Agro-Climatic regional planning strategy

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In news

Recently, the Prime Minister suggested to states to make theirs Agro-Climatic regional planning strategy

What is the Agro-Climatic Zone/region?

- It is a land unit in terms of major climates, suitable for a certain range of crops and cultivars.
- An agro-ecological zone is the land unit carved out of agro-climatic zone superimposed on landform which acts as a modifier to climate and length of growing period.
- **Agro-climatic conditions mainly refer to soil types,** rainfall, temperature and water availability which influence the type of vegetations.
- The Agro-Climatic regional planning aims at scientific management of regional resources to meet the food, fiber, fodder and fuel wood without adversely affecting the status of natural resources and environment

Planning of Agro climatic zones of India

Several attempts have been made to delineate major agro-ecological regions in respect to soils, climate, physiographic and natural vegetation for macro-level planning on a more scientific basis. They are as follows.

- Agro-climatic regions by the erstwhile Planning Commission
- Agro-climatic zones under National Agricultural Research Project (NARP)
- Agro-ecological regions by the National Bureau of Soil Survey & Land Use Planning (NBSS & LUP)

Agro-climatic regions by the erstwhile Planning Commission

The Planning Commission, as a result of the mid-term appraisal of the planning targets of the Seventh Plan, has divided the country into fifteen broad agro-climatic zones based on physiography, soils, geological formation, Climate, cropping patterns, and development of irrigation and mineral resources for broad agricultural planning and developing future strategies. These are further divided into more homogeneous 72 sub-zones.

The main objective was to integrate plans of the agro-climatic regions with the state and national plans to enable policy development based on techno-agro-climatic considerations

The 15 regions so delineated are(by Planning commission):

(I) Western Himalayan Region; (II) Eastern Himalayan Region; (III) Lower Gangetic Plains Region; (IV) Middle Gangetic Plains Region; (V) Upper Gangetic Plains Region; (VI) TransGangetic Region; (VII) Eastern Plateau & Hills Region; (VIII) Central Plateau & Hills Region; (IX) Western Plateau and Hills Region; (X) Southern Plateau & Hills Region; (XI) East Coast Plains & Hills Region; (XII) West Coast Plains & Ghats Region; (XIII) Gujarat Plains & Hills Region; (XIV) Western Dry Region and (XV) The Islands Region.

Agro-climatic zones under National Agricultural Research Project (NARP)

- NARP was launched by ICAR for initiating agricultural research in the agro-climatic zones of the country.
- The objective was t**o set up or upgrade a zonal research station** in each agro-climatic zone for generating location specific, need based research targeted for specific agro-ecological situations.
- The focus was on **analyzing agro-ecological conditions** and cropping patterns and come out with a programme directly targeted to solve the major bottle necks of

agricultural growth in a zone based on natural resources, major crops, farming systems, production constraints and socio-economic conditions prevalent in that zone.

- Stress was on technology generation. In NARP, the country was divided into 127 agro-climatic zones.

Agro-ecological regions by the National Bureau of Soil Survey & Land Use Planning (NBSS & LUP)

NBSS&LUP came up with twenty agro-ecological zones based on the growing period as an integrated criteria of effective rainfall, soil groups, delineated boundaries adjusted to district boundaries with a minimal number of regions. Subsequently, these twenty agro-ecological zones were sub-divided into 60 sub-zones.