Transforming Agrifood Systems with Forests

For Prelims: FAO, United Nations, deforestation

For Mains: Food Security, Government Policies and Interventions

Why in News?

Recently, the **Food and Agriculture Organization (FAO)** of the **United Nations** released a report on deforestation, livestock grazing and farmer field schools.

- FAO released the report at FAO-Global Landscapes Forum digital forum Transforming agrifood systems with forests.
- A Farmer Field School brings together a group of farmers, livestock herders or fisherfolk, to learn how to shift towards more sustainable production practices, by better understanding complex agro-ecosystems and by enhancing ecosystem services.

What are the Highlights of the Report?

- Food demand to support the global population will be 50% more in 2050 compared with 2012.
- Production will need 165 to 600 million more hectares of land for crop and livestock production, much of which is currently covered by forests and other critical ecosystems.
- From 2000-2018, almost 90% of deforestation globally was attributable to agricultural expansion.
 This negatively impacts associated ecosystem services such as carbon sequestration and biodiversity.
- The world has lost 420 million hectares of forests in the last two decades, as per FAO's Global Forest Resources Assessment 2022.
- Forests are vital to slow the rate of deforestation, which stood at 11 million ha per year from 2000-2010.

What are the Recommendations?

- Forest Positive' Food Production:
 - The need of the hour is to **build sustainable global agrifood systems** based on the synergies between agriculture and forests that provide a win-win outcome for both sectors.
 - Governments **need to create conditions for farmers to change their practices to maximise production** while minimising the impact on forests and biodiversity.
 - Governments need to pay special attention to smallholder farmers, who produce roughly 35% of the world's food, but often live in <u>poverty</u> and cannot afford the costs or interruptions to income incurred through changing the way they work.
- Restoring Degraded Land:
 - **Properly integrated grazing can play a vital role in restoring degraded land with trees**, halting desertification and improving wildfire prevention in drylands.

- Drylands are home to about **25% of the global population**, contain 50% of the world's livestock, 27% of the world's forests and are where about 60% of the world's food production takes place.
- **Silvopastrolism** (combining animal grazing and trees) can also **help enhance local communities** food security and income by preventing land degradation.
- Woody plants in drylands provide animal feed, timber and fruit as well as help to increase biodiversity and regulate soil and water cycles.
- At the same time, **grazing livestock helps control vegetation**, reduce the risk of wildfires, accelerate nutrient cycles and improve soil fertility.
- Part of the Solution:
 - As part of an integrated landscape approach utilizing agroforestry, landscape planners and decision-makers should consider livestock as part of the solution and carefully restore open tree cover (when tree cover is between 30 and 70%).

What is FAO?

- About:
 - FAO is a specialized agency of the <u>United Nations</u> that leads international efforts to defeat hunger.
 - World Food Day is celebrated every year on 16th October to mark the anniversary of the founding of the FAO in 1945.
 - It is one of the UN food aid organisations based in Rome (Italy). Its sister bodies are the World Food Programme and the International Fund for Agricultural Development (IFAD).
- Initiatives Taken:
 - Globally Important Agricultural Heritage Systems (GIAHS).
 - Monitors the **Desert Locust** situation throughout the world.
 - The <u>Codex Alimentarius Commission or CAC</u> is the body responsible for all matters regarding the implementation of the Joint FAO/WHO Food Standards Programme.
 - The International Treaty on Plant Genetic Resources for Food and Agriculture.
- Flagship Publications:
 - The State of World Fisheries and Aquaculture (SOFIA)
 - The State of the World's Forests (SOFO)
 - <u>The State of Food Security and Nutrition in the World (SOFI)</u>
 - The State of Food and Agriculture (SOFA)
 - The State of Agricultural Commodity Markets (SOCO)
 - World Food Price Index

UPSC Civil Services Examination, Previous Year Questions (PYQs)

Q. The FAO accords the status of 'Globally Important Agricultural Heritage System (GIAHS)' to traditional agricultural systems. What is the overall goal of this initiative? (2016)

- 1. To provide modern technology, training in modern farming methods and financial support to local communities of identified GIAHS so as to greatly enhance their agricultural productivity.
- 2. To identify and safeguard eco-friendly traditional farm practices and their associated landscapes, agricultural biodiversity and knowledge systems of the local communities.
- 3. To provide Geographical Indication status to all the varieties of agricultural produce in such identified GIAHS.

Select the correct answer using the code given below:

(a) 1 and 3 only
(b) 2 only
(c) 2 and 3 only
(d) 1, 2 and 3

Source: DTE

PDF Refernece URL: https://www.drishtiias.com/printpdf/transforming-agrifood-systems-with-forests

