

## Oil Palm Cultivation in North East India

### Why in news?

The push for large-scale monoculture plantations of oil palm is taking a toll on the environment and on people's economic and social security

### What is Oil Palm?

- Oil palm is world's most important oil crop, supplying approximately 40% of global demand for vegetable oil.
- **Nativity** - A native species of West Africa and now widely cultivated, especially in Southeast Asia.
- **Types** - It produces two distinct oils- Palm oil and Palm kernel oil.
- **Palm oil** - It is derived from fleshy mesocarp of the fruit, which contains about 45-55% of oil.
- **Palm kernel oil** - It is obtained from the kernel of stony seed, is a potential source of lauric oil.
- **Major Producers** - Indonesia and Malaysia.
- Malaysia is the world's second-largest producer of palm oil after Indonesia
- **Palm oil usage** - It has a variety of uses ranging from edible oil, cosmetics, and pharmaceuticals to bio-fuel and bio-lubricant.
- **Health benefits** - Palm oil is in rich natural nutrients, including tocotrienols, which support cardiovascular health and offer antioxidant properties.

*Tocotrienols is an excellent source of fatty acids, free of trans fats, and contains lower levels of omega-6. Its antioxidant properties also aid in conditions such as Alzheimer's and Dementia.*

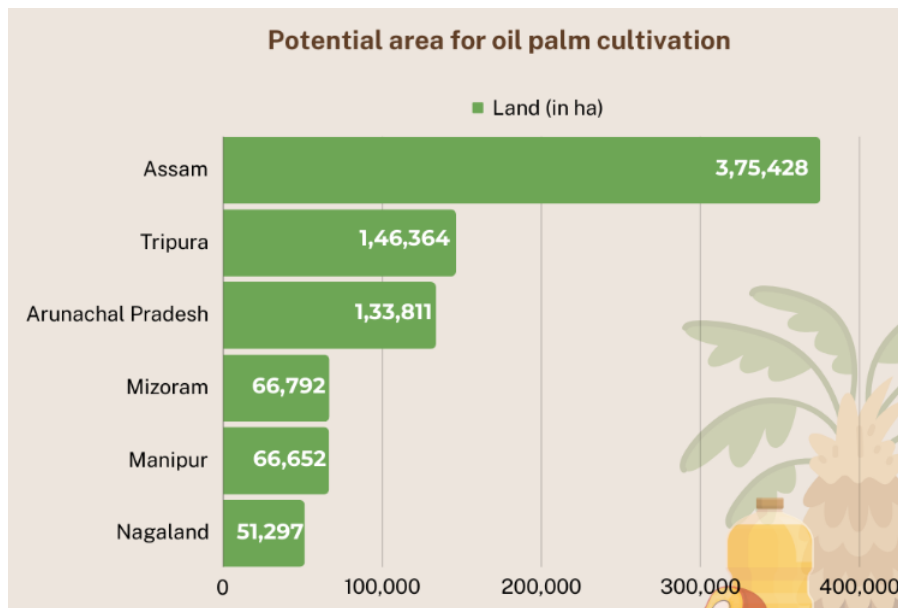
### Status of Oil Palm in India

- India is the world's largest importer of edible oils most times.
- Palm oil dominates India's edible oil imports, representing more than 50% of all edible oil imports.
- In 2021, palm oil import was valued at approximately \$US 8.63 billion.

### What are the measures taken by India to improve its cultivation?

- **Need for local cultivation** - Major palm oil-producing countries such as Malaysia and Indonesia are planning to cut the production to meet the environmental needs.
- **National Mission on Edible Oils-Oil Palm** - It was launched in 2021, a Centrally Sponsored Scheme with a special focus on the North east region and the Andaman and Nicobar Islands.

- **Aim** - It is aimed to increase the area of oil palm cultivation in India to one million hectares by 2025-26.
- **Target** - To increase the production of crude palm oil from 27,000 tonnes in 2019-20 to 1.12 million tonnes by 2025-26.
- **Coverage** - More than 50% of the proposed increase in the area of cultivation, 328,000 ha, is planned in the northeastern states, as identified in an assessment by the Indian Institute of Oil Palm Research in 2020.
- **Implementation** - Mizoram was the first state to start planting oil palm in the northeast.



### What are the challenges in cultivation in Northeast India?

- **Capital Intensive** - Initial setup requires large scale investment.
- **Insufficient Land** - It require large tract of monotonous lands.
- **High input need** - It require large amount of water and nutrients.
- **Irrigation need** - It requires evenly distributed rainfall of 150mm/ month or 2500-4000mm/annum.
  - Rainfall distribution in India is not even and adequate.
- **Long gestation period** - It takes at least four to five years before it starts producing fruit, followed by a productive period of 20 to 25 years.
- **Logistical challenge** - Rugged terrain and remote location of the plantations, coupled with the relatively poor road network.
- **Inadequate oil mills** - Absence of oil mills close to many of the plantations.
- **Perishable nature** - Oil Palms have to be processed within 24 to 48 hours post-harvesting.
- **Procurement issues** - Delay in procurement and reduction in procurement prize based on quality discourages farmers.
- **Natural Disaster** - Conversion of forest areas into plantation makes them vulnerable to landslide.
- **Delay in subsidies** - Delays, reduction or even complete stoppage of payment of the committed government subsidies.

*Sikkim and Meghalaya have decided to stay away from planting oil palm.*

### **What are its impacts in Northeast India?**

- **Social disruption** - Land in Northeast region are mostly community owned for subsistence farming where introduction of oil palm plantation causes shift in land tenure and ownership.
  - The capture of common lands for planting oil palm by the elite of the society is a large-scale problem, especially in Arunachal Pradesh.
- It furthers the marginalisation of the poorer sections of society and could potentially lead to social turmoil and conflict.
- **Environmental impact** - Deterioration of soil health and the quality and availability of groundwater.
- **Ecosystem change** - Conversion of large scale forest to plantation has significantly affected the local flora and fauna.
- **Economic impact** - Rapidly increasing labour costs in the region and women losing out on employment opportunities.
- **Biowaste** - Each tonne of crude palm oil produced generates approximately 4 tonnes of dry palm biomass and 3.5 tonnes of palm oil mill effluent.

### **What lies ahead?**

- Take into account local environmental factors before converting the forest to plantation.
- Include the experiences from similar tea and coffee plantations impacts in the region.
- Safeguarding social welfare through fair labour practices.

### **Reference**

[Down To Earth | Challenges & Impacts of Palm oil in Northeast India](#)