Future Programmers:

Apart from ongoing experiments as under in the Department some of the Future Programs under different projects and other activities of this Department are given as under:

Project for research in Agricultural Chemistry and Soil Science

1. Finding out nutrient requirements of various crops as well as increase the efficiency of various agricultural inputs and resources like, soil, water, plant, fertilizer and manures for improving crop yield and maintenance of soil health under South Gujarat condition.
2. Solving out various problems as would be encountered by farmers / organizations in relation to crop production when various natural resources and inputs like, soil, water, plant, fertilizer and manures are being utilized (on charge basis).
3. Determining the suitability and quality of prevailing irrigation water samples for their utilization in agricultural crop production (on charge basis).
4. Developing skill and technical know-how of farmers / extension workers / gram sevak / officers relating to soil, water, crop production system through imparting them as required from time to time.
5. Short and longer time build-up fo carbon in soil organic matter; carbon sequestration in agricultural soils under various crops.
6. Characterization of the "locked-up N pool" in soils of this zone, its release dynamics and management option

7. Evolving appropriate soil / crop management strategies to maintain plant available nutrient pools in soil (viz. K, P, S) at an optimum level between release and fixation threshold value for corresponding nutrients.

Establishment of central instrumentation laboratory

1. Providing analytical and advance research facilities to all PG students as well as research staff of this university in future course of time for analyzing various samples as per requirement under different ongoing research projects running at NAU.
2. Exposing PG students in teaching- cum -learning programs on various modern and sophisticated instruments under this laboratory.
3. Extending the analytical facilities to farming community and other agencies in order to analyze their samples for various parameters as would be available in the laboratory and also advisory services will be provided.
4. Organization of training program from time to time as per demand in future.

Establishment of state of art essential oil extraction laboratory

- Inclusion of additional weed and aromatic plant species to uncover more potential sources for essential oil extraction.
- Publishing of the research results in peer-reviewed journals to share discoveries with the scientific community and stakeholders.
- Partnership with other universities and research institutions to enhance the breadth of plant species studied.
- Development of scalable extraction technologies that can be adopted by small-scale and large-scale producers.
- Development of comprehensive training materials and guides to support hands-on training initiatives.
- Development of outreach programs to rural areas to train farmers directly on their land, promoting the adoption of essential oil extraction methods.
- Initiation of research into the development of technology for the restoration of wasteland using essential oil-yielding crops.

Ongoing experiments:

1.	Effect of different organic inputs in Banana
2.	Calibration and validation of DSSAT-CROPGRO model for mungbean crop under South Gujarat region
3.	Monitoring and assessment of soil pH, salinity and soil chemical properties in agricultural land of Navsari district using remote sensing and GIS based machine learning technique
4.	Effect of nutrient management on sugarcane planted through single eye budded settling under south Gujarat condition
5.	Effect of foliar application of urea and nano urea on rabi grain sorghum
6.	Effect of biochar and fertilizer application on transplanted rice – wheat cropping sequence under south Gujarat condition