

## **BUDGET LIST**

### **Research equipment**

#### **1. Analytical Balance:**

- An accurate balance for measuring precise quantities of rice samples.

#### **2. Mortar and Pestle:**

- Used for homogenizing rice samples before analysis.

#### **3. Sample Containers:**

- Containers for storing rice samples before and after analysis.

#### **4. Sieve Set:**

- To separate rice particles by size and obtain uniform samples.

#### **5. Laboratory Oven:**

- Used for drying rice samples before analysis.

#### **6. Muffle Furnace:**

- For ashing rice samples to determine mineral content.

#### **7. Digestion Apparatus:**

- Equipment for digesting rice samples for mineral analysis (e.g., Kjeldahl apparatus for nitrogen analysis).

#### **8. pH Meter:**

- To measure the pH of rice extracts, which can affect nutrient availability.

#### **9. Spectrophotometer:**

- For analyzing various nutrients, including vitamins and minerals, using colorimetric or UV-Vis methods.

#### **10. HPLC (High-Performance Liquid Chromatography):**

- Used for quantifying specific nutrients like vitamins (e.g., B vitamins) and antioxidants.

#### **11. GC (Gas Chromatograph):**

- For analyzing fatty acids and lipid content.

#### **12. Centrifuge:**

- To separate components in rice extracts, such as separating fat from the aqueous phase.

#### **13. Autoclave:**

- For sterilizing equipment and media used in microbiological analyses.

#### **14. Microscope:**

- For examining rice samples for fungal contamination or insect infestation.

#### **15. Incubator:**

- For culturing microorganisms when conducting microbiological tests.

16. Refrigerator and Freezer:

- For storing reagents, standards, and samples at appropriate temperatures.

17. Distillation Apparatus:

- If conducting distillation for nutrient analysis (e.g., total protein determination).

18. Chemicals and Reagents:

- A variety of chemicals and reagents for conducting specific nutrient tests, including indicators, solvents, standards, and buffers.

19. Glassware and Labware:

- Beakers, flasks, test tubes, pipettes, and other glassware for preparing and handling samples.

20. Safety Equipment:

- Lab coats, gloves, safety glasses, and other personal protective equipment (PPE) for handling chemicals and samples.

21. Data Analysis Software:

- Software for data analysis, statistical analysis, and generating nutritional profiles.

22. Documentation and Lab Notebooks:

- To record procedures, observations, and results accurately.

23. Rice Mills :

- To practically enable farmers to process rice and increase the awareness of mechanised farming.

24. Videography & Photography Camera:

- Capture all the events and enable the public to be aware of the ongoing campaign

25. Camera Lens:

- Prime Lens
- Zoom Lens
- Wide- Angle Lens
- Telephoto Lens

26. Tripod:

- To hold up the camera during video taping of the event and capacity building

27. Camera Accessories:

- Camera Bag
- Memory Card
- External Harddisks
- Video Editing Software
- Headphone

28. Microphone

29.Travel & Lodging

30.Capacity Building & Workshop

31. Media Exposure

32. Certifications

33. Intellectual Property