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# UNU-FLORES STRATEGIC PLAN 2019–2023



UNITED NATIONS  
UNIVERSITY

**UNU-FLORES**

Institute for Integrated Management  
of Material Fluxes and of Resources

## **a. Global Context**

The degradation of natural resources represents one of the most critical environmental megatrends worldwide and is of great concern to the United Nations and its Member States. The 2030 Agenda for Sustainable Development reflects this concern in a wide range of indicators across all 17 Sustainable Development Goals. Challenges manifest themselves at different levels: e.g., at the local level, nutrients are crucial for soil and land use management; at the regional level, the safe use of waste water is key for delivering an appropriate water quantity and quality; and at the global level, climate change requires systems analysis to inform resource management decisions for energy and geo-resources. Focusing on the management of any single resource neglects the close intertwining and mutual dependencies of environmental resources, and thus results in “sectoral silo thinking”: ignoring trade-offs and potential synergies.

The vision and mission of UNU-FLORES, in conjunction with its core functions and key research areas, are adduced from this global context.

## **b. Vision and Mission of UNU-FLORES**

**Vision:** *UNU-FLORES advances a nexus approach to the sustainable management of environmental resources around the world: The Resource Nexus*

**Vision (Extended):** UNU-FLORES is an internationally recognised thought leader on the nexus of environmental resources. It acts as the central node and bridge between the United Nations system, and an organised network of university research groups, government agencies, NGOs, and specialist companies with the goal of disseminating ideas, techniques and good practices for advancing a nexus approach to the sustainable management of environmental resources around the world: the Resource Nexus.

**Mission:** *To be an international leader for advanced training, capacity development, and knowledge dissemination on the Resource Nexus*

**Mission (Extended):** To contribute to the mandate of UNU as a research institute with an agenda guided by policy relevance; to be seen as a global think tank and postgraduate teaching organisation as well as a hub for advanced training, capacity development and knowledge dissemination. UNU-FLORES aims to advance the Resource Nexus for all environmental resources: water, soil, waste, energy, and other geo-resources that are of concern to the United Nations and its Member States - particularly in developing and emerging economies.

## **The Unique Value of UNU-FLORES**

UNU-FLORES has an important role to play in the Resource Nexus by improving the understanding of trade-offs and synergies between environmental resources, and by identifying methods and tools for monitoring the Resource Nexus. Thus, UNU-FLORES will contribute to the overarching priorities of the UNU: namely climate change and energy, as well as social change and economic development. After having focused on water, soil and waste in the first phase of the institute, the focus will then expand to include energy and geo-resources.

The unique strength of UNU-FLORES lies in its ability to work at the science-policy interface.

## Objectives

The Objectives of UNU-FLORES are concurrent with the four overarching Objectives of UNU<sup>1</sup>. They include:

- 1. Pursue policy-relevant programming:** by continuing to make policy considerations central to its research programmes and, in addition, actively shaping policy agendas through targeted and strategic collaborations.
- 2. Invest in a dynamic, innovative, and diverse institutional culture:** by encouraging innovation in all dimensions of the University's work, which is undertaken by a diverse and gender-balanced community of scholars, communicators, and management professionals, and by promoting collaboration across spatial and disciplinary boundaries.
- 3. Strengthen collaboration, communications, and visibility:** by leveraging the expertise and networks spread across the UNU system, promoting collaboration, impactful communications undertakings, and ensuring that UNU research meets actual demands.
- 4. Strive for financial sustainability across UNU's architecture:** by addressing the financial constraints that would otherwise undermine ambitious, long-term, research planning, and ensure through participatory management practices that fundraising objectives are realistic, achievable, and complement other strategic priorities.

### c. Core Functions of UNU-FLORES

*Policy Impact:* By working at the science-policy interface, UNU-FLORES contributes to the so-called knowledge triangle or third mission, i.e. extending beyond research and teaching to have a policy impact on the UN and its Member States. By combining a science-push and a policy-pull strategy, UNU-FLORES can convey research findings to policymakers (push) and deduct research questions from policy relevance (pull), based on the policy concerns of governments at different levels (national, regional, local and international). This tactical position enables the institute to shape policy visions, policy cycles, policy instruments and interventions, and to contribute to agenda setting.

*Academic Excellence:* A sound process - from the conception of the studies or experiments to be conducted, to the generation, analysis and interpretation of the data, to the preparation of research articles - is crucial for academic excellence. This knowledge creation is achieved through the collaborative efforts of research teams that include strategic partners such as TU Dresden and visiting scholars, the identification of expedient research questions, and the selection of appropriate data and methods.

*Capacity Development:* The accurate translation of research into practice and subsequent implementation of management strategies at individual, organisational and institutional levels are crucial in supporting decision-making. To advance the Resource Nexus, stakeholders must be engaged; wicked problems must be faced, and forces must be joined. To that end, a special focus will be set on capacity development for decision-makers in the Global South.

*Postgraduate Teaching:* UNU-FLORES offers high quality training that is both interdisciplinary and transdisciplinary in nature, with a dedicated focus of developing future scientists and leaders of all ages. Interactions with researchers from other disciplines and with stakeholders are key to approaching global challenges. A large percentage of our student intake originate from developing

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<sup>1</sup> Quoted verbatim from the United Nations University; Strategic Plan 2020-2024

countries, which means that the impact of postgraduate teaching is fully secured and implemented when the students return to their home countries.

*Nexus Thinking:* The nexus approach to the sustainable management of water, soil, waste, energy, and geo-resources, the Resource Nexus, is based on the insight that focusing on single resources neglects the close intertwining and mutual dependencies of environmental resources. Nexus thinking embedded in inter- and transdisciplinary working is an inherent component of all work at UNU-FLORES in relation to policy impact, academic excellence, capacity development, and postgraduate teaching, thereby complementing the other core functions.

#### **d. Key Research Areas**

UNU-FLORES research covers topics related to the nexus of the following environmental resources, complemented by data analysis and integrative modelling tools:

- water (e.g., water scarcity, integrated watershed management)
- soil (e.g., counteracting soil degradation, securing soil functions, fostering sustainable land-use management)
- waste (e.g., preventing losses and closing cycles of resources; avoiding contamination of water and soil)
- energy (in relation to water, soil, and waste; non-renewables and renewables)
- geo-resources (e.g., groundwater, rehabilitating sites)

This interdisciplinary Resource Nexus approach also encompasses research programmes on integrated resources management, which shape the selection and combination topics. The intention of extending the Joint PhD programme with TU Dresden to incorporate other faculties and cooperation within PRISMA - Centre for Sustainability Assessment and Policy will allow broadening the avenues of research to the Resource Nexus. The Implementation Plan specifies the priorities and target audiences in detail and will be updated on a yearly basis.

All key research areas are closely connected to the overarching priorities of the UN and the UNU. Through the involvement of target policymakers - especially from ministries and agencies related to environmental resources during the research design phase, UNU-FLORES will succeed in being policy-relevant.

#### **e. Institutional Planning and Fundraising**

Organisations depend on various forms of capital, namely financial capital, manufactured capital, intellectual capital, human capital, social and relationship capital, and natural capital. These capitals are "stocks of value that are increased, decreased or transformed through the activities and outputs of the organization" (IIRC 2013). To comprehensively capture these "stocks of value", institutional planning at UNU-FLORES will follow this logic:

*Financial Capital:* UNU-FLORES strives to secure a healthy balance of diverse and long-term funds to ensure the sustainability of its operations. For topics related to the science-push strategy, (inter)national calls for submission of research proposals of donors - such as the European Union or German Ministries - are to be considered prospective sources of funding. Regarding topics related to the policy-pull strategy, decision-makers and their respective funding mechanisms will be targeted. In following the Guidelines on Cooperation between the United Nations and the Business Sector, fundraising options with the business sector shall be explored. A rolling budget is to support the agility required by a think tank.

*Manufactured Capital:* A floating office concept that allows for different working zones; namely silent zones, communication zones, social zones and group work zones, will not only encourage collaboration within UNU-FLORES, but also result in a better utilised office space; thus demonstrating higher resource-efficiency, both economically and ecologically. This floating office concept will be accompanied by innovative hardware and software equipment. The long-term objective shall be to relocate to a venue in the vicinity of the Institute's strategic partner, TU Dresden.

*Intellectual Capital:* To support research on the Resource Nexus and to allow an innovation culture, UNU-FLORES will be organised into interdisciplinary Resource Nexus research programmes on integrated resources management. A reputation for academic excellence in the Resource Nexus research programmes will allow UNU-FLORES to implement a science-push strategy and ensure policy impact through subsequent advocacy-related activities. A flexible structure will foster this innovation culture, e.g. if funding is secured, additional Resource Nexus research programmes will be installed and staff can be reallocated accordingly. Gender and youth-based research will also be incorporated into academic endeavours. Institutional knowledge for strategic, content-related questions will be managed through a Science Knowledge Hub, and for administrative questions, through a UNU-FLORES handbook and close interaction with UNU Centre. A dynamic and creative Communications and Advocacy team is also vital in the transmission of knowledge and the promotion of UNU-FLORES objectives and output.

*Human Capital:* Announcing open topic positions for heads of research programmes, combined with competency-based recruiting, will lead to securing the best minds for cutting-edge topics at the forefront of urgent global challenges, and support the think tank function of UNU. Synergies with the strategic partner, TU Dresden, will be leveraged by allowing senior academic staff of UNU-FLORES to be co-opted as Honorary Professors with membership rights at TU Dresden, and senior academic staff of TU Dresden to be appointed as Adjunct Professors at UNU-FLORES. For younger scientists, our membership to DRESDEN-concept e.V. opens the opportunity of being appointed a Young Investigator at TU Dresden, and the Visiting Scholars Programme shall be developed as a catalyst for idea generation. A healthy work environment based on trust, transparency, tolerance of failure, and de-escalation, and in accordance with the UNU Policy on Gender Equality, shall guide decision-making at UNU-FLORES. Leadership Dialogue sessions are institutionalised by addressing topics identified both by the UN and colleagues at UNU-FLORES. Flexible Working Arrangements support our staff members in balancing work life and private life. UNU-FLORES has the goal of applying Institute-wide social security coverage for all employees, which will allow for the introduction of sustainability aspects in contracts, as well as increase the attractiveness of UNU-FLORES as an employer.

*Social & Relationship Capital:* Relationships are key for the business model of UNU-FLORES. A Partnerships & Liaison Officer will identify and engage target audiences and/or clients at the outset of research projects - including private and business sectors. Collaboration within UNU-FLORES will be supported by interdisciplinary Resource Nexus Research Programmes, and a variety of academic incentives to develop connections - including an engaging Internship Programme and Visiting Scholar Programme. This concept is based on the management rule "Structure follows strategy". The Advisory Committee is a valuable source of advice on strategic and administrative questions alike. Collaboration within UNU shall be a core pillar for relationships; a first initiative is the UNU Water Network. Collaboration within the UN system is key to operationalise the unique inclusivity of the scientific community. The strategic partnership and scientific collaboration conducted between UNU-FLORES and TU Dresden has also led to an alignment with two local research networks that will prove crucial for joint research proposals PRISMA - Centre for Sustainability Assessment, and DRESDEN-concept e.V., which represents nearly 30 research institutions across the Dresden area.

Donor relations are further strengthened by involving the Finance Officer in project proposal development.

*Natural Capital:* As an institute with a focus on environmental resources, UNU-FLORES closely collaborates with the Greening the Blue initiative of SUN - Sustainable United Nations. UNU-FLORES also demonstrates its commitment to environmental awareness on an everyday office level, by implementing green procurement strategies and the work of the Institute's Green Committee. Increased recognition shall be given to energy and waste management, as well as to the impact of air travel in regard to climate change. Missions shall therefore be complemented by video conferences whenever possible, in keeping with the goal of functioning as a carbon neutral and paperless institute.