

## **Objectives:**

### **A. Project for research in Agricultural Chemistry and Soil Science (B.H.- 5020)**

1. To find 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. To solve various problems encountered by farmers / organizations in relation to crop production utilizing various natural resources and inputs like, soil, water, plant, fertilizer and manures by analyzing (on charge basis) these inputs / resources and field visit and subsequently extending Extension Advisory Services.
3. To determine the suitability and quality of irrigation water samples for their utilization in agricultural crop production.
4. To develop skill and technical knowhow of farmers / extension workers / gram sevak / officers relating to soil, water, crop production system through imparting training to them organized at university / institutions level.

### **B. Establishment of central instrumentation laboratory**

#### **(B.H.-12971)**

1. To provide analytical and advance research facilities to all PG students as well as research staff of this university for analyzing various samples as per requirement under different ongoing research projects running at NAU.
2. To expose PG students in teaching- cum -learning on various modern and sophisticated instruments under this laboratory.

3. To extend the analytical facilities to farming community and other agencies in order to analyze their samples for various parameters as per requirement and also to provide advisory services.
4. Organization of training program from time to time as per demand from different agencies under this laboratory.

## **B. Establishment of Central Instrumentation Laboratory**

### **(B.H.-12082)**

1. Identification of potential weed and aromatic plants for economic extraction of essential oil.
2. To develop the technology for extraction of essential oils from weed flora and other aromatic plants.
3. To provide hand on training to students and farmers for extraction of essential oils from weed flora and other aromatic plants.
4. To Develop the technology for restoration of wasteland by planting crops for essential oil extraction.

## **C. Establishment of Leaf/Tissue and soil nutrient diagnosis laboratory for banana and papaya grown in South Gujarat**

### **(B.H.-18928-J)**

1. To determine the adequacy of fertilization / nutrient management practices in the plantation crop of Banana and Papaya of farmers.
2. Tailoring fertilization / nutrient management practices in the plantation crop of Banana and Papaya of farmers through analyzing plant tissue and soil based technique by development of leaf and soil nutrient diagnosis norms.