



BILATERAL COLLABORATION ROADMAP FOR ECRS

This template aims to support postdoctoral scholars and early-career researchers (ECRs) interested in initiating collaborative research between Australia and India. The roadmap is designed to guide ECRs through the early stages of bilateral research collaboration, with prompts that reflect the realities of both research ecosystems.

STEP 1: DEFINE YOUR COLLABORATIVE PROJECT

KEY PROMPTS

- What is the core research question or challenge you aim to address?
- Which thematic area(s) does your project align with? (e.g. water governance, digital health, climate resilience)

EXPLORE →

- ARCH-India Research Areas
 - » Why is the topic important in both national contexts?

REFERENCE RELEVANT BILATERAL FRAMEWORKS →

- <u>Joint Statement on a Comprehensive Strategic Partnership between Republic of India and Australia</u>
- A New Roadmap for Australia's Economic Engagement with India
- Framework Arrangement on Cyber and Cyber-Enabled Critical Technology Cooperation between the Republic of India and the Government of Australia
- Memorandum of Understanding on Cooperation in the Field of Mining and Processing of Critical and Strategic Minerals
- Establishment of an India-Australia Renewable Energy Partnership between the Government of the Republic of India and the Government of Australia
 - » Does your project correspond to Indian or Australian research priorities?

REVIEW →

- <u>India's National Missions</u>
- Australia's National Science and Research Priorities
 - » Are there Research Centres of Excellence or Research Hubs in your topic of choice?

IDENTIFY →

- Australia's <u>ARC Centres of Excellence</u>, <u>Cooperative Research Centres</u>, <u>India's Centres of Excellence</u>, or equivalent centres or hubs in India or Australia that align with your project. These centres can provide existing networks and infrastructure.
 - » Is your project interdisciplinary or cross-sectoral with links to industry sectors?

EXPLORE →

Science & Technology knowledge clusters identified by India's Office of the Principal Scientific
Advisor. There are eight knowledge clusters across India which aim to bring together
academia, R&D institutions, and industry to solve challenging problems of their respective
region. See if there is an overlap between your proposed project idea and the specific
knowledge cluster.

Outcome: Develop a succinct and non-confidential, 1-page project outline that can be used to initiate conversations with potential collaborators. Refer to the example provided on this page.

EXAMPLE OF A ONE-PAGE PROJECT OUTLINE

(Provided with consent of researcher; contact admin@arch-india.org for use)

Title: Should address the opportunity arising from the project.

Example: Joint venture for high value organic fertiliser and pest-repellent products from Australian wild neem.

Context: Short outline of the value of the resource from which high value products will be made.

Example: The qualities of neem, areas of Australia where wild neem is distributed, existing industry and technology for neem-based products in Australia.

Opportunity: State the global demand and growth for the product.

Example: Compound Annual Growth Rate (CAGR) stats, where is the largest production, where are the largest export markets, which Indian companies have developed technologies for high-value production.

Research strategy: What are the research components?

Example: Geographical assessment of the viable areas for wild neem harvesting for commercial production; lab tests for phytochemical properties to estimate market value; identification of potential partners; research collaborators, local manufacturers, Aboriginal Business Corporations, Indian companies; joint business model development for harvesting, processing, and export industry; technology patents; proof-of concept, prototype manufacturing; time to commercial production.

Outcomes: Highlight benefits to research collaborators and industry partners.

Example: patents, licences, export markets, sustainability indicators, carbon sequestration, meeting net zero targets.

STEP 2: IDENTIFY A POTENTIAL COLLABORATOR

IF YOU'RE BASED IN AUSTRALIA

- Get in touch with your university's international research office
- Reach out to Indian diaspora in your faculty.
- Reach out to Indian institutions with existing MoUs or joint centres with your university.
- Explore the Association of Indian Universities (AIU), India's representative body for higher education institutions.
- Explore VIDWAN, IRINS, AIRSA, IHERN Indian national research expert databases.
- Contact faculty from Indian universities that share your research focus, including those connected to the delivery of Indian National Missions - for example, lead institutes for Thematic Hubs established under the National Quantum Mission.
- Reach out to the Australian High Commission in New Delhi. Representatives from Austrade, the Australian Departments of Education and Department of industry, Science and Resources maintain networks across India and may be able to provide guidance or suggest relevant contacts.
- Use platforms such as Google Scholar, Scopus, ARCH-India or LinkedIn to find top researchers in your field / available for collaboration.
- Attend bilateral research events, thematic workshops, or networking forums hosted by universities, government, or centres like the Australia India Institute.

IF YOU'RE BASED IN INDIA

- Reach out to Australian institutions with existing MoUs or joint centres with your institution.
- Ask your supervisor or department head about alumni or faculty with Australian links.
- Explore Australian university networks: Universities Australia, Group of Eight (Go8), Innovative Research Universities (IRU), Regional Universities Network, and the Australian Technology Network of Universities (ATN).
- Use "Find an Expert" pages on university websites.
- Use platforms such as Google Scholar, Scopus, ARCH-India or LinkedIn to find top researchers in your field / available for collaboration
- Attend bilateral research events, thematic workshops, or networking forums hosted by universities, government, or centres like the Australia India Institute.

GUIDANCE FOR INITIAL OUTREACH

- Begin with a concise and courteous message that introduces yourself, your institutional affiliation, the
 focus of your proposed project, and why you are reaching out. Share links to a couple of your existing
 projects and publications.
- Share your one-page project outline (developed in Step 1) to provide context and demonstrate preparedness. Highlight the novel or innovative features, including industry or social applications, potential for applying for joint research funding with industry or government partners.
- Express openness to define the project concept collaboratively, acknowledging the value of mutual input and shared interests.
- Be mindful of time zones, academic calendars, and preferred communication channels. Indian researchers may be more responsive via WhatsApp, while Australian researchers typically prefer email.

Outcome: Identify at least one potential collaborator and initiate contact.

Aim to:

- Schedule an exploratory conversation (e.g. virtual meeting).
- Discuss shared interests and complementary expertise.

STEP 3: TAKE THE COLLABORATION FORWARD

KEY PROMPTS

- Clarify shared objectives
 - » Revisit your 1-page project outline together.
 - » Identify complementary expertise, institutional strengths, and mutual priorities.
 - » Determine intellectual property sharing principles, if applicable.

Explore collaboration pathways

- » Co-develop a research proposal for a specific funding scheme (see Australia-India Research Collaboration Schemes resource).
- » Plan a joint publication, workshop, or policy brief to develop evidence of collaboration.
- » Explore opportunities at the institutional level, such as exchange, co-supervision, or data-sharing.

· Discuss practical considerations

- » Timeline, roles, and responsibilities.
- » Institutional processes and constraints.

Outcome: A shared plan for collaboration, with clear next steps and mutual commitment to progress.