

Sydney Southeast Asia Centre Grand Challenges Program

Background

The Sydney Southeast Asia Centre's vision is to be a *leading hub for knowledge development and exchange, addressing the critical challenges facing Southeast Asia*. To realise this vision, SSEAC's researchers are leading ambitious multidisciplinary research programs that seek to understand and address many of the wicked problems confronting the region – ranging from climate change and digital disruption to pandemic preparedness and chronic disease.

Over the five years of [SSEAC's Strategy 2024–2029](#), we will support significant projects in the region that generate and apply new knowledge which benefits the region. These challenges will be developed further in partnership with academics across the University, including with Faculties, Schools, and Centres.

The SSEAC Grand Challenges Program will enable SSEAC researchers to focus upon areas in which the University is well positioned to make a substantial contribution. This approach aligns closely with the University's [Sydney in 2032 Strategy](#), a key aspiration of which is research excellence that “tackles the greatest challenges and contributes to the common good”. The five themes that we have initially chosen build upon the multidisciplinary excellence of University of Sydney research teams that work in the region, tackling highly complex problems where solutions require a wide range of disciplinary perspectives.

While we have identified these Grand Challenge themes as being a high priority for SSEAC, they will not be the only research that SSEAC will support over the five-year period of SSEAC's strategy. We will continue to support researchers from across the University addressing other important questions.

SSEAC's Grand Challenges

The Grand Challenges upon which this Program will initially focus are:

1. **Climate change resilience and the clean energy transition.** We will engage in multidisciplinary research partnerships to share knowledge and develop innovative solutions to address climate change, build climate resilience and support the clean energy transition across Southeast Asia.
2. **Agricultural development and sustainable use of natural resources.** We will conduct research to enhance agricultural development and sustainable management of critical natural resources, such as water, in Southeast Asia. These initiatives will involve collaborating with local communities, governments, and international organisations to promote innovative and resilient agricultural practices to grow local economies, and to develop and implement natural resource management governance and policies for sustainable, efficient, and environmentally responsible use of resources.
3. **Healthy and resilient societies.** We will focus on fostering thriving places and communities. We will collaborate with local governments, communities, and international partners to develop new knowledge to address the challenges of urbanisation and enhance the quality of life in rapidly growing areas. We will also leverage and establish local and international partnerships to create new knowledge and apply new solutions to enhance the health security of Southeast Asia with a focus on communicable and non-communicable disease control and building strong health systems and health partnerships.



4. **Digital transformation and AI.** We will support the region to harness the potential of new digital technologies and artificial intelligence (AI) in Southeast Asia, through cutting-edge research and strategic collaborations. We will focus on how societies can adopt AI to enhance economic growth, improve public services, and foster innovation across various sectors, while mitigating the problems that these new technologies also create.
5. **Shared pasts and shared futures.** We will support major research initiatives that address the historical and contemporary issues that shape social and political discourse in Southeast Asia. These activities will include fostering dialogue and collaboration among scholars, policymakers, and communities across the region to build a deeper understanding of the region's shared heritage and future aspirations, and to address some of the critical social issues facing the region.

How were these Grand Challenges selected?

These five themes encompass areas where the University of Sydney has a critical number of academics with the requisite expertise, where significant potential exists to attract large-scale external funding, and where our local partners recognise these issues as important and wish to work with us. This is not intended to be a static list. Over time, the number of Grand Challenges may be expanded, or modified, based upon new opportunities, expertise, and partnerships.

How do the Grand Challenges differ from other research that SSEAC supports?

The characteristics of a Grand Challenge are:

- The scale of the problem: these are major problems that affect large numbers of individuals or have a profound effect upon individuals in many different settings.
- The scale of funding available: there are various large-scale funding schemes available to support research or projects in these areas.
- The scale of the capacity at the University to respond: a critical number of colleagues in different disciplinary areas at the University are available to direct research in these areas. A disciplinary area may exist within a single Faculty or School, or between different Faculties.

How will SSEAC support the Grand Challenges?

Grand Challenges will be supported by a range of mechanisms available to SSEAC, including:

- Linking academics from across the University together to form effective multidisciplinary teams, including through our Country Groups and members across all Faculties and University Schools.
- Seed funding support for pilot projects that will contribute to larger-scale grant applications aligned with the theme.
- In-kind support by SSEAC staff, including organising meetings and scheduling events.
- Grant writing assistance, which may include strategic advice as well as support with administration of larger-scale funding applications.