



Agriculture – 2022-2047

Current Situation – Strategy of Agriculture – 2022-47:

In the last decade the country has sustainable agriculture growth. Its food production is continuing to go up. It could meet challenge providing free food in the time of pandemic and successfully meet the challenge of Food Security. Income of farmers increased. India also exported sugar and wheat in the initial phase of war in Europe – which is now restricted to meet local needs.

Adverse Weather Events continued to visit with greater frequency and intensity and there is increase in temperature – both day and night in the last decade.

But agriculture sector developed and implemented Climate Resilient Practices and that is why growth continued despite floods, single day heavy rain episodes, cyclone, rising of sea water level with salinity ingress – over-ground and under-ground, dust-storm, delay in rain spell, droughts in some parts of the country, heat and cold wave, locust attack, unseasonal rain – so on and so forth.

Agromat provided timely weather advisory – which was followed by Agro-advisory at a few places.



However, year 2021-22 seems to be facing decline in cereal and cotton production and also in Horticulture crops.

Latest IPCC report has warned about further intense adverse climate events – particularly for India. The rapid survey of agriculture zone of Gujarat and Maharashtra – Kutch, Amreli, Bharuch and Chhota Udepur and Roha reveal that in the year 2021-22 there is declining trend almost all crops – reason being adverse weather events. But farmers, who followed guidelines, saved their crops and increased income.

There is, therefore, need to re-visit existing guidance and take timely action.

The Agriculture Sector: Agriculture – including Horticulture, Animal Husbandry and Fisheries – Farmers, Animal Holders and Fishermen – need to be up-skilled to meet new challenges.

There is need to take urgent supportive action for meeting these new emerging challenges to meet goals of increasing income of farmers, increasing employment in rural areas and supplying food to the world.



Short Term:

- Climate Related Services – Round the year from week to week basis to month to month basis provide Weather Advisory followed by Agro-advisory. From selection of crops – to harvesting, storage and marketing (Action KVK – State Agri. Universities [SAU]- AGROMAT – Pune.
- Mass Communication (SAU – KVK – ICAR)
- Minimum six visits to villages and farm by scientists during entire year to provide guidance and get feedback (SAU – KVK – ICAR).
- Use
 - Doordarshan – AIR
 - Private Regional TV & FM Radio
 - You Tube
 - Face-book
 - Whatsapp Group
 - Action (VC – SAU – KVK)

Flood Prone Area Policies

Immediately introduce aiming at creating large Reservoirs, trenches in farm and water drainage (Govt. of India – Water Resources Department – State Rural Development Department).



Water Conservation and Smart use

- Clean up all canals – ponds.
- Promote Micro Irrigation. If feasible, link it with disbursement of subsidy.
- Cover open canal.

Flood Value Chain

- Ensure that from Farm to Market point transport losses are brought down to 5 per cent from 25 per cent as of now (State Agricultural and Cooperation Department).

Programme Implementation – Special Cell in PMO & CMO

- Already scheme exists – but implementation needs monitoring at all levels from District to State and Centre. Massive drive to catch specious dealers in seeds, fertilizers and pesticides.
- Satellite based crop production – data – local and international to have information (Currently State Agri. Department with assistance of ISRO). There is mis-information about crop data.



Long Term:

Re-structure ICAR:

- a) Integrate Research Centres into Research and Extension Centres and Research Centres need to develop communication material (ICAR).
 - b) Make ICAR Research and Development Centre to publicly declare their Research achievement and its transfer to farmers every year. Make them accountable.
- Selection of crops based on Soil Health and Moisture Analyse. Decision on irrigating crops based on water analysis – (water is becoming contaminated) (With State Agri. Department – ICAR).
 - Integrate KVK – ATMA (With State Agri. Universities (SAU)).
 - Make Vice Chancellor of State Agricultural University – responsible for entire above extension – both Climate Related Services and visit to villages and farmers and mass communications).
 - New Agro-climatic zone (Ministry of Earth & Science).
 - Mapping salinity affected areas (Ministry of Earth & Science & Ministry of Agri.) Constructing dykes to prevent salinity ingress along with bamboo plantation).



- Strengthen existing storage facility. APMC need to take care and cover area for agri. produce brought for sale – so that they are not affected by heat wave or un-seasonal rain (State Agri. Department).
- Promote on massive scale Sea-weed development as part of Fisheries Programme – Blue-economy to substitute need of Chemical fertilizers.
- Satellite mapping of local production to come to realistic estimate of actual production. Satellite mapping of crops of other countries where we can export – and guiding farmers for selection of crops (ICAR).
- Smart Village – Already very many villages have good infrastructure – Electricity, Gas, Wi-fi, piped water, asphalted roads, health check up facility – such villages could be promoted to attract urbanite stay there away from most of urban centres. This will create massive employment (State Govts).
- Finance – Already Kisan Credit Schemes exists – but animal holders and fishermen are yet to be covered. A massive drive to provide them with Kisan Credit Card (Action NABARD).
- Food – Water – Energy Nexus – introduce smart use of energy and water both will become scarce – develop strategy to educate how to use less to meet all needs.