



Strategy of Agriculture 2022-47 – Roadmap for Gujarat

Current Situation: 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.

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Agromat provided timely weather advisory – which was followed by Agro-advisory at a few places. Gujarat has been facing decline in cereal and cotton production and also in Horticulture crops in the last year and even before that. Further as revealed in NABARD – State paper 2022-23 it was lower than national average yield in rice, wheat, maize and tobacco. States like – Punjab, Haryana, Andhra Pradesh and Tamil Nadu have gone much ahead in food grain crops.

Latest IPCC report has warned about further intense adverse climate events – particularly for Gujarat. The rapid survey of agriculture zone of Gujarat – Kutch, Amreli, Bharuch and Chhota Udepur 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 and bring back Gujarat a lead state in agriculture.

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

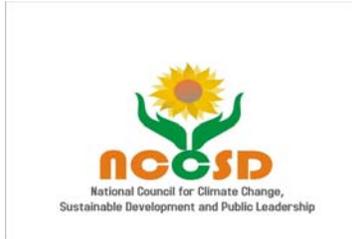


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There is need to take urgent supportive action for meeting these new emerging challenges to meet goals of increasing income of farmers, increasing employment in rural areas and increase exports.

Short Term Action Plan – 2022-23:

- 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.
- Mass Communication: Minimum six visits to villages and farm by scientists during entire year to provide guidance and get feedback (SAU – KVK). This was earlier as part of 'Krishi Mahotsav' the new extension approach introduced by Hon'ble Prime Minister as Chief Minister.
- Use
 - Doordarshan – AIR
 - Private Regional TV & FM Radio
 - You Tube
 - Face-book
 - Whatsapp Group



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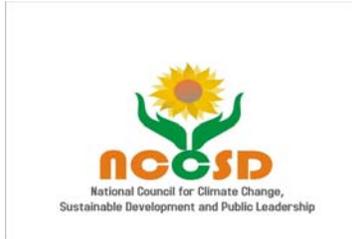
- The Vice Chancellor of State Agricultural Universities – all six – need to be made responsible for this. The advisory should be for Agriculture, Animal Husbandry and Fisheries.

Flood Prone Area Policies

Immediately introduce aiming at creating large Reservoirs, trenches in farm and water drainage. Every year water in rivers like Purna and Ambika in south Gujarat is lost due to flooding and conserving it up-stand by check dam and ponds.

Water Conservation and Smart use

- Clean up all canals – ponds.
- Promote Micro Irrigation. If feasible, link it with disbursement of subsidy.
- Cover open canal.
- Narmada Sardar Sarovar Dam – potential of 18 lakhs hectors and more. Currently only 2 lakhs hectors are irrigated while canals do exist – villages are not connected. The evaporation and sippage loss may be about 40 to 50 per cent. A mission mode programme need to be initiated to use this potential – that will triple the income of more than 20 lakhs farmers.



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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 this need.

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 spurious dealers in seeds, fertilizers and pesticides.
- Satellite based crop production – data – local and international to have information. BAISAG can provide this information.

Long Term Action Plan – 2022-23:

Re-structure State Agricultural Universities:

- a) There are more than 60 Research Centres. They need to be integrated into Research and Extension Centres. Research Centres need to develop communication material for farmers, ATMA, KVKs and put also on You Tube for each crop from planning to market point.
- b) Make Research and Development Centre to publicly declare their Research achievement and its transfer to farmers every year. Make them accountable.



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- Selection of crops based on Soil Health and Moisture Analyse. Decision on irrigating crops based on water analysis – water is becoming contaminated as revealed in recent report of M.S. University. Irrigating contaminated water reduces productivity.
- Integrate KVK – ATMA - with State Agri. Universities (SAU) and make Vice Chancellor of State Agricultural University – responsible for entire above Research Extension – both Climate Related Services and visit to villages and farmers and mass communications).
- New Agro-climatic zone (BAISAG can help). Already parts of Saurashtra has different weather zone.
- Mapping salinity affected areas BAISAG can do this by constructing dykes to prevent salinity ingress along with bamboo plantation need to be taken on immediate basis along the coastal areas where villages are being over topped by sea water.
- Strengthen existing storage facility. APMC need to take care and cover open area for agri. produce brought for sale – so that they are not affected by heat wave or un-seasonal rain or dust storm.



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- Promote on massive scale Sea-weed development as part of Fisheries Programme – Blue-economy to substitute need of Chemical fertilizers. This needs a mission approach as Gujarat has big coastal area.
- 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. BAISAG can take up this.
- Smart Village – Already in Gujarat very many villages have good infrastructure – Electricity, Gas, Wi-fi, piped water, asphalted roads, health check up facility etc. etc. Such villages could be promoted to attract Urbanite who like to stay away from congested city centres. This will create massive rural employment.
- 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. It is important to develop bankable schemes for this.
- Food – Water – Energy Nexus – introduce smart use of energy and water both will become scarce – develop strategy to educate how to use less water.



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- Agro-Advisory – on You Tube – You Tube has become increasingly popular. It maintains videos for long duration. Currently used by private players who share experience and guidance. It is necessary that Authentic Guidance – crop-wise is put in the form of video with success story for all crops and also Weather Advisory – long term and medium term .
Nutritional Security – While we are self sufficient in food production and reaching out with subsidized food distribution to all poor families – our next step need to be ensure that all children have nutritional security. The mid-meal scheme – menu needs to be revised.

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