food processing, mushroom cultivation and processing.
- There exist a high potential for the setting up of select, bio-technology based industries in Meghalaya. This industry is essentially knowledge-based and can function with minimum resources and limited transportation infrastructure.
- Meghalaya accounts for 150 species of orchids. Thus, there is a large scope for commercial exploitation in a systematic and scientific manner through tissue culture.
- Setting up of high value export production units in the state, especially for Spices, Oleoresin and other Essential Oils.

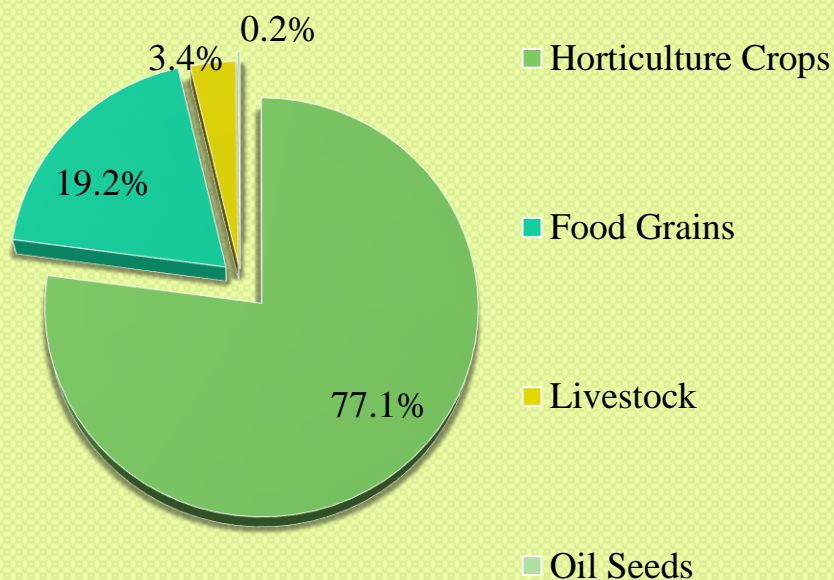
Meghalaya

Priority Sectors

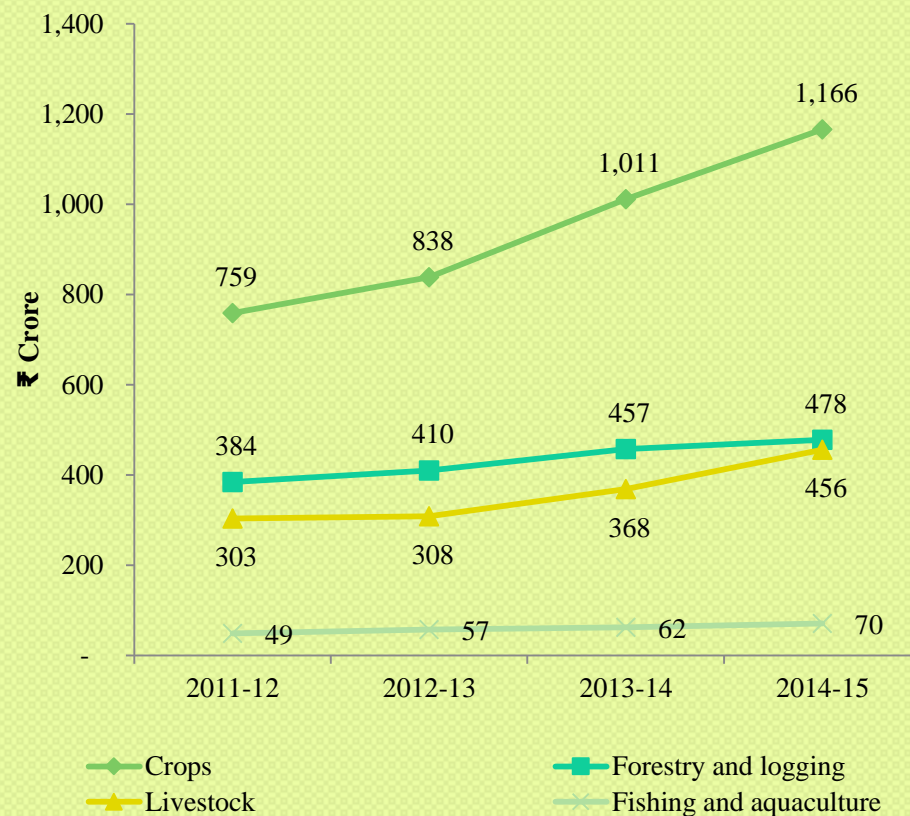
- Meghalaya needs units for hygienic and scientific processing of poultry, piggery and other meat products.
- Meghalaya has a high potential for development of dairy and allied products as well as for processing of animal hides and skins and for setting up leather industries.
- Meghalaya has a good potential for cultivation of tea and rubber.

Mizoram

Mizoram Agriculture and Allied Sector; 2014-15



Mizoram GSDP from Agriculture and Allied Sector; 2011-15

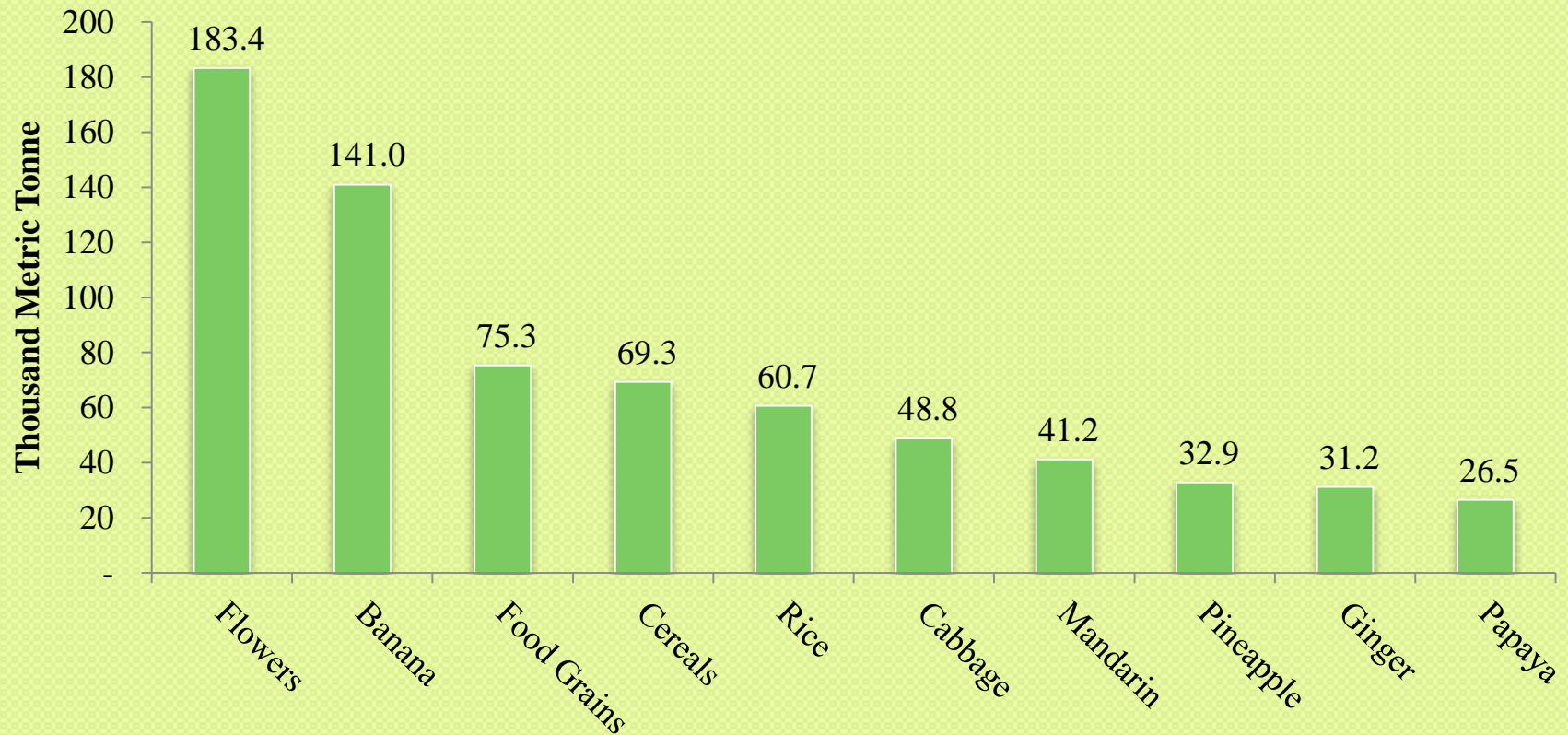


Source: NER Databank, DAHD – GOI and Dept. of Agriculture and Farmers Welfare – GOI, Tea Board of India
 Note: Livestock does not include egg production.

Source: MOSPI

Mizoram

Top 10 Crops Produced in Mizoram; 2014-15



Source: NEDFi Databank

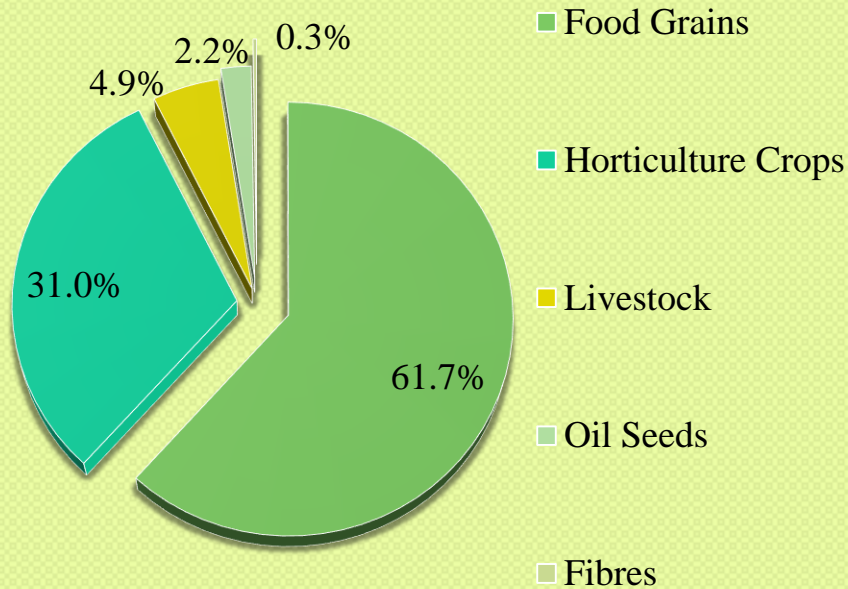
Mizoram

Priority Sectors

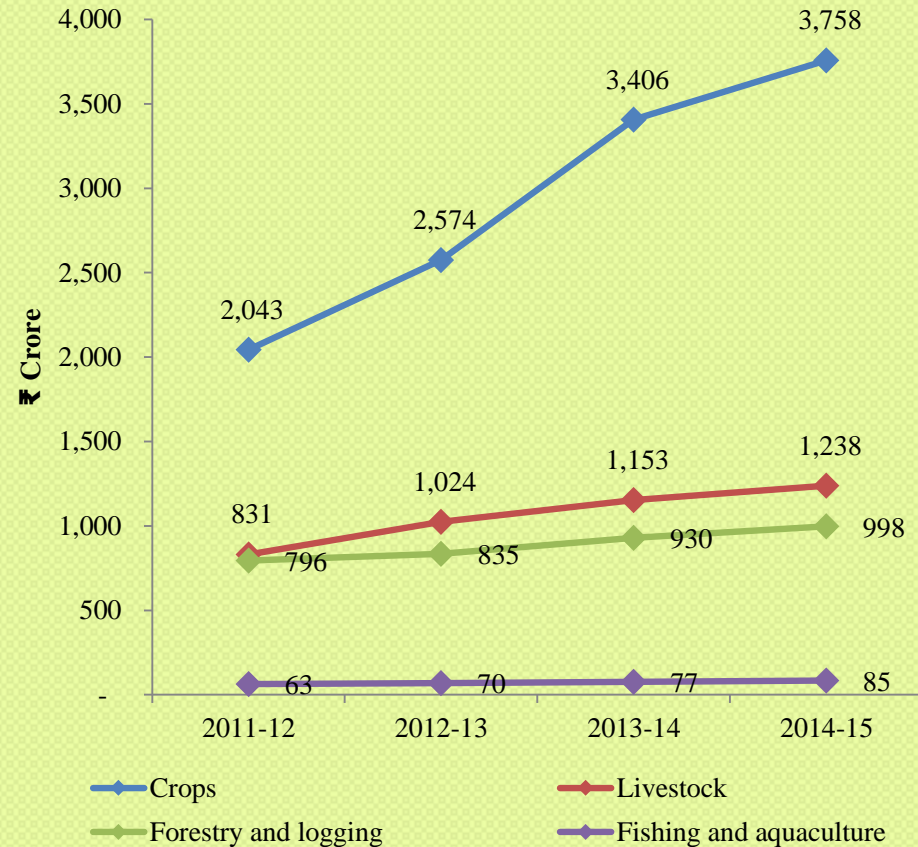
- Production of fruits, vegetables, spices, cotton, coffee, tea, bird's eye chilli, anthurium, and rose has immense potential in Mizoram.
- The fish farming industry has great potential as only around 19% of the state's fishing potential has been utilized up till now.
- With abundant natural resources and supporting policies, the food processing sector along with allied services such as cold chain management offers potential for investment.
- Use of pesticides and fertilizers is low in Mizoram, leading to rich organic produce, which makes it attractive for exports.
- Creation of tourist complexes, adventure sports and resort facilities, amusement parks, health farms, hotels, convention centres, tourist travel services, etc., offer various avenues for investment in the tourism sector of Mizoram.

Nagaland

Nagaland Agriculture and Allied Sector; 2014-15



Nagaland GSDP from Agriculture and Allied Sector; 2011-15

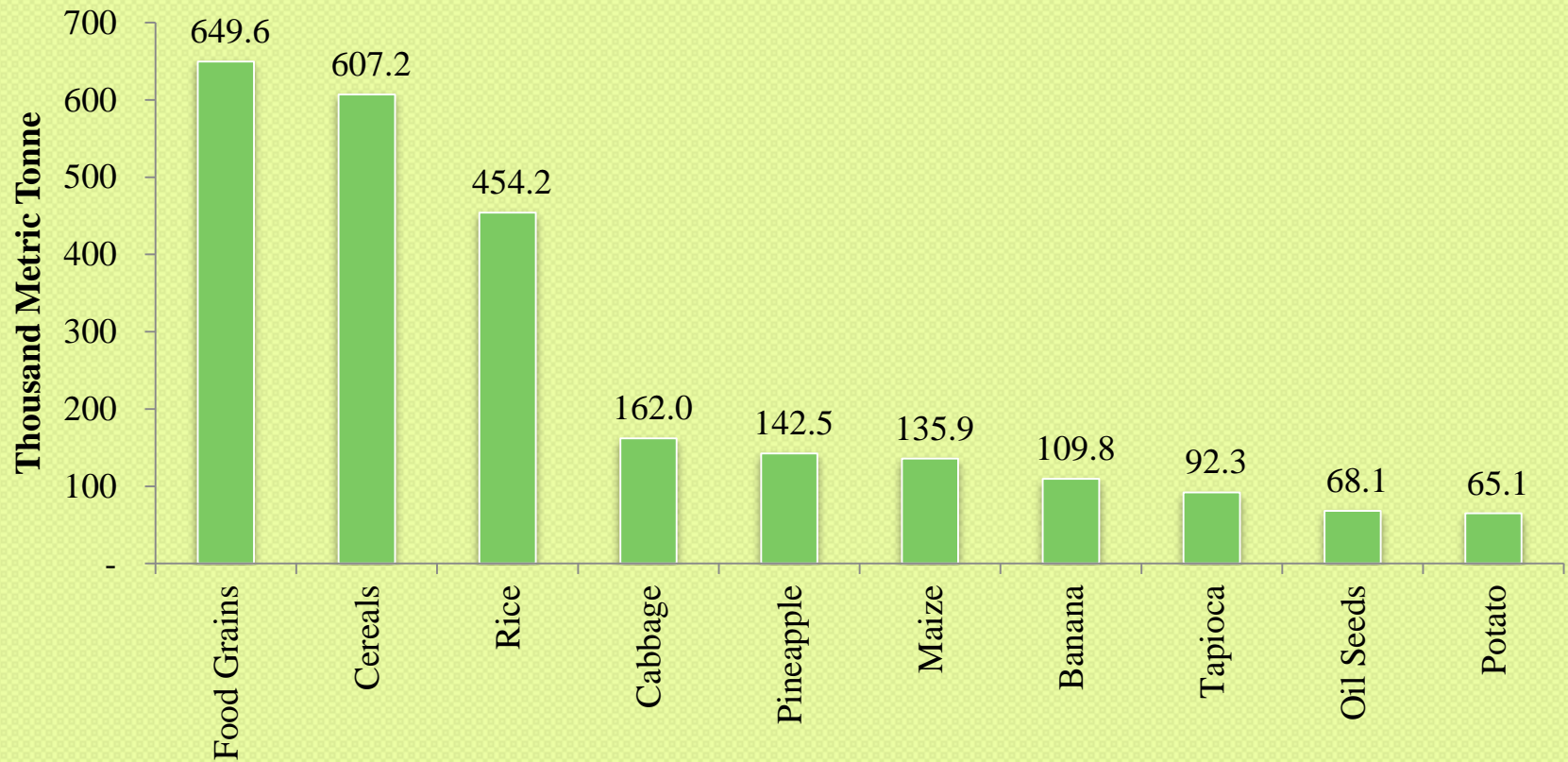


Source: NER Databank, DAHD – GOI and Dept. of Agriculture and Farmers Welfare – GOI, Tea Board of India
 Note: Livestock does not include egg production.

Source: MOSPI

Nagaland

Top 10 Crops Produced in Nagaland; 2014-15



Source: NEDFi Databank

Nagaland

Priority Sectors

- The Horticulture is one of the promising sectors for the state in terms of employment generation and income addition along with reducing nutritional poverty.
- The natural resources, climatic conditions and policy incentives in Nagaland support investments in industries related to bamboo, sericulture, tourism and agro-processing.
- Nagaland has a rich wealth of flora and fauna. Favorable climatic and geographical conditions in the state offer tremendous scope for floriculture.
- Nagaland has immense potential to produce organic honey and pollen due to its rich biodiversity, traditional knowledge, practice of beekeeping and numerous honeybee species.

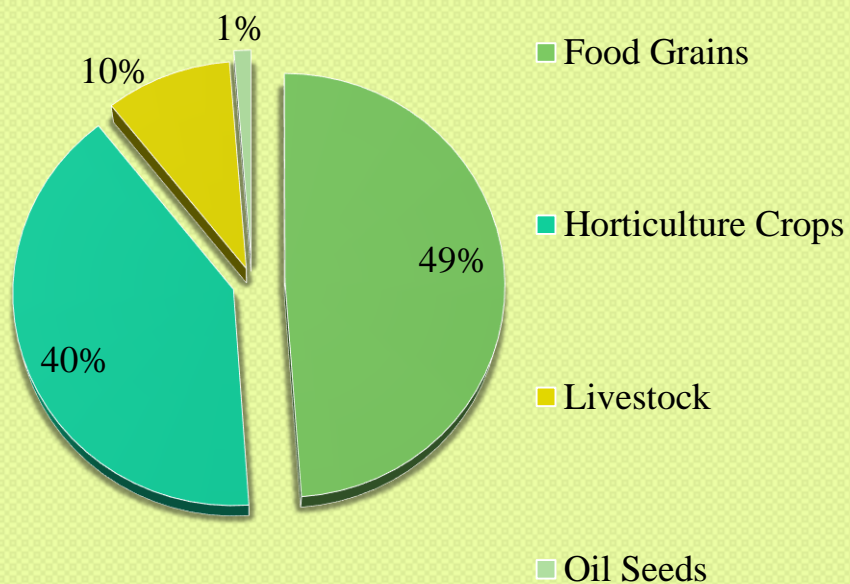
Nagaland

Priority Sectors

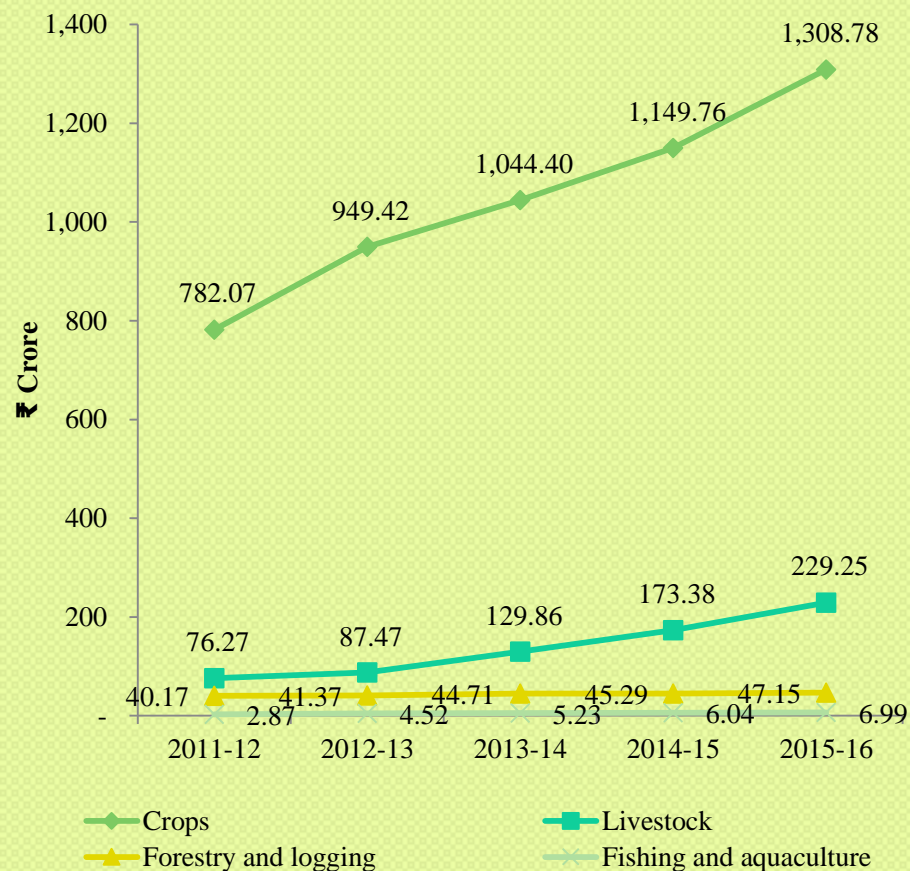
- Eco-tourism, adventure tourism, ethnic culture tourism, health farms, hotels, convention centres, tourist travel services, etc, has high potential in the tourism sector of the state.
- The handicraft and handloom sector in Nagaland has enormous growth potential due to the abundant availability of skilled labor and raw materials.
- Setting up of private commercial and rural breeding farms on Private Public Partnership mode.

Sikkim

Sikkim Agriculture and Allied Sector; 2014-15



Sikkim GSDP from Agriculture and Allied Sector; 2011-16

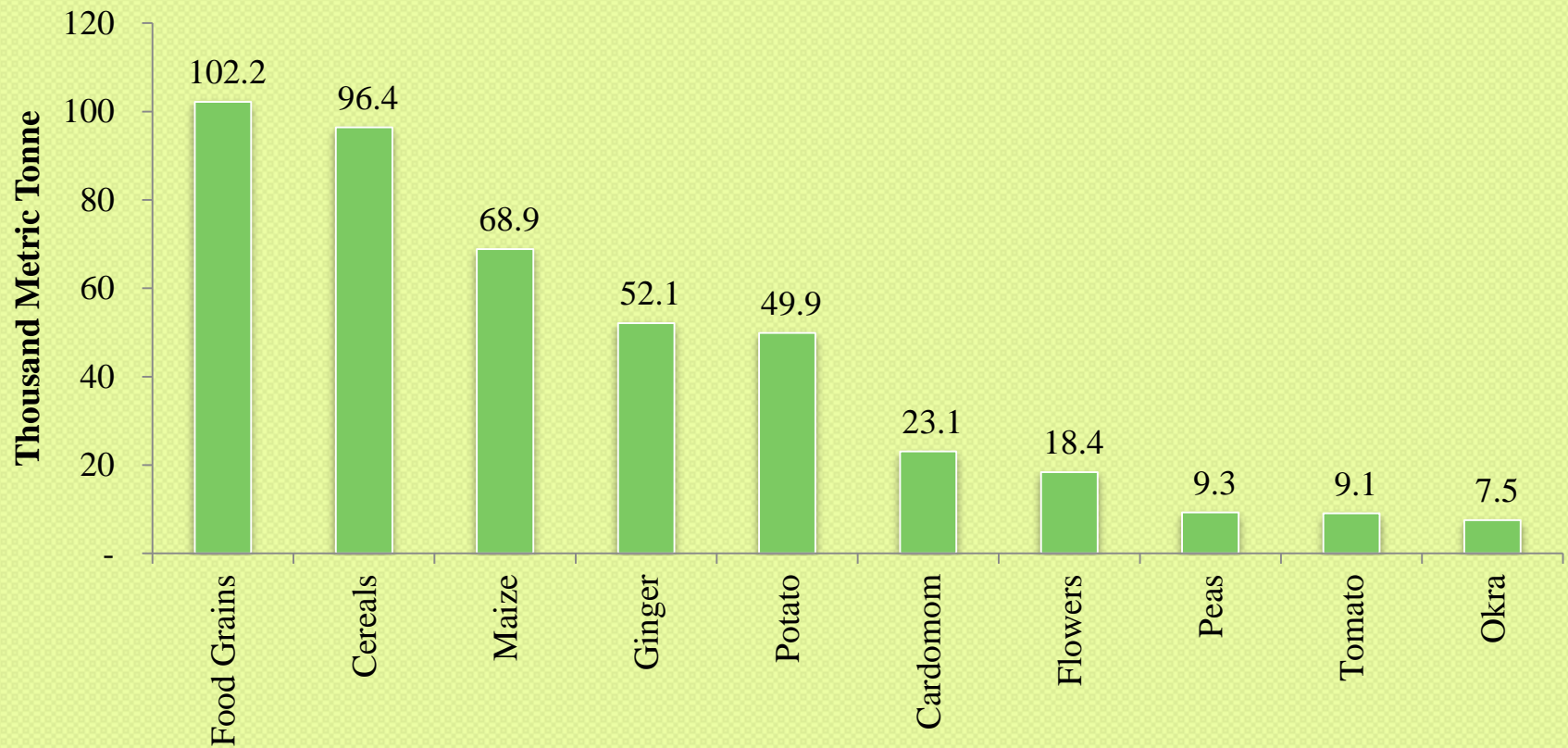


Source: NER Databank, DAHD – GOI and Dept. of Agriculture and Farmers Welfare – GOI, Tea Board of India
 Note: Livestock does not include egg production.

Source: MOSPI

Sikkim

Top 10 Crops Produced in Sikkim; 2014-15



Source: NEDFi Databank

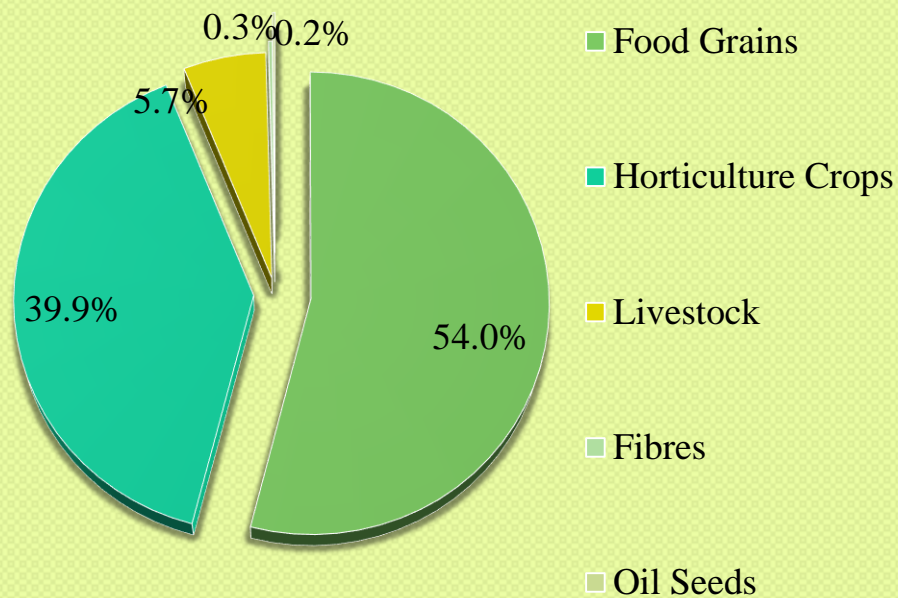
Sikkim

Priority Sectors

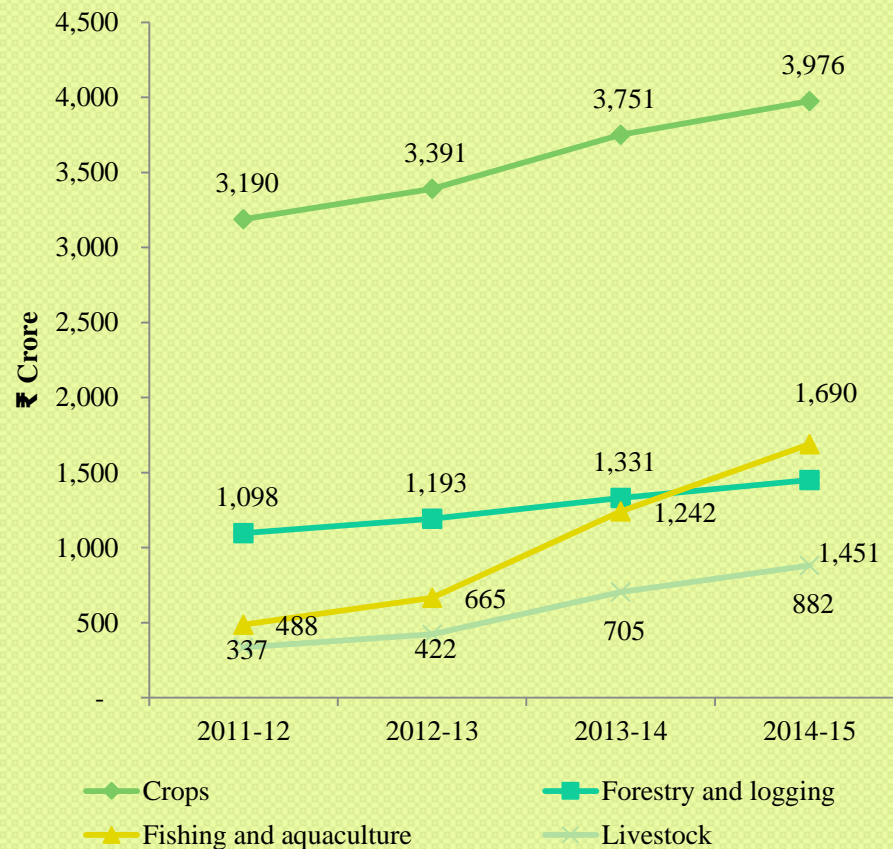
- The surveyed arable land in Sikkim is 109,000 ha, of which only 9.5% is used; this provides a vast untapped potential for development.
- There are large areas of fallow land available, having the potential to be converted into productive farms for cash crops.
- The handloom and handicraft industry has a great potential to generate income and employment in the state.
- The demand for large cardamom in the export market is bound to increase steadily. Thus, there is huge export potential for large cardamom from Sikkim.

Tripura

Tripura Agriculture and Allied Sector; 2014-15



Tripura GSDP from Agriculture and Allied Sector; 2011-15

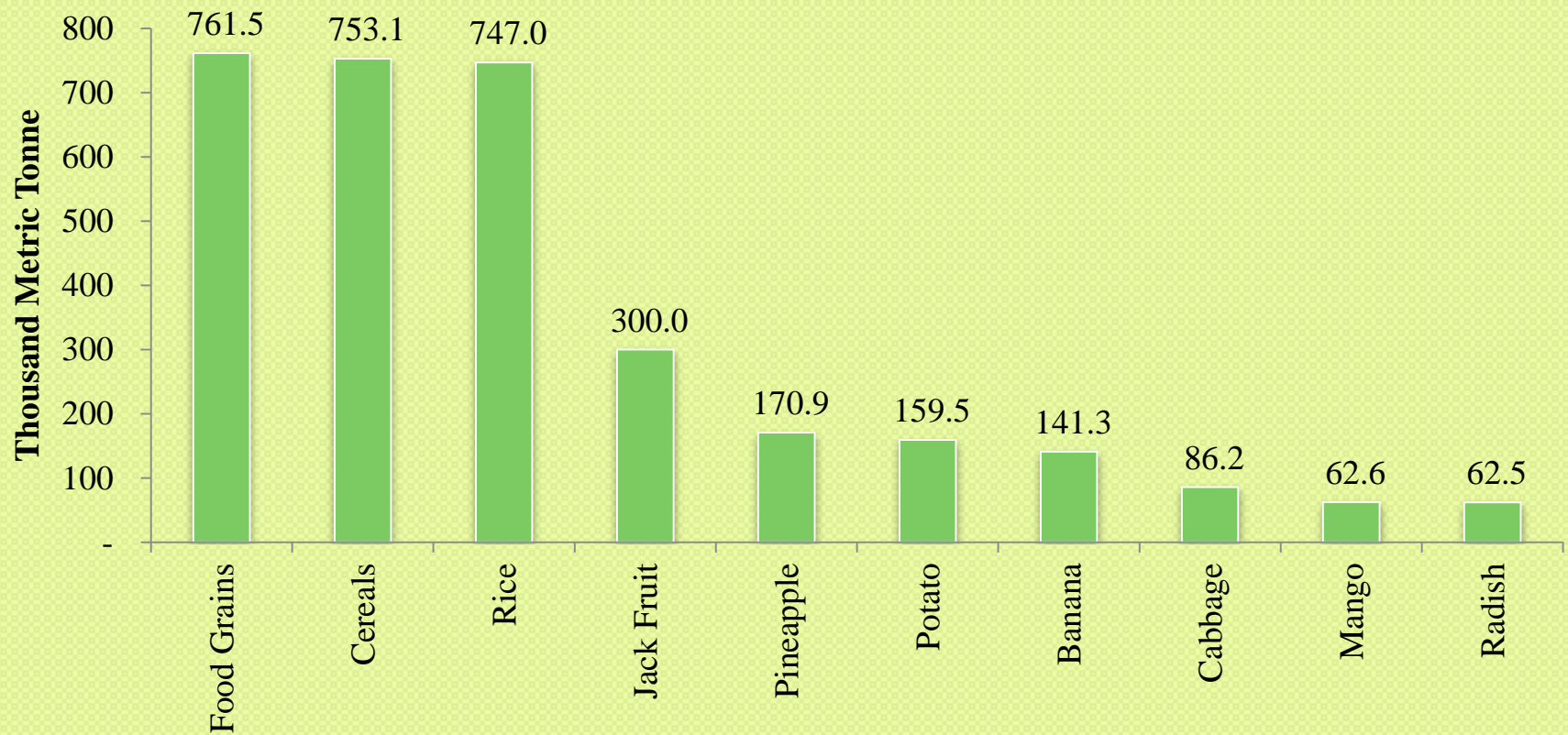


Source: NER Databank, DAHD – GOI and Dept. of Agriculture and Farmers Welfare – GOI, Tea Board of India
 Note: Livestock does not include egg production.

Source: MOSPI

Tripura

Top 10 Crops Produced in Tripura; 2014-15



Source: NEDFi Databank

Tripura

Priority Sectors

- Tripura acts as a gateway between Northeast India and Bangladesh. The state shares a 856-km international border with Bangladesh. This offers enormous potential for international trade.
- The state has a huge potential in tourism, specially eco-tourism, religious tourism, heritage tourism, hill tourism, rural tourism, archaeological tourism and water tourism.
- There is huge potential of RoFR land available for cultivation of fruit/ plantation crops like Pineapple, Jackfruit, Orange, Mosambi, Mango, Arecanut etc., commercially which may cater the need of other North Eastern States and neighboring country Bangladesh.
- There is a vast potential for setting up of food processing units in the State.
- The State also has potential in the meat processing sector.
- There is an ample scope for area expansion under organic spices cultivation in Tripura.

NER Government Schemes

Arunachal Pradesh

- Rashtriya Krishi Vikas Yojana (RKVY)

Assam

- Rashtriya Krishi Vikas Yojana (RKVY)

Manipur

- Rashtriya Krishi Vikas Yojana (RKVY)
- Dairy Development Schemes
- National Agro Forestry & Bamboo Mission

Meghalaya

- Rashtriya Krishi Vikas Yojana (RKVY)
- Funds for Promotion of Floriculture

NER Government Schemes

Mizoram

- Rashtriya Krishi Vikas Yojana (RKVY)
- National Mission for Food Processing
- Funds for Medicinal Plants
- National Bamboo Mission

Nagaland

- Rashtriya Krishi Vikas Yojana (RKVY)

Sikkim

- Rashtriya Krishi Vikas Yojana (RKVY)
- Schemes for Medicinal Plants

Tripura

- Rashtriya Krishi Vikas Yojana (RKVY)
- National Agro Forestry & Bamboo Mission

NER Challenges

- **Logistics Challenge:** Products are being traded to North East Region from Arunachal Pradesh but not vice-versa. Also, for transportation of the agricultural produce farmers generally use bamboo baskets to transport their produce manually. Poor road conditions, poor connectivity and fragmented land holdings compel farmers to sell off their produce at a much lower price and thus at loss.
- **High Cost of Distribution:** Population of the North East Region is scattered, which results in high cost of distribution.
- **Need to identify comparative advantages.** The average productivity for all the eight states in the North East Region individually was found to be lower than all India average for fruits as well as vegetables, while it was reverse for the spices. Thus, huge untapped potential for entrepreneurs lies in the spices segment
- **Packaging Issues:** Entrepreneurs need to travel to other states for packaging printing etc., which make product cost ineffective for producers as well as consumers.

NER Challenges

- **Fragmented land holding:** Overusing the same plot of land again and again without proper knowledge of crop rotation has severely diminished soil fertility. Another very serious side effect of fragmented land holdings is that farmers earn only enough to sustain their immediate needs.
- **Lack of a stable market:** One of the major causes of low income of the NER is the difficulty in marketing their crops. Due to the small size and scattered nature of agricultural holdings, the productivity per acre is low. Consequently, the collection of these surpluses for the purpose of marketing presents a serious problem.
- **Lack of mechanization:** A farmer carrying out various farming steps such as ploughing, sowing, harvesting or winnowing manually is a common thing. Post harvest techniques such as cleaning, drying or slicing are done by the NE Indian farmers manually. Northeast India actually is the major impediments in the way of agricultural mechanization in the region. Due to poor mechanization and crude agricultural techniques the farmers are not able to ripe good value for their produce.

NER Challenges

- Inadequate Infrastructure i.e. warehouses & cold storages, unavailability of nutritious fodder for cattle and dearth of quality planting material, and illegal market routes for livestock and poultry in the region were some other major concerns.
- The region's economy is generally characterized by low per-capita income, low capital formation, inadequate infrastructure facilities, geographical isolation and communication bottleneck, inadequate exploitation of natural resources like mineral resources, hydro power potential, forests etc., low progress in industrial field, lack of private and foreign direct investment (FDI) and high unemployment rate among the relatively high literate people.
- Lack of education creates gap between Northeast India farmers and prosperity: Due to the lack of proper education, farmers more often than not, are unable to even capitalize on the various government schemes for farmers and the unemployed youth of the region.

Recommendations

- High potential crops and produce need to be tapped.
- It is recommended to constitute a committee of experts from all relevant aspects to analyze the crops for:
 - Local as well as domestic consumption,
 - Exports to neighboring countries and rest of the world and lastly for food processing industry.
- Piggery could be a great opportunity as it is low input high output venture in less time period and NER has natural resources in sufficient to undertake the rearing.
- Skills development of the communities and technical exposure of farmers is necessary.
- To tap the potential of such unexplored products, Government should earmark funds to promote research regarding their feasibility and cost benefit analysis in the region.

Recommendations

- It is also suggested that government through existing extension institutions should demonstrate the scientific cultivation to harvest high quality and quantity of yield.
- The region should have incubation centers for developing and testing of technologies and testing labs to ensure the food and produce quality.
- Rather than fetching raw material for processing industry from NER to distant places, setting up value addition and processing industry with support from government is a feasible option.
- Crops with hardy nature and long shelf life should be promoted against perishable nature commodities to sustain distant transportation.
- Quality planting material, produced under in-vitro conditions, is critical to improving yields and profitability on sustainable basis. Thus, a modern tissue culture lab and nursery need to be set up for key crops of the region.
- A food testing lab is the critical requirement for facilitating the growth of organic as well as non organic food from the region.

Recommendations

- Supporting industry like packaging material and labeling needs to be promoted to reduce the manufacturing cost of the agricultural and other products such as animal husbandry handloom and handicraft products.
- NER has huge potential for the development of eco-tourism as the region is perfect blend of natural wealth and topography.
- The region is endowed with rich and diverse bamboo resources. Thus, there is a high potential for bamboo processing industries.
- The climate smart villages project should be set up to promote agriculture practices that will mitigate the effects of climate change on agriculture and help communities adapt to climate change to become resilient to extreme weather events such as droughts, floods, and delayed monsoons.
- Developing commercial poultry production in the region by setting up Poultry Park with one mother unit of about 25,000 birds and block level satellite units of about 2000 birds each, taking one district as model is also advised.



Thank You