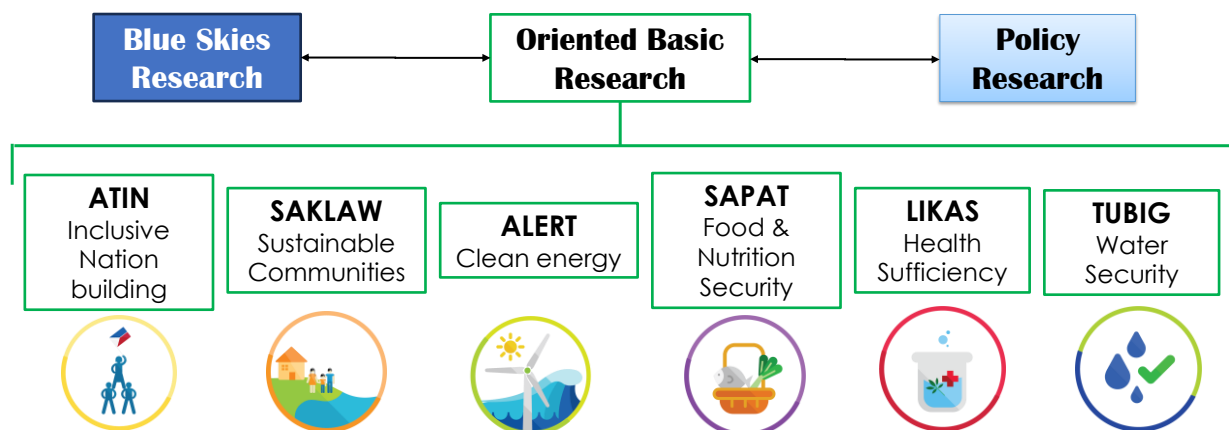


# 2024 DOST-GIA Call for Proposals Priority Areas

## DOST Pillars and 11 Priority Areas

Human Well Being Promoted	Wealth Creation Fostered	Wealth Protection Reinforced	Sustainability Institutionalized
Food Security	Job Creation and Entrepreneurship / Regional Development	Climate and Disaster Resilience	Facilities Upgrading
Health Security			Digital Transformation
Water Security and Environmental Protection			Smart and Sustainable Cities and Communities
Energy Security			
Transportation System			
Human Resource Development			

# National Integrated Basic Research Agenda (NIBRA)2023-2028



## BLUE SKIES RESEARCH

These are Pure Basic Research in the sciences and the humanities which have **no perceived immediate practical use**. These may be purely theoretical in scope and heralding disciplinary advances and pioneering works/discoveries.

### Outputs:

the generation of new knowledge that is translated primarily as publications in scientific journals.

# POLICY RESEARCH

Research that addresses problems related to public welfare. They fall under two tracks:

1. Demand-driven research projects - where the issues are identified by solons from the Lower House or the Senate, and
2. Council-directed research projects - where the issues are identified by the Governing Board.

## Objectives:

To provide the science to aid legislation, hence, promote evidence-based policymaking in the country. The output of a Policy Research project may include a draft policy proposal/recommendation or a policy statement which will be shepherded to appropriate Committees/Offices in the two Houses and/or relevant government agencies.

## FOOD AND NUTRITION SECURITY SAPAT PROGRAM (SAGANANG PAGKAIN PARA SA LAHAT)

### Goals:

To generate databases of safe, accessible, available, and sustainable alternative food and feed sources.

### Objectives:

Provide science-based knowledge to address gaps in the four key elements of food security for food and feed sources.

Food safety to be systematically integrated into policies and interventions to improve nutrition and food security.



## Wealth Creation Promoted

### NRCP's Priority Areas on

### Food Security

## Priority areas under **SAPAT** Program

### 1. Screening and Characterization of alternative food and feed sources

- a. Biochemical and molecular analyses of alternative food and feed sources
- b. Biology of pests, diseases, and natural enemies
- c. Diseases and pathogens of important crops
- d. Taxonomy of eco-friendly species (e.g. arthropods and microorganisms) for Integrated Pest Management

## HEALTH SUFFICIENCY **LIKAS PROGRAM** (Likas Yaman sa Kalusugan)

### Goal:

To generate databases of new sources of natural products from uncommon and native/indigenous sources, and profile of infectious diseases for One-health.

### Objectives:

Conduct biodiversity researches grounded on taxonomic studies to explore Philippine biodiversity and various ecosystems for sources of compounds/molecules that have bioactivity properties such as antibacterial, antifungal, and anticancer that will serve as new leads for natural products development in health and medicine.

Undertake basic veterinary studies to create and provide effective disease control and management in pursuit of attaining better health for all.



## Wealth Creation Promoted

## NRCP's Priority Areas on

## Health Security

### Priority areas under **LIKAS** Program

1. **Fundamental Studies on Potential Sources of Natural Products from Uncommon and Native/Indigenous Sources**
  - a. Bioprospecting
  - b. Bioinformatics
  - c. Screening, Characterization and structure elucidation of bioactive compounds
  - d. Pre-clinical studies
2. **Basic Veterinary Studies**
  - a. Identification and characterization of zoonotic diseases
  - b. Emerging and re-emerging zoonotic diseases and its management
  - c. Characterization / identification of socio-economically important animal diseases

## INCLUSIVE NATION BUILDING **ATIN PROGRAM** (ANG TINIG NATIN)

### Goals:

- A country united in its ethnic diversity and a nation with free and responsible use of communication.
- Cultural integrity and economic self-sufficiency.
- Appreciation and awareness of Filipino identity and heritage.
- Day-to-day vulnerabilities faced by communities and the Filipino addressed.

### Objectives:

- To ensure provision of inclusive education.
- To develop mechanisms for the implementation of IPRA.
- To develop mechanisms for IPs and Ethnic Groups to voice their insecurities.
- To ensure the security of geographically separated Filipinos, groups, and communities.
- To promote resilience studies



# INCLUSIVE NATION BUILDING ATIN PROGRAM (ANG TINIG NATIN)



## Objectives:

- To promote innovation informed by resilience.
- To promote mobility studies.
- International recognition of a distinct Filipino cultural identity.
- To promote technology-based cultural products
- To address the policy gaps, and reduce daily-life vulnerabilities faced by Filipinos.
- To increase awareness of existing initiatives that address human vulnerabilities.
- To improve the quality of life of the Filipino through research (Human Development Index).
- To address threats to human freedom in all forms.

## Wealth Creation Fostered

## NRCP's Priority Areas on

## Job Creation and Entrepreneurship / Regional Development

## Priority areas under ATIN Program

### 1. Heritage and Arts for Tourism, Creative Industries, and Nation Building (HATCINB)

- Documentation of Philippine indigenous knowledge, culture, and heritage
- Filipinovation of Arts, Culture and Heritage for Tourism and Creative MSMEs/Industries
- ART History

### 2. Resilience and Security

- Traditional Security and Sovereignty
- Non-traditional (Human/Resilience) Security

### 3. Mobility study

- Diaspora
- Educational mobility
- Migration
- Mobility Humanities
- Economic Mobility

## Wealth Creation Promoted

### NRCP's Priority Areas on

Human  
Resource  
Development

## Priority areas under **ATIN** Program

### 1. Heritage and Arts for Tourism, Creative Industries, and Nation Building (HATCINB)

- a. Documentation of Philippine indigenous knowledge, culture, and heritage
- b. Filipinnoation of Arts, Culture and Heritage for Tourism and Creative MSMEs/Industries
- c. ART History

### 2. Kapakanan ng Tao sa Oras ng Peligro (KTOP)

- a. Post pandemic studies
- b. Trauma studies (interdisciplinary)
- c. Socio-economic adjustments beyond the pandemic
- d. Personal dimension of health, environmental, conflict, and socio-economic emergencies

### 3. Resilient Education

## Sustainability Institutionalized

### NRCP's Priority Areas on

Smart and  
Sustainable  
Cities and  
Communities

## Priority areas under **ATIN** Program

### 1. Heritage and Arts for Tourism, Creative Industries, and Nation Building (HATCINB)

- a. Documentation of Philippine indigenous knowledge, culture, and heritage
- b. Filipinnoation of Arts, Culture and Heritage for Tourism and Creative MSMEs/Industries
- c. ART History

## Wealth Creation Promoted

### NRCP's Priority Areas on

#### Health Security

## Priority areas under **ATIN** Program

### 1. Resilience and Security

- a. Traditional Security and Sovereignty
- b. Non-traditional (Human/Resilience) Security

## Wealth Protection Reinforced

### NRCP's Priority Areas on

#### Climate and Disaster Resilience

## Priority areas under **ATIN** Program

### 1. Resilience and Security

- a. Traditional Security and Sovereignty
- b. Non-traditional (Human/Resilience)  
Security



**Sustainability  
Institutionalized**

**NRCP's Priority  
Areas on**

**Digital  
Transformation**

**Priority areas under ATIN Program**

## **1. Resilient Education**

-Systems that can adapt easily, completely focused on various ways of learning and technologies, and better prepared to handle possible crises.

## **WATER SECURITY TUBIG PROGRAM (TUBIG AY BUHAYIN AT INGATAN)**

### **Goal:**

Prepare the Philippines to transition to an ecological, efficient, and equitable water-secure future.

### **Objectives:**

TUBIG program aims to foster basic experimental, theoretical, computational modeling, and data intensive research with the potential to enhance knowledge on achieving water security.



## Wealth Creation Promoted

### NRCP's Priority Areas on

Water Security &  
Environmental  
Protection

## Priority areas under **TUBIG** Program

- 1. Integrated Water Resource Management**
  - a. Watershed/groundwater and river basin modeling
  - b. Socio-hydrological modeling studies
  - c. Valuation of ecosystem service of watershed
- 2. Water Quality and Supply-Demand Management**
  - a. Smart water monitoring system
  - b. Water efficiency assessment of business enterprises
- 3. Sanitation and Wastewater Management**
  - a. Resource recovery system
  - b. Baseline monitoring of emerging contaminants

## Wealth Creation Promoted

### NRCP's Priority Areas on

Water Security &  
Environmental  
Protection

## Priority areas under **TUBIG** Program

- 4. Resilience from water-related disasters**
  - a. Early warning/surveillance system
  - b. Water infrastructure safety and resilience assessment.
- 5. Water governance and policy**
  - a. Community-based water management,
  - b. E-governance and Citizen science
  - c. Water security index

# **ALERT PROGRAM**

## **(ALTERNATIVE ENERGY RESEARCH TRENDS)**



### **Goal:**

Prepare the Philippines to transition to an affordable, efficient, secure and sustainable energy future.

### **Objectives:**

ALERT Program aims to foster basic experimental, theoretical, computational modeling, and data intensive research with the potential to enhance knowledge on energy sources, energy storage, energy utilization and the energy-sustainability connection.

**Wealth Creation  
Promoted**

**NRCP's Priority  
Areas on**

**Energy  
Security**

## **Priority areas under ALERT Program**

### **1. Energy sources**

- a. Solar energy
- b. Wind energy
- c. Wave energy
- d. Geothermal energy
- e. Hydroelectricity
- f. Biofuels
- g. Photosynthesis
- h. Electrocatalysis and photocatalysis
- i. Hydrogen energy
- j. Nuclear power
- k. Energy harvesting devices
- l. Thermoelectrics

**Wealth Creation  
Promoted**

**NRCP's Priority  
Areas on**

**Energy  
Security**

## **Priority areas under ALERT Program**

### **2. Energy storage**

- a. Batteries
- b. Fuel cells
- c. Supercapacitors
- d. Energy materials
- e. Hydrogen storage
- f. Carbon capture and storage

### **3. Energy utilization**

- a. Energy conversion technologies
- b. Energy transmission grids and networks
- c. Energy transport
- d. Development and scaling of new technologies

**Wealth Creation  
Promoted**

**NRCP's Priority  
Areas on**

**Energy  
Security**

## **Priority areas under ALERT Program**

### **4. Energy-sustainability connection**

- a. Environmental and economic impact, such as: clean technologies, energy-efficient buildings, transportation, and industry
- b. Atmospheric and climate science
- c. Carbon capture and utilization
- d. Solar radiation management

# SAKLAW PROGRAM (SUSTAINABLE COMMUNITIES)



## Goals:

Provided support to the attainment of sustainable and resilient communities and cities  
Improved environmental conditions through responsive and responsible environmental management.

## Objectives:

- To establish scientifically crafted sustainability management solutions (e.g., action plans/roadmaps/models) to the pressing ecological, environmental, and social issues/problems.
- To develop scientific solutions and policy recommendations based on: 1) Diagnosed problems, and 2) Valuation of ecological, economic and social benefits and costs.

Environmental Forestry  
**Wealth Creation  
Promoted**

**NRCP's Priority  
Areas on**

**Water Security &  
Environmental  
Protection**

## Priority areas under **SAKLAW** Program

1. **Vulnerable Ecosystems (Lakes, Rivers, Wetlands, Seas, and Oceans)**
  - a. Soil science
  - b. Carrying capacity models of ecosystems
  - c. Environmental scanning of physical, aquatic, marine, and terrestrial resources
  - d. Endangered species
  - e. Economic valuation of ecosystems, natural capital, and cost-benefit analyses
  - f. Evaluation of adaptive socio-ecological systems in a changing environment
  - g. Assessment studies on the resource sustainability of various ecosystems
  - h. Models and frameworks for enhancing adaptive capacities of vulnerable communities
  - i. Biological pollution

## Wealth Creation Promoted

### NRCP's Priority Areas on

#### Water Security & Environmental Protection

## Priority areas under **SAKLAW** Program

### 2. Biodiversity and Ecosystem Studies

- a. Environmental scanning of aquatic and terrestrial resources (taxonomy, systematics, ecology)
- b. Genomics
- c. Ecosystem interactions

### 3. Environmental Forensics

### 4. Planetary health

- a. Soil health
- b. Soil science
- c. Biological pollution
- d. Air pollution and atmospheric health
- e. Aeroecology

## Wealth Protection Reinforced

### NRCP's Priority Areas on

#### Climate and Disaster Resilience

## Priority areas under **SAKLAW** Program

### 1. Risk Communication Studies for Disaster Management

- a. Human dimensions research on climate change
- b. Risk communication models for disaster risk reduction and climate change adaptation (DRR/CCA)
- c. Popularization and dissemination of scientific language
- d. Studies on roles of LGU before, during, and after disaster
- e. Studies on use of multimedia platforms for risk communication
- f. Roles of Oral Communication in Risk Communication

## Sustainability Institutionalized

### NRCP's Priority Areas on

#### Smart and Sustainable Cities and Communities

## Priority areas under **SAKLAW** Program

### 1. Greening Mined out Areas in the Philippines (GMAP)

- a. Reduction of Heavy Metals Exposure Among Communities
- b. Soil Forensics
- c. Social Studies
- d. Community Succession
- e. Local Development Studies

### 1. Blue and Green Economy

- a. Economic Valuation Studies
- b. Just Transition of workers towards green jobs
- c. Green Employment and Industries
- d. Digitalization of Blue and Green Economy
- e. Impacts of Climate Change on Blue and Green Economy

## Sustainability Institutionalized

### NRCP's Priority Areas on

#### Smart and Sustainable Cities and Communities

## Priority areas under **SAKLAW** Program

### 1. Land use change and security

- a. Evaluation of land use policies
- b. Urban and rural studies
- c. Biological pollution
- d. Evaluation of adaptive socio-ecological systems in a changing environment
- e. Assessment studies on the resource sustainability of various ecosystems
- f. Models and frameworks for enhancing adaptive capacities of vulnerable

Come and submit your capsul research proposals  
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from **May 1 to 31, 2024**  
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8-837-6141 to 43/ 839-0275





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**Thank you!**