Planting Evidence Where Policy Happens: The Role of INGSA-Asia from Grassroots Awards to Seeds of Science

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Science advice becomes meaningful only when evidence can enter the places where public decisions are actually made. In Asia, these places range from national ministries and academies to municipal councils, community organisations and small enterprises. The diversity of political systems, languages, development conditions and institutional capacities across the region means that no single advisory model can serve every setting. INGSA-Asia was founded in 2017 to strengthen regional capacity by connecting policy practitioners and scientists from across Asia, supporting training, and encouraging practical research on advisory processes, principles and practices.[1] Its Grassroots Science Advice Promotion Awards, and the expanded Seeds of Science, Asia programme that followed, translate this mandate into local action. Together, the initiatives show how seed funding, structured mentorship and regional networking can turn a local policy problem into a functioning evidence-to-policy relationship.

Why Grassroots Science Advice Matters

Formal science advice is often associated with chief scientific advisers, national academies, expert councils and ministerial committees. These institutions remain essential, but many policy problems first appear at a more immediate level, where citizens, local officials and practitioners confront issues related to waste management, disease, food security, climate risks or technology transitions. Evidence can fail to reach these settings because researchers may not understand policy constraints, local contexts, cultural norms and officials may lack trusted access to relevant expertise. Grassroots science advice addresses this gap through a bottom-up approach by creating an organised space for scientists, decision-makers and affected communities to define a problem together, examine evidence and identify feasible actions through local, actionable policies. It is, therefore, not a diluted form of national science advice. It is a practical entry point through which advisory capability, trust and demand for evidence can grow from the ground upwards.

The Grassroots Science Advice Promotion Awards began as a deliberately accessible mechanism. The award program was launched in 2019 and has since provided opportunities for scientists, researchers, academics and practitioners in Asia to share their knowledge and insights on science advice with fellow members of the scientific community and policymakers in their home countries across the Asian region. In 2021, recipients received seed grants of EUR 500 and mentorship from members of the INGSA-Asia Steering Committee to organise workshops in their home countries.[2] The grant increased to EUR 1,000 in 2022 and CAD 1,000 in 2023, while collaboration with the International Science Council Regional Focal Point for Asia and the Pacific enabled awards of up to AUD 10,000 in 2024.[3-5] Across the four rounds from 2021 to 2024, 23 projects were selected in eight countries. Their subjects included open science,

disaster management, climate policy, marine plastics, women in science leadership, childhood disorders, antimicrobial resistance, zoonoses, biodiversity, science journalism and waste governance. This range demonstrates that science advice is an enabling practice that can improve decisions across many sectors.

The Role of INGSA-Asia

The central contribution of INGSA-Asia is not limited to distributing grants. The Chapter acts as a regional broker that identifies capable local leaders, connects them with experienced mentors, and gives their work legitimacy within a wider science advice network through capacity building. Mentorship helps recipients move beyond conventional academic seminars by clarifying the policy question, identifying relevant decision-makers, designing participatory sessions and producing usable outputs. The regional network allows lessons from one setting to be adapted rather than copied into another. This function is particularly important in Asia, where advisory systems range from highly embedded government structures to more plural and arm's-length arrangements.[6] INGSA-Asia therefore provides both proximity to local realities and connection to international experience.

The programme also creates a two-way learning process. Scientists learn that good advice requires more than presenting accurate findings; it requires timing, communication, awareness of institutional incentives and respect for implementation constraints. Policymakers learn how evidence is generated, where uncertainty remains and how expertise can support rather than replace political judgement. Communities and civil society organisations contribute experiential knowledge that may be absent from formal datasets. Through this exchange, a workshop can become a temporary advisory institution in which different forms of knowledge are tested against a real policy problem.

Evidence of Local Impact

Activities implemented under the 2024 awards illustrate the value of this model. In Pakistan, a workshop on science-policy integration in waste management convened more than 80 participants from academia, government, industry, non-government organisations and communities. Breakout groups on municipal, industrial and organic waste produced recommendations that were consolidated into a science-policy roadmap for relevant authorities.[7] In Bandung, Indonesia, a two-day programme brought together 150 participants and combined expert input with practical demonstrations of Black Soldier Fly technology for organic waste treatment.[8] The design linked a local environmental crisis with an accessible technological option, while bringing community members into direct contact with researchers, businesses and government agencies.

Other workshops revealed that science advice must include both products and relationships. A Malaysian initiative on reducing single-use plastics produced a practical toolkit for food vendors and event organisers, but it also identified limited participation from the vendors who would need to implement the recommendations.[9] This finding exposes a common weakness in public engagement: stakeholders may be discussed without being adequately represented. In Indonesia, a workshop for grassroots women in science generated recommendations, plans for an open-access training resource and a commitment to build a national network of women scientists involved in policy.[10] These examples show that the programme can generate immediate outputs, diagnose participation gaps and establish networks for longer-term influence.

From Grassroots Awards to Seeds of Science, Asia

The rebranding of the programme as Seeds of Science, Asia in 2025, represented an institutional expansion rather than a name change alone. The first round offered grants of up to AUD 9,500 and required a consortium comprising an applicant from an academic or research organisation and a policy-facing applicant from government, civil society, or a non-government organisation.[11] This requirement embedded co-production into the application structure instead of expecting researchers to seek policy engagement

after project design. Ten projects were selected across Indonesia, Bangladesh, China, Thailand, Malaysia, Pakistan, the Philippines, Bhutan, South Korea and Vietnam. Their themes extended from urban resilience and sustainable agriculture to open science, national fitness governance, digital infrastructure, methane reduction, seaweed farming, agri-food strategy and nuclear power communication.[12]

Seeds of Science, Asia 2.0, further expanded the model in 2026. The programme offered grants of up to AUD 15,000 for workshops, training, focused advocacy and broader activities at the institutional or national level, while opening participation to Australian collaborators.[13] This development strengthens the Asia-Australia science-policy landscape and supports comparative learning. It also shifts the programme from supporting isolated events towards cultivating portfolios of activity that can influence institutions, professional practices and national conversations. The metaphor of seeds is therefore appropriate: the purpose is not merely to finance an event, but to create conditions from which durable advisory relationships can grow.

A Form of Science Diplomacy from the Ground Up

The programme also contributes to science diplomacy. Conventional accounts often focus on negotiations among states or international agreements, but diplomacy also depends on networks that build trust before a crisis. Grassroots projects create horizontal relationships among scientists, communities, officials and organisations within countries, while INGSA-Asia and the International Science Council connect these actors across borders. Local experience can travel through the regional network, and international principles can be translated into locally legitimate practice. This movement in both directions is a form of science diplomacy from the ground up because it connects domestic evidence systems with regional cooperation without removing the authority of local actors.

The value of this distributed approach is especially clear in a region where science advice cannot be separated from the political context. Advisory systems differ in proximity to government, public trust, institutional continuity and the perceived neutrality of experts.[6] A regional platform cannot erase these differences, but it can help practitioners recognise them and choose suitable strategies. Some settings require close work with ministries, while others benefit from independent academies, civil society organisations, journalists or professional networks. By supporting multiple entry points, INGSA-Asia strengthens the resilience of the wider advisory ecosystem rather than relying on a single office or individual.

The next phase should retain three principles. First, every funded activity should begin with a clearly defined policy user and a decision that can realistically be informed by evidence. Second, mentorship should extend beyond event design to include policy briefs, follow-up meetings, stakeholder mapping, and institutional uptake. Third, the evaluation should examine not only attendance and satisfaction but also changes in relationships, advisory skills, policy demand, and the use of recommendations over time. These measures would preserve the accessibility of the grassroots model while improving evidence about impact.

INGSA-Asia has shown that regional science advice capacity can be built through carefully supported local action. The Grassroots Science Advice Promotion Awards created an entry point for practitioners who understood a problem but needed resources, guidance and policy connections. Seeds of Science, Asia has enlarged that foundation through stronger partnerships, larger grants, co-designed applications and wider regional reach. The enduring role of INGSA-Asia is to connect these local experiments, help them learn from one another and convert temporary engagement into lasting advisory capability. In a period of complex risks and fragmented trust, planting evidence where policy happens is not peripheral to science diplomacy; it is one of the most practical ways to sustain it.

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