

IAI Strategic Plan Success Indicators and Metrics

The 27th meeting of the Conference of the Parties (Brasilia, Brazil) adopted Decision XXVII/12 on the 25-year Strategic Plan to guide the IAI's activities from 2019 – 2044. In addition to updating the IAI's Vision and Mission, the Strategic Plan outlines steps to (i) ensure that the IAI's activities are in concordance with the Agreement establishing the IAI⁴, (ii) direct IAI transdisciplinary science towards solving sustainability challenges in the Americas, and (iii) ensure the sustainability of the IAI as an organization. It builds on the previous 25 years of science and capacity building on Party-driven goals, objectives, and actions.. Collectively, the actions outlined in the Strategic Plan build on one another, through time, to help the organization to continue as a leader in the region, to support Parties in achieving sustainability goals and to work towards creating a path for the Americas to be equitable, informed, and thriving.

To meet the goals and objectives outlined in the Strategic Plan, progress towards successfully completing actions and achieving objectives must be assessed. Indicators and metrics are needed to collectively learn what is working and what is not, to assess progress, and to measure and communicate the impact of the IAI. The Strategic Plan states in Theme I, Goal 1, objective iii, action a, that: The Directorate, with the support of the Science Advisory Committee (SAC) and Science-Policy Advisory Committee (SPAC), will develop indicators to measure the success of objectives and actions.

To fulfill the need for developing indicators for the Strategic Plan, a process to identify both Key Performance Indicators (KPIs) and leading and lagging metrics commenced in the 2020- 2021 intersessional period. A subcommittee of the SAC/SPAC and the IAI Directorate met weekly to co-develop metrics and indicators for the entire SAC/SPAC and Directorate to review and accept, and to present to the Parties at CoP-29 for review and approval.

The indicators and metrics will serve as a basis for the Directorate to report to the Parties on the activities, progress, and successes of the institution annually at the Conference of the Parties for the three Themes in the Strategic Plan. Note that Theme II Science for the Sustainability of the Americas, has indicators and metrics that are in common for all eight goals.

Definitions: KPIs evaluate organizational performance, assist in trend analysis, promote continuous improvement and proactive performance, and allow for transparent management of processes and staff. They are usually expressed at the level of objectives and synthesize the leading and lagging metrics for that objective.

Leading metrics are more difficult to measure (but easy to change) and measure the actions that lead to results, such as the number of unique website visitors per month or the number of attendees on a webinar. In other words, leading metrics lead to lagging metrics.

Lagging metrics are easy to measure (but more difficult to change), since they are outputs or results , such as the number of STeP fellows gained per year or percentage of female principal investigators who responded to a call for proposals.

⁴ http://www.iai.int/en/structure/institutional_documents#establishment

Revision Cycle: The Strategic Plan is to be revised every three to six years to align with the tenure of the IAI Executive Director⁵. As such, the indicators and metrics are also subject to review every three to six years, or more frequently if recommended by the Strategic Planning subcommittee.

IAI DRAFT KEY PERFORMANCE INDICATORS

Calls for proposals:

KPI 1: The IAI, along with key partners, has annually supported new and existing cooperative, interdisciplinary, open-source projects on aspects of global change.

KPI 2: 20% or more of peer reviewed projects funded/sponsored by the IAI that focus on interdisciplinary (ID) or transdisciplinary (TD) science include representation from underrepresented groups as members of the research teams.

KPI 3: Successful proposals are chosen due to their regional relevance, regional distribution, ID/TD aspects, scientific merit, compliance with the IAI gender policy, and inclusion of underrepresented groups.

KPI 4: IAI projects, capacity building, and other activities address critical information gaps in one or more Goal in Theme II.

Fundraising:

KPI 5: The IAI endowment fund grows by 2% annually.

KPI 6: 10% of amount in endowment fund is from donors (non-public) and foundations.

KPI 7: 5% of IAI projects and activities have support and/or participation from donors, development banks or non-Party states outside the region.

KPI 8: Amount in USD from Directorate staff led proposals is equal to or greater than USD 2 million.

Open data/data management:

KPI 9: New IAI data (upon publishing) is open to Parties and researchers via the IAI open data portal within two months of publishing or twelve months after the completion of the project (whichever comes first).

KPI 10: All IAI sponsored projects include metadata, have registered their data on the IAI open data portal, and follow the guidelines issued by the IAI on curating and administrating their data by the first annual report and annually thereafter.

KPI 11: The IAI open data portal is an open rich data resource for countries in the Americas and elsewhere.

Informing Parties:

⁵ The next Strategic Plan revision will take place in 2023.

KPI 12: As a result of the IAI, Parties have improved scientific and technical capabilities and research infrastructure.

KPI 13: Party Focal Points are more aware of IAI-supported science and how it may have contributed to the development of public policies per Article II, paragraph (f) of the Agreement.

KPI 14: Focal Point fidelity is strengthened, and integration and partnership between the IAI and Parties is improved.

Capacity building:

KPI 15: The proportion of early-career scientists, women, and other underrepresented groups increases annually in the Region's science-policy interface through IAI capacity building initiatives.

Research Centers/Affiliates/Associates:

KPI 16: The IAI is comprised of an active and robust network of Institute Research Centers, Affiliate Research Institutions, and Associates as outlined in the Agreement Establishing the IAI.

Understanding Parties' priorities through regional assessment:

KPI 17: At least 50% of Parties participate actively in the regional assessment processes leading to the development of IAI projects and activities.

KPI 18: The actions and activities of the IAI are targeted towards the science information needed by Parties to make informed decisions around global change issues.

Science priorities/monitoring success:

KPI 19: By 2044, the IAI can demonstrate measurable impact that its research had on the region in addressing one or more of the following: poverty and equality, food security, water security, energy security, climate action, human health and wellbeing, biodiversity and ecosystem services, and clean air, water and soil.

KPI 20: IAI efforts contributed to the Parties' understanding of long-term trends related to Goals in Theme II.

Communications:

KPI 21: Awareness of the IAI is increasing across the Americas. Number of new inquiries about the IAI from new potential partners increases 5% annually.

KPI 22: Communication capacity is built within the Directorate as indicated by the annually increasing number of website news items, social media posts, numbers of new followers, website visits, etc.

Growing the IAI:

KPI 23: New Parties join the IAI and ratify the treaty.

KPI 24: The IAI serves as a boundary organization to facilitate networks in the region and to foster collaboration across the various activities already occurring in the region.

IAI DRAFT METRICS

Calls for proposals:

Leading Metric 1: A proposal is written and submitted to a global funding agency to fund ID and TD research to assist the Parties in advancing understanding of global change issues.

Lagging Metric 1: The proposal has been funded and projects/activities are underway.

Leading Metric 2a: The IAI Peer Review White paper is available on the IAI website.

Leading Metric 2b: A transparent peer-review process is established and approved by the IAI.

Lagging Metric 2: A transparent peer-review process has been implemented.

Leading Metric 3: The invited peer review committees have gender diversity, wide representation of academic disciplines including from the social and economic sciences, are regionally balanced, and include Indigenous Peoples and other underrepresented groups.

Lagging Metric 3: The annual number of well-balanced peer review committees organized by the IAI.

Leading Metric 4a: Calls for proposals focus on ID and TD science and include elements that address the needs of underrepresented groups.

Leading Metric 4b: Contracts contain a clause where investigators have to describe the process of how the project will include underrepresented groups from inception to implementation.

Lagging Metric 4: The annual number of funded projects that focus on ID and TD science and that address the needs of underrepresented groups.

Leading Metric 5a: Transdisciplinary guidance is expressed clearly in the calls for proposals.

Leading Metric 5b: The IAI provides training for transdisciplinary research as part of grant process.

Lagging Metric 5: The annual number of initiatives requiring transdisciplinary components of research.

Leading Metric 6a: Calls for research proposals address the Goals and Objectives in Theme II as prioritized by the Parties and recommended by the SAC/SPAC.

Leading Metric 6b: Research proposals must clearly identify the Goals and Objectives chosen for the RFP.

Lagging Metric 6: The number of proposals that the IAI received, submitted, or collaborated on proposals that directly target Goals and Objectives in Theme II.

Fundraising:

Leading Metric 7: Charitable tax exemption granted to the IAI.

Lagging Metric 7: Minimum of 10 million USD in contributions was received by 2024.

Leading Metric 8: Major donors, development banks and non-Party States outside the region establish partnerships with the IAI.

Lagging Metric 8: Annually, cooperative agreements are established or extended with a minimum of 2 donors, development banks or non-Party states outside the region.

Leading Metric 9: Number of proposals drafted by Directorate staff equals or exceeds number of professional staff.

Lagging Metric 9: Minimum 20% of Directorate staff led proposals are successful.

Leading Metric 10: The IAI Directorate participates in a minimum of 1 CRA per Belmont Forum CRA funding cycle as a result of the establishment of a flexible funding mechanism for the Americas.

Lagging Metric 10: American researchers receive support from a minimum of 1 CRA per Belmont CRA funding cycle.

Open data/data management:

Leading Metric 11: Contracts on IAI projects include an explicit clause on the requirement to tag project data with metadata and register the data on the IAI open data portal and to publish in open access journals and/or pre-print servers. Exceptions in the IAI guidelines will be made for sensitive data such as, but not limited to, personal data, species data which may lead to over harvesting or illegal trade in species, confidential data, etc.

Lagging Metric 11a: Data from IAI projects are tagged with metadata and indexed by the major indexing engines and data curating guidelines are published to assist Principal Investigators in the custodianship and administration of their data.

Lagging Metric 11b: Number of times, and from which countries, data portal is accessed on website.

Lagging Metric 11c: The IAI Directorate encouraged researchers in IAI projects and activities to publish in open access journals and to use preprint servers.

Informing parties:

Leading Metric 12: A plan to enhance knowledge transfer through mentoring early career scientists in the Americas is drafted.

Lagging Metric 12: The number (or percentage) of knowledge transfer opportunities through mentoring early career scientists implemented and evaluated.

Leading Metric 13: Scientific research projects are underway and providing timely and satisfactory performance reports.

Lagging Metric 13: Final results from scientific research projects have been presented at the Conference of the Parties.

Leading Metric 14: Directorate Staff ask all funded science projects to submit project briefs.

Lagging Metric 14: Project briefs have been completed and are available on the website.

Leading Metric 15: The IAI and partners organize a minimum of 2 workshops on priority topics (see Theme II) and priority locations every year. At least three Party Focal Points are invited to attend.

Lagging Metric 15a: At least two workshops have been held on two topics.

Lagging Metric 15b: Participation included a diversity of Parties attended with wide regional representation. Stakeholders, including local government officials, from IAI-supported projects attended and met with their national Focal Points.

Leading Metric 16: The Directorate plans a Focal Point engagement strategy based on election cycle, current engagement, and priority areas.

Lagging Metric 16: The Focal Point engagement strategy is complete and has been used to inform activity planning by the Directorate.

Leading Metric 17: At least two communication exchanges between researchers and Parties are initiated per year.

Lagging Metric 17: Two novel communication exchanges between researchers and Parties have been executed.

Capacity building:

Leading Metric 18: The IAI has fosters/supports capacity building initiatives through joint and collaborative research (TD), with partners, and the STeP Program in Latin America, including but not limited to webinars, workshops, seed grants, small grants, and internships.

Lagging Metric 18a: Number of countries and people (including early career) that have benefitted from IAI's capacity building and collaborative efforts.

Lagging Metric 18b: Number of capacity building events held per year.

Leading Metric 19a: During each intersessional period, the Directorate in collaboration with the SAC and SPAC identifies opportunities for financial support and possible collaboration with senior researchers to mentor or work with early career scientists through capacity building initiatives.

Leading Metric 19b: In each intersessional period, a list has been compiled on possible sources of financial support, collaborations, and senior scientists to facilitate capacity building programs.

Lagging Metric 19: Number of matches/partnerships made between senior and early career scientists each year.

Leading Metric 20: The IAI Directorate and Parties develop a minimum of 2 outreach and capacity building activities every year.

Lagging Metric 20b: At least two outreach and capacity building activities were held each year with a diversity of Parties with wide regional representation in attendance. Stakeholders, including local government officials, from IAI-supported projects (including capacity building trainees and seed grantees) attended and met with their national focal points.

Research Centers/Affiliates/Associates

Leading Metric 21: The Parties present arguments in support of the establishment of research programs as Institute Research Centers.

Lagging Metric 21: New Institute Research Centers have been identified and the Directorate is working to establish Memoranda of Understanding.

Leading Metric 22a: The Directorate submits requests to the Parties to identify institutions that may meet the criteria to become Affiliated Research Institutions and Associates of the IAI.

Leading Metric 22b: Institutions and organizations submit proposals/projects to become an Affiliated Research Institution or an Associate of the IAI.

Lagging Metric 22: New Affiliate Research Institutes and Associates joined the IAI.

Understanding Parties' priorities through regional assessment:

Leading Metric 23a: The Directorate develops an assessment template in collaboration with the SAC/SPAC and undertakes a comparative analysis on actions necessary to implement national priorities.

Leading Metric 23b: The Directorate undertakes a comparative analysis for actions necessary to implement national priorities.

Lagging Metric 23: The Directorate, with feedback from the SAC/SPAC, has completed an initial comparative analysis to identify actions to prioritize IAI's and Parties' needs in the form of a regional assessment.

Leading Metric 24: The Directorate identifies and plans at least one focused science-policy workshop per year with the intent of identifying regional science gaps needed for the development of more effective public policy.

Lagging Metric 24: At least one science-policy workshop per year, reaching at least 10 people, has been implemented with the intent of transferring regional science to policy makers targeted at actual policy challenges.

Science Priorities:

Leading Metric 25: The IAI focuses efforts related to regional support and cooperation on global change research considering the scientific objectives under Theme II and the science agenda.

Lagging Metric 25: Number of collaborative initiatives that have been implemented which promote objectives under Theme II (Call for proposals, small grants, workshops etc.).

Leading Metric 26: Science capacity building initiatives, workshops, and other IAI activities are designed to be in line with the prioritized Goals and Objectives in Theme II.

Lagging Metric 26a: Science capacity building initiatives, workshops, and other IAI activities can be clearly linked to at least one Goal in Theme II.

Lagging Metric 26b. 27: Outputs from IAI funded research projects are tracked annually, including, but not limited to, the number of publications, number of early career scientists trained, impacts on policy, and number outreach/dissemination efforts.

Monitoring success:

Leading Metric 27: Support, facilitate, and engage with national and regional periodic assessments to track progress and trends in the Americas as they relate to the Goals and Objectives in Theme II.

Lagging Metric 27: The IAI has contributed to and engaged with national and regional assessments in order to identify trends and measure the impacts of management actions.

Leading Metric 28: The research supported by the IAI mandates that the investigators monitor and evaluate the effectiveness of their research in informing policy and/or meeting project objectives.

Lagging Metric 28: IAI-supported investigators have been reporting regularly on the impacts of their research on the global change challenges they are seeking to address.

Leading Metric 29: The IAI continually explores opportunities for partnering with other organizations for regional or global monitoring or surveillance efforts as they relate to the

prioritized Goals and Objectives in Theme II, in order to ensure the information needed to establish baselines, and detect and investigate the causes of trends, as well as their impacts.

Lagging Metric 29: The IAI has facilitated a regional monitoring strategy for the America incorporating global, regional and local data.

Leading Metric 30: The IAI identifies ways to collect information on how the Institute is meeting the Goals and Objectives in Theme II (e.g., how many projects are aligned with the IAI Gender Policy and considers diversity, Indigenous Peoples, local communities, and the poor).

Lagging Metric 30: A transparent and simple process is in place for the IAI to collect important demographic information and to ensure that projects are addressing the Goals and Objectives in Theme II.

Leading Metric 31: The Directorate creates a questionnaire for Parties and other relevant stakeholders to assess the quality of research funded by the IAI (both baseline and follow up).

Lagging Metric 31: The follow-up research questionnaire has been collected and analyzed, and there is an understanding of the perceived quality of the IAI research.

Communication:

Leading Metric 32: The Directorate communicated its activities regularly through official notifications, web postings and social media. Parties, SAC, SPAC, investigators and partner organizations are encouraged to disseminate throughout their networks.

Lagging Metric 32: Number of communications shared equals/or is greater than the number of activities.

Leading Metric 33: The Directorate created a PowerPoint template and press-kit of outreach material with IAI logo, background information, brochures, pamphlets featuring IAI projects and initiatives (SGP, STeP, general).

Lagging Metric 33: The Directorate disseminated a communication "press kit" to focal points, SAC/SPAC, Associates, and PIs.

Leading Metric 34: The IAI Directorate meets to review and update the communication strategy, needs, and priorities.

Lagging Metric 34: The IAI has implemented its communication strategy and has explored the option to hire a communications professional.

Leading Metric 35: The Directorate has identified five topics for press release per year, plans to post once per week on social media.

Lagging Metric 35: At least one media outlet has picked up each IAI press release for publication per year, the IAI has an increase of 5% followers on social media with an increase of 5% reposts, and the IAI website has an increase of 5% annual visitors and an increase of 5% from countries in the region.

Growing the IAI:

Leading Metric 36: The IAI Directorate engages with a minimum of two potential new Parties.

Lagging Metric 36: By 2023, at least one non-Party state has ratified the Agreement.

Leading Metric 37: By August of each year the IAI team begins to identify opportunities for fundraising and project support.

Lagging Metric 37: The Directorate has executed an annual work plan that outlines goals for contributions via fundraising and project support is based on the Strategic Plan, regional assessment, and other priorities indicated by the Parties at the CoP.

Leading Metric 38: The IAI Directorate reaches out to relevant regional organizations to discuss south-south collaborations across its networks and plans to hold at least one joint session at a global conference to feature voices from the "Global South."

Lagging Metric 38: The IAI and relevant regional organizations have convened at least 1 joint sessions at global conferences to feature transdisciplinary and stakeholder engagement case studies and lessons learned from the Global South (LAC, Africa and Asia).