PROGRAM AREAS

UNU-INRA has identified three program areas (PA) in which it will concentrate its research, training and capacity development, and its policy work during the implementation period of this Strategic Plan. These are:

**PA 1. Harnessing land and water resources for efficient and sustainable use:**
- The themes in this program area include:
  - Evaluating and monitoring the state of land and water resources in Africa
  - Introducing technologies for improved on- and off-farm water use and management, including recycling and water harvesting;
  - Understanding access and equity in distribution of and access to secure land and water resources;
  - Improving and encouraging innovation through appropriate technologies for effective management of small reservoirs;
  - Analyzing the connections between climate change and the human activities that affect land use as agents contributing to pollution, carbon emissions and global warming;
  - Increasing soil nutrients and efficient use of water;
  - Assessing the sustainability of the creation of long-term carbon sinks on agricultural lands;
  - Understanding the potential and challenges of payment on ecosystem services (PES), and;
  - Exploring climate change adaptation through forecasting, early warning and adaptive capacity development for sustainable livelihoods.

**PA 2. Promoting conservation and developing a green economy:**
- The main themes for this program area are:
  - Training stakeholders on payment for ecosystem service (PES) as a potential means of lifting poor rural households out of poverty and ensuring future environmental security and sustainability;
  - Catalysing capacity development in Africa’s universities to supply much-needed talents in Plant and Animal Taxonomy and Systematics;
  - Designing strategies to develop and sustainably exploit the potential of biodiversity-based industries;
  - Determining the environmental and economic impacts and relevance of invasive species on biodiversity and food security;
  - Promoting the conservation, development and commercialization of underutilized and under-valued crops and species with emphasis on medicinal and other useful plants, and;
  - Understanding the approaches that can be effectively employed to close the complex and “leaky” nitrogen and phosphorous nutrient cycles.

**PA 3. Governing and managing the extractive industries**
- The priority themes include:
  - Understanding and managing mineral extraction and conflicts;
  - Conducting needs assessment and capacity development for negotiations and implementation of natural resources-related Multilateral Environmental Agreements (MEAs);
  - Encouraging large and sustained private sector investment in the extraction and value addition to Africa’s agro-minerals such as local phosphate rocks and rare elements, and;
  - Examining policy options to create incentives for investments in alternatives energy production (bio/hydro energy, solar, wind).

OPERATIONAL MODALITIES

UNU-INRA has a lean administrative structure at its headquarters in Accra headed by director with a critical mass of scientists. The institute operates through a network of Operating Units (OUs) and College of Research Associates (CRAs) from universities and research institutions across the African continent. The institute also collaborates with other UN agencies, multilaterals and bilateral institutions to deal with natural resources challenges facing Africa.

RESOURCE MOBILIZATION

UNU-INRA’s resource mobilization effort is segmented into:
1. Endowments;
2. Special Project/Program Contributions (SPCs);
3. Consultancy, and;
4. Equipment and event funding.

UNU-INRA will pursue a clear strategy for each of these segments. It is expected that all senior staff, unit coordinators and the Board members will play an active role in resource mobilization.
Africa’s environmental performance has done relatively well in recent years, but the number of people living in regions where the Gini coefficient is greater than 0.5 is 0.8% a day has actually increased. The economy remains a supplier of raw materials and海口 force and raw materials. According to the United Nations Human Development Index, Africa’s per capita GNP is 93.3% of the world’s average in the 1990-2010 period. Food insecurity is high; more than 40% of the sub-Saharan Africa are food insecure. The continent remains the only part of the world where the percentage of the population that is chronically malnourished has continued to increase. Political conflicts and civil wars in many African countries are not only diverting human and material resources needed for development but are also exacerbating the depletion of Africa’s natural resources.

UNU-INRA’s vision is to be the leading institution in Africa for capacity building for research in natural resource management (NRM). The main targets are African universities and other national and regional organizations. UNU-INRA’s goal is to be a catalyst in knowledge creation for efficient use of the continent’s natural resources, thus leading to the improvement of livelihoods on the continent.

Mission

The mission of UNU-INRA is to empower African universities and research institutions through capacity strengthening. This will enable them to conduct high-quality research and produce a cadre of well-trained, well-equipped and highly motivated individuals. The knowledge created and the increased capacity should be useful in developing, adapting and disseminating technologies that promote efficient and sustainable use of the continent’s natural resources.

STRATEGIC FOCUS

Nearly 25 years since its inception, UNU-INRA has still to fulfill its potential as an institution that plays an important leadership role and also exerts considerable influence in setting the direction, pace and content of research, training and capacity building for natural resources management in Africa. Africa urgently needs just such an institution to fill this crucial niche, and UNU-INRA is well placed to facilitate the development, accumulation and delivery of knowledge base for sustainable natural resource development and management in Africa. The strategic focus on UNU-INRA’s original mission and objectives: and the overall Strategic Plan of the UNU for the period 2012-2014.

UNU-INRA will strategically focus on:

FOCUS 1: Developing and improving capacity for research, training, and policy development for natural resource management in Africa

Goal 1.1: Strengthen research and training capacity

- Conduct and support cutting edge research at African universities and research institutions;
- Survey and access the training needs of researchers at the Operating Units (OUs) and within the College of Research Associates (CRAs) membership;
- Develop training materials, taking into consideration the information from the needs assessment surveys;
- Train the OUs to undertake high quality research on NRM.

Goal 1.2: Facilitate and support knowledge development

- Establish and administer competitive grant programs for pre-doctoral dissertation, doctoral dissertation, post-doctoral and visiting scholar research and;
- Support and coordinate internship programs by encouraging partner institutions abroad to outreach literature reviews, data gathering, preliminary analysis and other research assistantship duties for their research work focusing on Africa to the world at large. This aims to develop skills, offer employment opportunities and encourage their interest for future career in NR and NRM research.

Goal 1.3: Enhance the collaboration and coordination of research funding for NR management in Africa

- Forge links and strengthen collaboration with foundations and organizations within the framework of their work, for example, that of the Partnership for Higher Education in Africa (PHEA), which comprises foundations such as Rockefeller, MacArthur, and others, etc.;
- Initiate and implement in collaboration with the OUs and the College of Research Associates (CRA) to organize national and regional training and research capacity building activities. Conclude with the Thirteenth Academy of Science, which already exists, will be strengthened to encourage partnerships to scale up the allocation of resources for NRM, increasing benefits from the synergy generated by joint projects;
- Forging partnerships and forges conferences, networking and development of collaborative research and capacity training, all of which will help establish best practices for research, including the most efficient and effective use of research funds.

Goal 1.4: Develop and manage knowledge delivery systems for natural resource policy and decision-making

- Collate current and relevant research information, package existing knowledge into accessible form for widespread dissemination and application;
- Update and contextualising existing knowledge and facilitate the generation of new knowledge.
- Develop a knowledge management system that links collated information on the current and updated relevant research at UNU-INRA, CRA and affiliated institutions with the knowledge needs of policy and decision-makers;
- Coordinate a knowledge delivery system for disseminating and applying the relevant information in policy and decision-making, tapping into existing and emerging communications opportunities in Africa, particularly the burgeoning use of mobile telephones, social media and Internet opportunities.

FOCUS 2: Strengthening UNU-INRA’s operating structures and networks

Goal 2.1: Enhance UNU-INRA’s image and operational structures

- Set up a systematic internal management process.
- Use the provisions enshrined in the UNU personnel policies to pursue longer-term appointments for senior research and teaching staff, as recommended in the UNU Strategic Plan 2011-2014, to ensure stability and continuity in UNU-INRA programs.
- Utilise UNU training and human resources management programs to improve the quality of work of both the administrative and academic staff;
- Conduct periodic brown-bag seminars and lectures to encourage the sharing of knowledge and information.

Goal 2.2: Strengthen the links between UNU-INRA and the OUs and within OUs

- Develop and implement Rules of Procedures and Standards of Operation for UNU-INRA and OUs consistent with Article VII Section 2 of the UNU-INA Statutes;
- Enhance the coordination between UNU-INRA and OUs to harmonize research and training activities, resource mobilization, evaluation, performance monitoring and reporting, and research publications;
- Encourage and support collaboration between OUs for effective allocation of research resources and to maximize synergy between and among OUs.

Goal 2.3: Revive and Enhance the College of Research Associates (CRA) Network

- Structure researchers into a two-tier network consisting of a Registry of Researchers (ROR) and a College of Research Associates (CRA). Members of the CRA will be selected from the ROR using criteria for recognition and value process similar to that of the UNESCO Professorship. Current CRA members would be grandfathered in the process of selecting and evaluating CRA recognition;
- Make provisions for online membership registration and database management of ROR and CRA members;
- Use the ROR and CRA framework and collaboration with the OUs to organize training and research capacity development for African scientific and policy researchers.

Goal 2.4: Strengthen the Twinning partnership with UNU-ISP

- Expand and improve UNU-INRA’s role in the implementation of UNU-ISP projects;
- Formalize arrangements for allocating assignments, funding and general governance of the twinning partnership with UNU-ISP;
- Pursue the development of joint research and training proposals for funding and implementation.