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India– Agriculture

Lesson Plan

Contents

- What agriculture is and why it is important
- India's agricultural resources
- Types of crops and agricultural seasons in India
- Green Revolution
- Crops produced, cattle rearing, fishes

Objectives

- Learning what agriculture is and its importance
- The resources India has that make it an agricultural nation
- The agricultural seasons in India and the crops grown in them
- The Green Revolution
- Some of the major crops: rice, wheat, maize, millets, pulses, oilseeds, sugarcane, tea, coffee, cotton, jute and spices
- Cattle rearing and fishes

Teacher's Aids

- Maps of India – Political and Physical
- Maps showing distribution of crops
- Atlases
- Blank maps of India for the students
- Blackboard, the internet, pictures, magazines, etc.

Tips for Teacher

- Correlate what has been learnt about regions, climate, physical features, vegetation, etc., with the pattern of agriculture and the distribution of crops.
- Students should be able to understand how everything in an area is connected.

/// Gear Up, Background

- ▶ Gear Up shows the picture of MS Swaminathan, the man behind the Green Revolution.
- ▶ Read the lesson aloud, including the points to remember, and explain.
- ▶ **What is agriculture:** Cultivation of land for growing crops; horticulture; rearing of animals; fishing.
- ▶ Important occupation – Farming – food for everyone – 65% of India's population depends on agriculture. Apart from farming – related agro-based industries: storage, transport, food processing, vegetable oils, refining, packaging, export-import, fertilisers, seeds, marketing, etc.
- ▶ India's rich agricultural resources – Suitable climate for cultivation almost throughout the year; enough water for irrigation; fertile alluvial soil.

/// Types of Crops

- ▶ Two main agricultural seasons: Kharif and Rabi
- ▶ Kharif – begins with monsoon showers – rice, maize, millets, pulses, groundnuts, cotton and jute. Rabi – begins at the end of rainy season – wheat, gram, mustard, barley and oilseeds.
- ▶ Crops for food and cash crops grown
- ▶ Food crops – rice, wheat, maize, millets [jowar, bajra, ragi] and pulses.
- ▶ Cash crops – sugarcane, oilseeds, cotton, jute, tea, coffee, rubber, tobacco and spices. They provide income to farmers.
- ▶ **Green Revolution:** Progress in agriculture – due to improved irrigation, use of fertilisers and manures, tractors and other machines, use of improved seeds and more land under farming.

/// Some Crops

- ▶ (i) Rice – second largest producer in the world after China – hot humid climate – Bengal, Assam, Jharkhand, Bihar, Chhattisgarh, Andhra Pradesh, Tamil Nadu, Kerala, Punjab, Haryana. Most consumed in India.
- ▶ (ii) Wheat – second important food crop – cool, moist climate – Punjab, Haryana, Western Uttar Pradesh, Madhya Pradesh, Bihar, Rajasthan, Gujarat, Maharashtra.
- ▶ (iii) Maize – coarse grain – high temperature and moderate rainfall – Uttar Pradesh, Rajasthan, Punjab, Haryana, Bihar – also used for feeding cattle – introduced from North America.
- ▶ (iv) Millets – Jowar, bajra, ragi – where rice and wheat cannot be grown – Bihar, Rajasthan, Gujarat, Karnataka, Andhra Pradesh, Telangana.
- ▶ (v) Pulses – gram, urad, moong, arhar, peas, masoor, etc. – called lentils [dal] – almost every state – India largest producer and consumer – important part of our food.
- ▶ (vi) Oilseeds – mustard, groundnuts, linseed, sesame, rapeseed, cotton seed, sunflower seed, soyabean, etc. – different parts of the country – largest producer in world – oil extracted used for cooking – vegetable oil.

- (vii) Sugarcane – hot wet climate – used to make sugar and gur [jaggery/molasses] – largest producer in world – Maharashtra, Uttar Pradesh, Bihar, Madhya Pradesh, Tamil Nadu, Punjab, Andhra Pradesh, Karnataka.
- (viii) Tea – plantation crop – warm wet climate – largest producer in world – Assam, Bengal, Himachal Pradesh, Nilgiri hills. Best quality – Darjiling.
- (ix) Coffee – plantation crop – warm with moderate rainfall – Karnataka, Kerala, Tamil Nadu – good quality – exported.
- (x) Cotton – lava soil of Deccan Trap – hot wet climate during growing season & bright sunshine for ripening – Gujarat, Punjab, Haryana, Rajasthan, Madhya Pradesh, Andhra Pradesh, Telangana, Tamil Nadu.
- (xi) Jute – called golden fibre – ropes, bags and carpets – hot wet climate – Bengal, Assam, Bihar, Odisha – goods exported.
- (xii) Spices – chillies, black pepper, cardamom, cinnamon, coriander, cloves, ginger, turmeric, etc. – Kerala, Karnataka.

/// Cattle Rearing

- ▶ Every part of India – cows, buffaloes, goats, sheep, pigs, camels, poultry
- ▶ Cattle and poultry – for milk, meat, eggs, skin and bones
- ▶ Largest number of cattle in the world
- ▶ Bullocks – used for farm work
- ▶ Sheep and camels – wool – camel 'ship of the desert'

/// Fishing

- ▶ Coastal areas, rivers and ponds
- ▶ Sardine, tuna, herring, salmon, mackerel, trout
- ▶ Blue Revolution - Increase in fish production in small ponds and water bodies