Topic Map

KONEKSI

Digital Transformation in Health, Energy and Food Security, including Blue Economy

The following topic map identifies the topics that Government of Indonesia and Government of Australia have identified bilaterally. Only those topics that fall within these categories will be eligible. The research focus provides examples of the type of research that will be funded. Close alignment with research in the below table under 'example research focus' is recommended.

KONEKSI welcomes research project applications in the following areas:

1. Digital transformation to support enhanced wellbeing in healthcare

Topic map: Enhanced wellbeing in healthcare

Topic	Example research focus
Rural and remote digital health service delivery	- Distance learning for health workers in rural, remote and underdeveloped areas - Digital health monitoring technologies and systems, including tele-medicine/ health, hospital-in-the-home, wearables and new models of care leveraging technologies - Advancing sustainable and equitable digital healthcare systems including remote care and technologies appropriate for rural and remote areas - Specific regional and remote barriers to digital healthcare, such as connectivity
Digital health service delivery	- Innovations in digital healthcare management, including hospital information systems and electronic medical records, automated decision making, data analytics and diagnostics and system interoperability - Impacts of digital service delivery, including on safety, ethics, and inclusivity (including the digital divide), literacy, accessibility and connectivity - Risks and harms in the transition to digitally enabled care, including adverse impacts on GEDSI groups

Digital technologies and the healthcare workforce (professional and domestic)	- Digital health literacy and accessibility in the care workforce, from professional service providers to in-home and family carers - Enabling capabilities of digital technologies to lift burdens and ease inequalities in the care workforce, including for GEDSI groups - Innovative training and workforce support systems to enable digital healthcare
Data, digital health and artificial intelligence	- Digital surveillance opportunities for public health and disaster mitigation - Data security and privacy to improve governance and policy in the health sector - Improvements in data utilisation for integrated and effective healthcare systems: clinical decision analytics, data standards, interoperability, data linkage - Understanding data storage and usage challenges particular to Indonesia - Uses of data and IT to support and enhance clinical safety, improve productivity and efficiency and connect the health system - Opportunities to leverage data linkage and automated decision making

2. Digital transformation to support sustainable food systems and blue economy

Topic map: Sustainable food systems and blue economy

Topic	Example research focus
Digital agricultural technologies	- Smart farming, digital technologies and automation, including to increase or maximise climate/drought crop resilience: including IoT automatic feeders, irrigation, monitoring devices, smart phone integrated apps - Digital environment monitoring and surveillance technologies, such as weather modelling, to support food security - Digital device utility and adoption requirements - Uptake of rules and standards to facilitate trade and address common interests in relation to digital trade, food and nutrition safety - Ensuring equitable and safe access to digital tools and services for women, people with disabilities and disadvantaged groups
Agricultural and blue economy digital infrastructure	- Digital tools and solutions to improve segments of the Blue Economy ecosystem and value chains, such as monitoring, decision making, and product traceability - System optimisation technologies and data to help trace and minimise food loss and optimise food waste management including diversification and preservation of livestock and seafood - Barriers to implementation of digital technologies across distance, such as between small ports, industry, and islands
Agricultural workforce capability and community trust in digital tech	- Barriers and opportunities for technology uptake and adoption - Community trust in surveillance and monitoring technologies in agriculture and the blue economy

	- Barriers to workforce digital literacy and awareness to support capacity building and collaboration - Sustainable management practices for using digital technologies
Data management practices	- Data management and governance practices in agriculture - Data opportunities and barriers, including data rules and interoperability - Opportunities from data streams, analysis and interpretation to support local and timely decision making - Digital literacy, connectivity, and accessibility to digital transformation developments, particularly for women, people with disabilities and disadvantaged groups.

3. Digital transformation to support energy efficiencies and transition to renewables

Topic map: Energy efficiencies and transition to renewables

Topic	Example research focus
Digital transformation to support distributed, decentralised and community-driven energy systems and resources	- Digital technologies to provide access, optimise and load balance energy to regional, rural and remote communities - Application and integration of digital technology for renewable or distributed energy systems into communities and end-users - Digital energy platforms for decentralised, digitally enabled exchanges of energy from distributed resources - Distributed, robust, peer-to-peer energy trading driven by prosumer choices and local demand (i.e. using blockchain) - Standards and regulations to support distributed energy systems - Impact of digital technologies in the energy transition on GEDSI groups
Energy system sustainability through digital transformation	- Monitoring and surveillance technologies to test renewable energy viability (such as weather monitoring to scope wind and solar resources) - Facilitating clean and renewable ways to capture, generate, store, optimise the use of energy, including through blockchain, AI, and the IoT technologies - Digital tools to support low-emission energy, decarbonisation and improve energy system resilience - Digital tools, platforms, products and services for monitoring, optimising and distributing energy at individual and community levels - E-waste problems from digital transformation - Development of the new capital of Indonesia, Nusantara
Digital systems integration	- Energy systems integration and digital infrastructure readiness to support energy transition, particularly in remote, rural and underdeveloped areas - Interoperability of digital technologies into energy systems, including data storage, devices, community knowledge and tools to support utilisation - Smart city infrastructure, and innovations within the development of smart city infrastructure which have multiple applications - Potential benefits or diverse impacts on women, people with disabilities, disadvantaged groups of digital transformation in the energy sector

Data	- Data exchange to improve energy system flexibility (i.e. helping supply match demand) - Data security needs to support distributed energy system technology - Interoperability and data standards needed to support digital transformation in the energy sector - Digital accessibility and literacy, particularly for women, people with disability and disadvantaged groups