



RAYA UNIVERSITY
RESEARCH, PUBLICATION, ETHICS AND INDUCTION DIRECTORATE

Call For Internal and External Research Proposal Reviewers
The office of research, publication, ethics and induction directorate will invite internal and external research proposal reviewers for 2017 E.C budget year on the following thematic research projects.

S.NO	Title of Thematic Research project	Sub-Thematic Research (STR)
1.	Integrating Machine Learning and Deep Learning Solutions for Agricultural Disease Detection in Southern Tigray.	STR 1. Early disease detection in Tomato using Conventional Neural Network in the case of lowland areas of southern Tigray. STR 2. Enhanced Automatic Detection of Coffee plant disease through machine learning. Werebaye coffee case study. STR 3. Developing a maize pest disease detection and classification model using machine learning techniques.
2.	Advancing sustainable energy	STR 1. Optimizing resident energy consumption in Tigray: smart grid systems and Time of Use Pricing. STR 2. Optimization of power utilization Efficiency in small scale renewable energy sources. STR 3. Small wind turbine power generator for sustainable and affordable energy solutions. STR 4. Design of Wind-Solar Hybrid Energy System for Drip Irrigation Pumping Application in Mychew Tabia Smret Community, Northern Ethiopia. STR 5. Urban Waste – to – Energy Conversion in the case of Maichew Town, Tigray, Ethiopia.
3	Modeling Land Use Change for Climate-Resilient Crop Production	STR 1: Object-based classification for crop land use monitoring using fuzzy approach and machine learning in the Western Section of Raya Valley. STR 2: Agro-ecological Zonation and its Impact on Resilience in the North-western Escarpment of the Great East Rift Valley System STR 3. Adaptive strategies for climate-resilient crop production through agroecological zonation under land use changes in the Western Section of Raya Valley
4	Integrated Approaches to Conflict Prevention, Resolution and Peace building: Pathways to Sustainable Development	STR 1: The Role of Conflict Resolution Mechanism in Addressing Conflicts among the Border-Shared Communities of Afar, Tigary and Amhara regions STR 2: Revitalizing Traditional Practices and Government-Supported Community Associations: A Route to Conflict Resolution and Harmony STR 3: Gender Perspective in Peacebuilding: The Role of women's involvement in conflict resolution

Knowledge for societal change

		<p>STR4. Harmonizing alternative dispute resolution in light with application legislation: A case study of Abogereb Bylaws</p> <p>STR5. The Role of Indigenous Customary Institutions in Transitional Justice Process: The Case of Southern Tigray</p>
5	Sustainable Tourism Development	<p>STR1: Cultural Festivals and Ceremonies as Catalysts for Cultural Tourism: Analyzing Opportunities and Challenges in Fostering Tourism Development in Southern Tigray</p> <p>STR2: Exploring the Integration of Indigenous Knowledge Systems in Cultural Tourism Development: Harnessing Indigenous Wisdom for Sustainable Tourism in Southern Tigray</p> <p>STR 3: Community-Based Cultural Tourism: Investigating the Impact of Local Engagement in Preserving and Promoting Cultural Heritage in Southern Tigray</p>
6	Infectious Disease Epidemiology and Health Outcomes in Conflict-Affected Region of Tigray	<p>STR1: HIV Dynamics and Health System Challenges in Conflict-Affected Zones of Tigray</p> <p>STR2. Genotypic Distribution and Risk Factors of HPV Among Women of Reproductive Age</p> <p>STR3. Mycobacterium Tuberculosis (MTB) Dynamics in High-Risk Populations</p> <p>STR4. Dynamics, Epidemiology, and Risk Factors of Hepatitis in the General Population</p>
7	Entrepreneurship, Innovation, Resilience and Economic Development	<p>STR1: Manufacturing Sector Resource Potential Assessment, Project Identification & Selection, and Profile Development for Southern Tigray Zone.</p> <p>STR 2: FinTech Adoption and Its Impact on Promoting Financial Inclusion and Digitizing Indigenous Financial Institutions in Southern Zone of Tigray, Ethiopia.</p> <p>STR 3: Entrepreneurial Resilience and Development in Post-Conflict Regions.</p>
8	Socio-Economic Analysis for Sustainable Development	<p>STR1: Factors affecting bank productivity and efficiency: Application in Ethiopia banking Sector:</p> <p>STR2: Assessment of Ethiopian Education Policy and its performance in Tigray National Regional State.</p> <p>STR3: sustainable beekeeping value chain on Honey Bee Productivity in South Tigray.</p>

Important Notice:

1. Eligible applicants can submit their application dossier to office in the form of softcopy to RPD@rayu.edu.et up to **February 24, 2025(Yekatit 17, 2017 E.C)**
2. Reviewer payment will be as per the directive of FDRE Ministry of Finance and with full accommodations.
3. Any inquires; you can communicate via 0928055211 to Dr. Redae Kahsay

