

CGIAR System Board
 18th meeting, Virtual
 Monday 23 November 2020, 15:00 – 18:00 Paris time

[Process to develop 2022-24 Investment Plan and CGIAR Initiatives](#)

Distribution Notice:	May be shared without restriction
Agenda Item	2: One CGIAR – Matters for decision
Purpose:	To lay out the process, roles and responsibilities for the development of CGIAR 2022-24 Investment Plan and its set of CGIAR Initiatives – the key vehicles for delivery of CGIAR research and innovation.
Document pathway:	This document has been prepared by the System Organization, with input and review from the Executive Management Team and the Transition Program Management Unit. It builds on earlier documentation from the System Reference Group, the Funder workshop at Eschborn, and the Independent Science and Development Council (‘ISDC’) on principles for CGIAR Initiatives. The process proposed in the document is designed to fit with the Performance and Results Management Framework that is submitted at the same time to the System Board. The CGIAR Initiative submission template has been reviewed by the ISDC.
Details of the Board’s last deliberations on this matter:	The System Board held an initial discussion of the proposed Investment Plan and process during an ad hoc call on 7 October 2020, during which the Board provided strategic guidance to inform its development.
Requested action:	For endorsement, in advance of submission to the System Council for its strategic steer on the modality to take development forward.
Draft decision point:	Pursuant to Article 8.1 z) of the Charter of the CGIAR System Organization, the CGIAR System Board <u>endorses</u> the process to develop the 2022-24 Investment Plan and CGIAR Initiatives for submission to the System Council for its guidance.
CGIAR Risk Management Framework linkages:	<p>Risk Family 1: CGIAR is no longer a front runner</p> <p>Critical Success factors:</p> <ul style="list-style-type: none"> • Compelling shared research agenda reinforces Funder commitments • CGIAR Science is relevant and cutting edge • Seizing the "next important thing" gives sustainable competitive advantage • CGIAR's research agenda aligns with international community priorities <p>Risk Family 2: CGIAR loses its central role in Agricultural Research for Development</p> <ul style="list-style-type: none"> • CGIAR a desired and supportive partner

Process to develop 2022-24 Investment Plan and CGIAR Initiatives

- Diversity and predictability of funding maintains CGIAR as a global player
 - Research activities are well deployed and coordinated in target countries
 - Risk Family 5: Poor execution undermines capability
 - Adequate use of intellectual property and licensing tools maximizes accessibility and/or impacts including via the production of International Public Goods.
 - Top talent is attracted to and retained by the CGIAR and Centers
 - CGIAR System adds significant value to outweigh related costs and constraints
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Issue date: 19 November 2020

Supporting documents for this meeting: SB18-02bii - 2022-24 Investment Plan Outline

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Process to develop 2022-24 Investment Plan and CGIAR Initiatives

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Purpose and scope

1. The purpose of this document is to lay out the process for the development of CGIAR 2022-24 Investment Plan and its set of CGIAR Initiatives, the key vehicles for delivery of CGIAR research and innovation.
2. The document is a companion document to the 2022-24 Investment Plan, and may also be used to inform development of the 2025-27 and 2028-30 Investment Plans.

Definitions

3. A CGIAR Investment Plan sets out a prospectus of CGIAR research and innovation for support through pooled funding, including a proposed budget envelope and sequenced set of CGIAR Initiatives within each Action Area. Each Investment Plan covers a 3-year timeframe and will be prepared once every three years but may be updated more regularly under the direction of the System Council, as new priorities arise.
4. CGIAR Initiatives are the main vehicle for delivery of research and innovation by CGIAR. They are major, prioritized areas of investment that will bring capacity from within and without the System to bear on well-defined major problem statements to deliver across five CGIAR impact areas. They state quantitatively what impacts and outcomes they intend to achieve, by when, and then work backwards to generate compelling theories of change, activities and resource requirements. They come with evaluable results frameworks and clear reporting of results against investment. Initiatives may be targeted at global, regional or country levels.

Principles for CGIAR Initiatives

Principles for origination of ideas

5. Elicitation of ideas for CGIAR Initiatives will be based on a combination of bottom-up crowdsourcing of ideas from across CGIAR and top-down priority-setting within each Action Area, using the first stage of the template shown in Annex 1.
6. The goal is to draw widely on innovative thinking while also ensuring that the CGIAR portfolio is designed to address global, regional and national challenges as effectively as possible.
7. Processes for both mechanisms will be under the leadership of Science Group Directors, informed by the Investment Advisory Groups and by the Impact Area Leads.
8. Ahead of the recruitment of Science Group Directors and the Investment Advisory Groups, these processes will be led by the Executive Management Team.
9. Processes for bottom-up crowdsourcing of new ideas will be kept as simple and accessible as possible.
10. Processes for priority-setting, the top-down complement to crowdsourcing, will be nested. The 2030 Research & Innovation Strategy level will provide a broad framing. The Action Area level will identify evidence-based global and regional priorities for investment based on likelihood of

positive impact across the 5 Impact Areas. The CGIAR Initiative level will identify specific priorities relevant to the Initiative, such as geographies, farming systems, or scientific methods. At each nested level, a more detailed level of priority-setting is expected, based on both scientific evidence and advice from stakeholders and investors, following the triangulation principle laid out in Figure 1 below. Action Areas and CGIAR Initiatives will not be expected to use the same priority-setting tools.

Principles for design

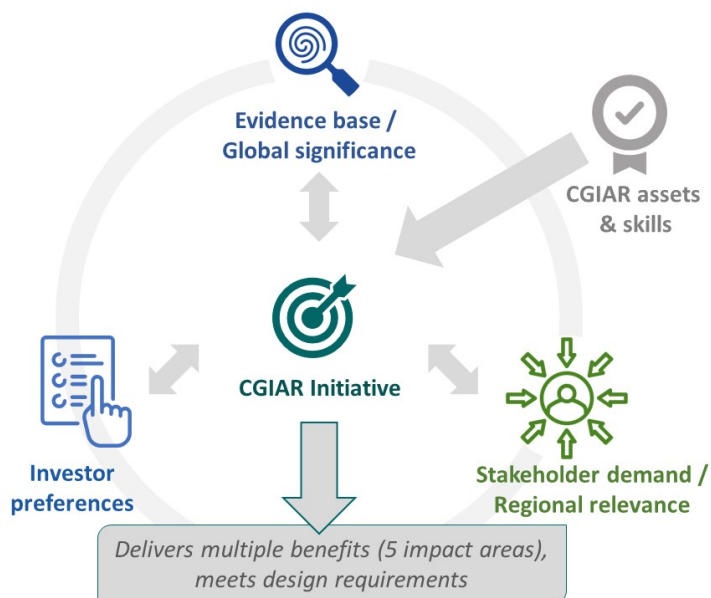
11. CGIAR Initiatives must be designed to meet the criteria laid out in the prioritization steps agreed by System Council in November 2019, the ISDC Quality of Science for Development framework, the seven key implementation approaches identified in the CGIAR 2030 Research and Innovation Strategy, the features of CGIAR Initiatives agreed by System Council in November 2019, and the Eschborn principles. These criteria and design principles are provided in Annexes 2 and 3.
12. CGIAR Initiatives are participatory by design: commissioned by the Executive Management Team, co-created by Initiative Design Teams, advised by multi-stakeholder Investment Advisory Groups, drawing on consultations at national and regional levels, independently assessed under a process overseen by the Independent Science and Development Council, endorsed by the System Board and approved by the System Council.

Principles for identification and sequencing within the 2022-24 Investment Plan

13. Concepts for CGIAR Initiatives will be elicited via non-competitive targeted calls from EMT.
14. Identification and sequencing of CGIAR Initiatives will occur in the development of the Investment Plan.
15. Identification is the choice of Initiatives to include in the Investment Plan prospectus.
16. Sequencing is the recommended order in which the Initiatives should be funded, based on the logic of multiple issues including importance, urgency, follow-on from previous investments, availability of funds.
17. Identification and sequencing will be based on a principle of triangulation.
18. Triangulation will consider *global significance*, based on scientific evidence, *regional relevance*, based on consultation and evidence of stakeholder demand, and *investor preference*, based on evidence of support for financing (Figure 1).
19. Eligible CGIAR Initiatives will also need to demonstrate why and how the partnership arrangements will deliver a unique or more cost-effective set of results compared to other credible partnerships or service providers, and how they will leverage CGIAR assets and skills appropriately (comparative advantage). Critically, it will be mandatory for all CGIAR Initiatives to aim for a set of credible, quantified, interdependent benefits across all 5 Impact Areas, including an appreciation of trade-offs (Figure 1).
20. As with priority-setting, identification and sequencing of CGIAR Initiatives will combine both *deliberative processes*, drawing on advisory groups and wider consultations, and *technical*

aspects, based on scientific evidence and carried out using tools such as expert review, Delphi processes or modelling.

Figure 1. Triangulation principle for identification and sequencing of elements of CGIAR portfolio



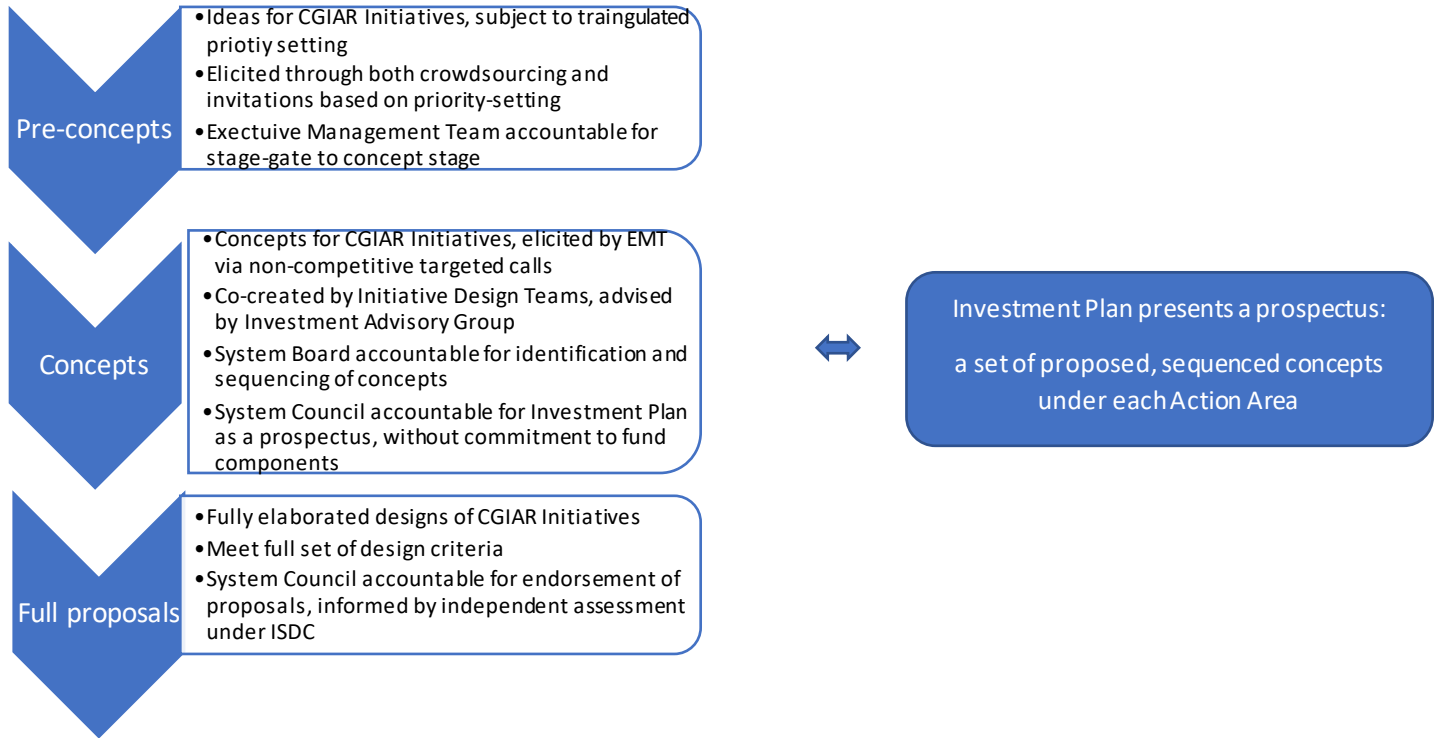
Process for the 2022-24 Investment Plan and nested CGIAR Initiatives

Overview

21. The processes for development of an Investment Plan and CGIAR Initiatives are closely linked (Figure 2).
22. The key purpose of an Investment Plan is to present sets of ‘concepts’ for CGIAR Initiatives, arranged into a prospectus grouped according to the 3 Action Areas– with the 5 Impact Areas running across all concepts.
23. The ‘concept’ is a midway point in design, designed to be detailed enough to allow for presentation of a set of ideas for investor consideration at the three levels of CGIAR Initiative, Action Area and prospectus of CGIAR Initiatives, with aggregation of intended benefits and impacts at each level, associated with a budget envelope.
24. The RASCI table in Table 1 maps parties responsible (R), accountable (A), supportive (S), consulted (C) and informed (I) with regard to the 2022-24 Investment Plan and the stages of pre-concept, concept and full proposal development for CGIAR Initiatives.
25. The timeframe for the 2022-24 Investment Plan is for initial submission in the second quarter of 2021, with opportunity for revision before the end of the 2022-24 business cycle under the direction of the System Council (Figure 3).

26. The timeframe for CGIAR Initiatives will be continuous development, with staggered approvals and start dates. The first round of fast-track Initiatives will be ready to launch in January 2022.

Figure 2. Relationship between Investment Plan and stages of CGIAR Initiative development



Process to develop 2022-24 Investment Plan and CGIAR Initiatives

Table 1. RASCI table to map parties responsible (R), accountable (A), supportive (S), consulted (C) and informed (I) with regard to an Investment Plan and the stages of pre-concept, concept and full proposal development for CGIAR Initiatives

Group/body → Component/stage ↓	SC	SB	ISDC	EMT	SGD	IAG	IAG tech team	CGIAR country teams	Regional partners	Initiative partners	Initiative design team	Impact Area lead
INVESTMENT PLAN	A	A	I	R	S	C	I	I	I	I	I	I
PRE-CONCEPT												
<i>Crowd-in new ideas</i>					R	R	S	S	C			
<i>Create ideas</i>										S	R	
<i>Stage-gate: yes no to concept stage</i>	I	I		A	R	C	S	I		I	I	C
CONCEPT												
<i>Commission</i>				R	S							
<i>Consult in-region</i>								S	C	S	R	
<i>Theory of change</i>										S	R	C
<i>Projected benefits</i>							R					
<i>Design & write</i>						C				S	R	
<i>Stage-gate: yes no to full proposal stage</i>	I	A	I	R	S	C	I	I	I	I	I	C
FULL PROPOSAL												
<i>Commission</i>				R	S							
<i>Consult in-region</i>								S	C	S	R	
<i>Co-design</i>					S	C				S	R	
<i>Write proposal</i>										S	R	
<i>Independent assessment</i>	A		R		S	I				I	I	
<i>Stage-gate: yes no to implementation stage</i>	A	R	C	S	S	I	I	I	I	I	I	I

Key:

SC	System Council
SB	System Board
ISDC	Independent Science and Development Council
EMT	Executive Management Team
SGD	Science Group Director
IAG	Investment Advisory Group
IA Lead	Impact Area Lead

Development of the 2022-24 Investment Plan

27. The key process in the development of the Investment Plan is identification and sequencing of CGIAR Initiatives – see principles above for definitions.
28. The Executive Management Team is responsible for the identification and sequencing of CGIAR Initiatives to propose to the System Board and System Council, drawing on the advice of Science Group Directors, Impact Area Leads and multi-stakeholder Investment Advisory Groups (and later also from Investment Panels, which will comprise Executive Management Team, Science Group Directors, Impact Area Leads and top-level Finance Head/Director).
29. Science Group Directors will use the triangulation principle outlined above and draw on technical tools, stakeholder consultations and deliberative processes with the Investment Advisory Groups to make a proposal to the Executive Management Team.
30. Science Group Directors will similarly be responsible for design and execution of regularly updated priority-setting at the Action Area level, to inform the identification and sequencing of CGIAR Initiatives and more generally to provide a robust justification for key areas for investment.
31. Additional activities in the development of the Investment Plan will be under the leadership of the Science Group Directors and are as follows: integration that connects and leverages the proposed CGIAR Initiatives within an over-arching logic and theory of change, development of overall target funding range for pooled funding for the Action Area, synthesis of ex ante projected benefits across 5 Impact Areas for the full prospectus, synthesis of major intended results by region and at global level, and oversight of key partners and partnerships across the Action Area.
32. Ahead of the recruitment of the Science Group Directors, the Investment Advisory Groups will fulfill these roles.

Development of CGIAR Initiatives

33. There are three stages of design: pre-concept, concept and full proposal, separated by decision gates. The stages are designed to meet the needs of each stage gate.
34. Annex 1 lays out the expected level of detail at each stage of design; the text here is only fully understandable in reference to Annex 1.
35. Pre-concept stage: Initial submission of ideas, designed to be a low-cost undertaking with low barriers to entry for proponents of Initiatives. Science Group Directors responsible for using both priority-setting and crowdsourcing to elicit a strong set of ideas, and to screen these ideas to put forward a long-list or short-list to the Executive Management Team, who will be accountable and act as gatekeepers for the pre-concepts to progress to the concept stage.
36. Concept stage: Development of CGIAR Initiative designs to the point at which assessment is possible against key design principles and criteria. Unlike the pre-concept stage, preparation of the concept will need time and resources. Important time-intensive and resource-intensive requirements for the concept stage are stakeholder consultation and priority-setting; there is also a requirement for ex ante projection of benefits, for which a relatively low-cost tool is

under development. The System Board will be accountable and act as gatekeepers for concepts to progress to the full proposal stage.

37. Full proposal stage: This stage adds the detail and assurance required for release of a 3-year grant, and is expected to be a time-intensive (but not otherwise a resource-intensive) stage. The System Council will be accountable and act as gatekeepers for the full proposals to be approved for a 3-year grant, subject to availability.
38. Independent assessment of CGIAR Initiatives will happen at the concept stage rather than at the full proposal stage, to maximize effectiveness and efficiency in decision-making.
39. Independent assessment will be overseen by the Independent Science and Development Council.
40. Initiatives will be developed using a common template (Annex 1), which allows for progressive additions of information at each stage; the templates will be managed by a CGIAR performance and results management team.
41. Initiative design will allow for variation among CGIAR Initiative designs in terms of objectives, activities, theories of change, partnerships, metrics, management modalities and financing, but using a common set of systems for compliance to CGIAR policies and for financial and results reporting.
42. The full process of CGIAR Initiative design is expected to take six months in the case of ‘fast track’ concepts based on already well-advanced participatory design, including six weeks for independent review (Figure 3).
43. The timeframe will be considerably longer for new ideas and concepts for which a more substantial period of consultation, partnership-building and co-creation is required.
44. CGIAR Initiatives approved by the System Council will be awarded a 3-year grant, subject to availability of funding.
45. The RASCI table in Table 1 gives a more detailed description of parties responsible, accountable, supportive, consulted and informed at the stages of pre-concept, concept and full proposal development for CGIAR Initiatives.

Investment Advisory Groups

46. Each Science Group will convene an Investment Advisory Group for its Action Area.
47. The role of the Investment Advisory Groups is advisory. Ahead of the recruitment of the Science Group Directors, the Investment Advisory Groups will be responsible for their roles.
48. Investment Advisory Groups will advise on crowding-in of new ideas, priority-setting, identification and sequencing of CGIAR investments at both pre-concept and concept stages, and design of CGIAR Initiatives – for each Action Area.
49. Terms of reference for the Investment Advisory Groups will be developed.

50. Membership will comprise representatives from the following categories: System Council members, System Board members, regional stakeholders, subject matter experts and senior CGIAR staff.
51. Members will cover expertise across the Impact Areas, to enable the Action Area to better deliver a wide set of benefits and impacts; Impact Area Leads will advise on membership to ensure that all 5 Impact Areas have representation.
52. Science Group Directors will chair the Investment Advisory Groups.
53. The total membership of an Investment Advisory Group will be limited to 12 people including the Chair.
54. Ahead of the appointment of the Science Group Directors, each Investment Advisory Group will have a dedicated technical team, responsible for supporting the Investment Advisory Group's content and process, including managing and commissioning all technical inputs, and providing support to meeting agendas and minutes.
55. The technical team will be managed by two senior scientists with differing expertise that reflects the breadth of the Action Area and the Impact Areas.

Initiative Design Teams

56. Each Initiative will be designed by a time-bound Initiative Design Team, commissioned by a Science Group Director or Investment Advisory Group.
57. The Initiative Design Team will be responsible for all aspects and phases of design of the Initiative, and for meeting common design requirements and tools across CGIAR Initiatives (Annex 1) as well as original aspects of design unique to the Initiative.
58. The designated lead of the Initiative Design Team will interact regularly with the Science Group Director and the Investment Advisory Group, to report progress and seek advice.
59. Membership of the Initiative Design Team may include CGIAR staff and others, including prospective implementing partners, Funders and external experts. To avoid conflicts of interest, there will not be overlap in membership of Initiative Design Teams and Investment Advisory Groups.
60. The CGIAR performance and results management team responsible for management of processes, tools, templates and protocols for submission of CGIAR Initiatives will provide information and support to the Initiative Design Teams.

Timeline for development of the 2022-24 Investment Plan

61. Figure 3 provides the timeline for the development of the 2022-24 Investment Plan, indicating roles of different bodies, aligned with the RASCI table (Table 1).

Process to develop 2022-24 Investment Plan and CGIAR Initiatives



Figure 3. Timeline for production of 2022-24 Investment Plan and CGIAR Initiatives

Annex 1. CGIAR Initiative submission templates

Notes:

- All CGIAR Initiatives will be proposed using this template.
- There are three stages of design: pre-concept, concept and full proposal, separated by decision gates.
- There are progressive additions to the submission template at pre-concept, concept and full proposal stages; each new stage will incorporate the information from the previous stage, with the opportunity to update and expand as needed.
- The template is designed to provide, at the full proposal stage, all relevant information for assessing whether a CGIAR Initiative meets four sets of proposed criteria: the prioritization steps agreed by System Council, the ISDC Quality of Science for Development framework, the features of CGIAR Initiatives agreed by System Council, and the Eschborn principles. These criteria are provided in Annexes 2 and 3.
- The template is designed to give 'necessary and sufficient' information, avoiding any excess information that will not be used for one or more specific purposes of screening, assessment, sequencing, approval, compliance, contracting, and setting baselines for performance and results management.
- The template is designed to allow for variation among CGIAR Initiative designs in terms of objectives, activities, theories of change, partnerships, metrics, management modalities and financing, but using a common set of systems for compliance to CGIAR policies and for financial and results reporting.
- All submissions will be made online for purposes of transparency and information management.

Process to develop 2022-24 Investment Plan and CGIAR Initiatives

<i>Item</i>	<i>Description</i>	<i>Format</i>	<i>Prioritization steps agreed by System Council</i>	<i>ISDC Quality of Research for Devpnt framework</i>	<i>CGIAR key implementation approaches</i>	<i>Features agreed by System Council</i>	<i>Eschborn principles</i>
PRE-CONCEPT							
Initiative ID	Initiative name, lead contact person, primary CGIAR Action Area	Drop-down menus and character-controlled fields					
Challenge	Concise statement on the global and regional challenge the Initiative will tackle, and why science/research is needed	Max 250 words					
Objective	Concise, preferably quantitative, objective statement	Max 250 words					
Results	Expanding if/where needed on the objective statement, to give intended outcomes relevant to the challenge, plus intended impacts mapped to 5 CGIAR SDG-related Impact Areas	Max 250 words and character-controlled fields for entries by Impact Area					
Activities	Concise description of activities towards the results, showing linkages between research and the innovation systems / pathways that deliver on objectives, outcomes and impacts	Max 500 words					
Highlights	Brief note to highlight any significant choices and/or original contribution in terms of challenge, objective, results and/or activities	max 250 words					
Geographic focus	Mapping to countries and to CGIAR regions as appropriate	Drop-down menu of global/region names/country names					
Key partners	Names of main partner organizations that will contribute to delivering the activities, outputs and outcomes	Character-controlled fields					
Global budget	Initial budget estimate	Figure, preferably range, in USD					

Process to develop 2022-24 Investment Plan and CGIAR Initiatives

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CONCEPT							
To include all components of the pre-concept, updated as needed, plus the following:							
Challenge statement	More detailed problem statement, expanding on the text on 'challenge' provided in the pre-concept	500 words supported by links and reference list		Relevance			Clear problem statement
Measurable objectives	3-year measurable (SMART) objectives	500 words, to include short objective statement/s plus justification		Relevance		3-year measurable objectives	Purpose driven solutions; Transparency
Projection of benefits	Ex-ante impact estimates across 5 Impact Areas using a common CGIAR tool	Estimated benefits (expressed as ranges) using common global impact indicators aligned with 5 Impact Areas (drop-down menu and fields) - specifying timeframe for impact beyond end of Initiative	Provision of multiple benefits; Ex-ante impact analysis	Effectiveness	Multiple benefits across 5 Impact Areas	Projection of impacts	Define metrics for success
Initial theory of change	Theory of change - Indicative mapping of activities, outputs and outcomes to 5 Impact Areas and SDG targets, situating the 3-year Initiative within a longer timeframe (e.g. 10 years) for progressive change, and noting trade-offs and synergies across Impact Areas	Preliminary standard format diagram (delivered with common software e.g. Changeroo) and accompanying notes linked to work packages, and drawing on ISDC guidance on trade-offs	Compelling ToC; Trade-off & delivery analysis	Effectiveness	Multiple transformation pathways	Theory of change	Strategic partnerships for outcomes
Priority-setting	Results from and method used to set priority activities, geographies, systems, crops or other choices relevant to the Initiative	500 words + links to analyses		Relevance, effectiveness		Regional priority-setting	Rigorous priority-setting
Work packages	Replacing the 'activities' section of the pre-concept, concise descriptions of work packages that link science to impact pathways	1000 words, using guidance provided to ensure both science/research and innovation/impact pathway content	Innovation profile; Scalability	Credibility, effectiveness	Digital revolution; risk-management and resilience		Purpose driven solutions; Diverse context-appropriate approaches

Process to develop 2022-24 Investment Plan and CGIAR Initiatives

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Geographic focus for innovation	Mapping work packages and results to countries and to CGIAR regions as appropriate	Drop-down menu of global/region names/country names		Relevance, effectiveness	Regions, countries and landscapes	Target geographies	Geographic focus
Comparative advantage	Evidence of why and how CGIAR and the partnership arrangement will deliver a unique or more cost-effective set of results compared to other credible partnerships or service providers	250 words + supporting documentation	CGIAR comparative advantage	Legitimacy, credibility			CGIAR comparative advantage
Key partners	Greater detail on partners' roles and fit within the theory of change	Drop down menus for categories, organization names and roles, and character-controlled open fields to add missing information	Credible partner arrangement	Legitimacy, effectiveness	Ambitious partnerships for change		
Budget	High-level budget by major categories	Table - template to be provided by CGIAR finance function		Effectiveness			Financial realism; Transparency
FULL PROPOSAL							
To include all components of the concept and pre-concept, updated as needed and with expanded word counts where needed, plus the following:							
Detailed theory of change	Refined version of initial ToC: results (outputs, outcomes, impacts), targets, partner names/roles. Add key elements e.g. nested component ToCs, innovation packages, milestones	Standard format diagram (delivered with common software e.g. Changeroo) and accompanying text c. 500 words linked to next section on innovation packages; plan for agile/flexible theory of change		Effectiveness, Credibility			

Process to develop 2022-24 Investment Plan and CGIAR Initiatives

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Work packages	Replacing the 'activities' section of the pre-concept, description of work packages that link science to delivery pathways, including scientific and research methods, scaling of technologies and institutional solutions, capacity building, and policy engagement (including communications), all in partnership	1000 words per work package; note that all work packages cover interlinked research and impact pathway activities (scaling of technologies and institutional solutions, capacity building, and policy engagement including communications)	Innovation profile; Scalability	Credibility, effectiveness	Digital revolution; risk-management and resilience		Purpose driven solutions; Diverse context-appropriate approaches
Management plan	Closely tied to the theory of change and work packages (using same language and nested components), management plan for the 3-year period, specifying responsibilities, milestones and deliverables over time	Gantt chart + notes - template to be provided by CGIAR performance management function		Legitimacy		Strong leadership and mgt functions; Model for delivery	Technical rigor
Risks	Risks (positive and negative) and risk management measures	Table - template to be provided by CGIAR risk management function	Trade-off & delivery analysis	Effectiveness	Risk-management		
Monitoring, evaluation, learning and impact assessment	Statement of Initiative-specific metrics related directly to the Initiative objectives; Statement of alignment with CGIAR Performance and Results Management framework and system; Plans for Initiative-level evaluation and impact assessment; Arrangements for internal learning	Drop-down fields to add Initiative-level metrics to Performance and Results Management framework and system; drop-down fields to record Initiative-specific eval IA plans; 500 word narrative		Credibility, effectiveness		PRM system; budget allocation to eval & IA	Define metrics of success; Novel metrics; Stage-gating
Participatory design process	Concise narrative and evidence that the research proposed is demand-driven (has emerged from stakeholder discussion and co-design, including Investment Advisory Group) and consistent with country/region/global stakeholder priorities	500 words + annexes showing partner support statements + links to evidence, e.g. to country or regional development strategies or action plans, details on process	Response to demand, triangulating stakeholder views	Legitimacy	Regions, countries and landscapes	Co-creation with relevant parties	
Governance arrangements	Any arrangements additional to the governance arrangements at CGIAR level	250 words + supporting documentation		Credibility			

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Ethics	Statement of commitment to CGIAR Research Ethics code & implementation arrangements	Field 'have read and commit to' plus 250 word field for implementation details		Credibility			
Open data	Statement of commitment to CGIAR open access data policy, plus specific details of implementation as relevant	Field 'have read and commit to' plus 250 word field for implementation details		Credibility			
Personnel	Details of people, skills, responsibilities and time commitments	Table - template to be provided by CGIAR human resources function		Effectiveness			
Gender, diversity and inclusion	Match of personnel to CGIAR GDI measures	Table - template to be provided by CGIAR gender, diversity & inclusion function		Legitimacy			
	Summary of training-oriented capacity development activities, including for junior staff	Table - template to be provided by CGIAR performance management function		Effectiveness, Legitimacy			
Performance management entry criteria	Evidence of compliance with CGIAR performance management criteria	Table - template to be provided by CGIAR performance management function		Credibility		Meet perf mgmt entry criteria	
Detailed budget	Detailed budget by results, partner, activity (including M&E), geography, year	Table - template to be provided by CGIAR finance function		Effectiveness			Financial realism; Transparency

Annex 2. Guidance on requirements for CGIAR Initiatives

2.1 Features of CGIAR Initiatives (from System Reference Group Recommendations, approved by System Council, November 2019)

1. All CGIAR Initiatives will involve co-creation with relevant parties, including participation by Funders in framing projects via the Research Advisory Groups.
2. The terms of reference for commissioned CGIAR Initiatives will provide for:
 - a. 3-year measurable objectives (outputs and outcomes)
 - b. A robust model for delivery from research to impact at scale by working in partnerships
 - c. Positioning within a theory of change that explains expected impacts across all five Impact Areas, with projected positive impacts for multiple benefits
 - d. Demonstrated fit with the 3-step prioritization criteria
 - e. Strategic roles of specific research and delivery partners to deliver on the theory of change
 - f. Target geographies and farming systems, with regional priority-setting for research, partnerships and delivery mechanisms (including capacity development)
 - g. Ex ante 'market assessment' and projection of impacts, including disaggregation of intended beneficiaries among small-scale producers
 - h. A Performance and Results Management System that encompasses planning, monitoring, stage-gate decision points and reporting, and includes a dashboard open to Funders, via a Common Services information system
 - i. For technology research, a 'product profile' and the use of scaling readiness criteria in stage-gate decisions
 - j. Compliance with performance management entry criteria
 - k. Plans and funding allocations for evaluations and impact assessments
 - l. Strong leadership and management functions to deliver large ambitious projects

2.2 Eschborn Principles for Big Lifts (from Chairs' summary from Eschborn informal Funder-led workshop, February 2020)

1. Define and articulate clear problem statements + purpose driven solutions
2. Big lifts, not buckets of fragmented, diverse projects
3. Apply rigorous priority setting
4. Define metrics for success (SDG2 et al)
5. Reflect financial realism (costing by problem)

6. Build on the comparative advantage of the CGIAR
7. Apply operational and geographical focus (hotspots!) & technical rigour
8. Establish transparency (“know what donors are buying”)
9. Consider a variety of approaches based on the challenges (“not only hammers”); no fixed format for all
10. Constitute the shared agenda and funded by pooled funding
11. Integrate a stage-gate funnel to manage R4D as an innovation system / pipeline
12. Integrate strategic partnerships for outcomes along the stage gate funnel
13. Utilize (and budget for) novel approaches for measuring success (epIA, e.g. DNA-Finger printing)

2.3 Criteria for CGIAR Initiatives (adapted by Transition Consultation Forum TAG2 from the *Eschborn Principles*, April 2020)

- Major multi-funder, strategically aligned, fully funded CGIAR Initiatives, laid out in multi-year investment plan. This definition explicitly rules out “buckets” or “gluing” together of bilaterally funded projects. Together, these CGIAR Initiatives constitute the CGIAR shared agenda funded by pooled funding.
- Different disciplinary knowledge and research is used to address food, land and water system issues identified with the stakeholders in any specific region/country, drawing on the global agenda of work.
- Compelling theory of change to achieve impact at scale on SDG2 and other Sustainable Development Goals (as framed by CGIAR’s five Impact Areas).
- A clear problem statement, rigorous priority-setting, purpose-driven solutions and a focused set of metrics for success.
- Generate diverse approaches designed to address the stated problem as effectively as possible using an integrated systems-based approach, rather than relying on supply-driven solutions.
- Apply operational and geographic focus in areas of recognized CGIAR competencies, and achieve impact by working strategically with partners that have complementary competencies, at all stages of research-for-development.
- Manage the research-to-development process via a sequence of stage-gated decision points at which there is a review progress along the theory of change and a resulting reallocation of resources, to support an ongoing funnel of best-bet innovations from early stage through to scaling.
- Realistic and transparent costing explicitly linked to expected results.

- Inspired by the future (where we want to get to, but also unforeseen events) not only by where we come from; some innovations might not be demanded at the present, but their importance will emerge (in often unpredictable ways).
- Use appropriate and innovative metrics of success, considering time lags from research to large-scale impacts, and making the most of modern tools such as genetic markers.
- Integrate strongly with emerging work on country-collaboration, financial modalities, resource mobilization, governance and shared services (through smart interactions with other TAGs).

Annex 3. Recommendations on prioritization of CGIAR Initiatives

(from System Reference Group Recommendations, approved by System Council, November 2019)

CGIAR Initiatives will be commissioned, and thus explicit systems for prioritization are crucial. Within '3-year Investment Plans', a common three-step prioritization process (formulated by the CGIAR Science Leaders and aligned with the CGIAR Quality of Research for Development framework of relevance, scientific credibility, legitimacy and effectiveness) is proposed to identify and rank CGIAR Initiatives eligible for grants:

I. Relevance

- Response to demand, triangulating stakeholder views (Funders, partners, others)
- Based on CGIAR comparative advantage
- Provision of multiple benefits (across 5 Impact Areas)

II. Effectiveness

- Compelling theory of change linking research to outcomes, with strong fit to CGIAR-wide theories of change
- Innovation profile and advancement plan, or strategy for systems transformation
- Credible partner arrangement

III. Value

- Scalability (stepwise and evidence-based)
- Qualitative and quantitative ex-ante impact analysis (also called a market assessment or projected beneficiary assessment)
- Trade-off and delivery analysis among multiple benefits (at least do no harm)

Annex 4. Recommendations on design and approval of CGIAR Initiatives

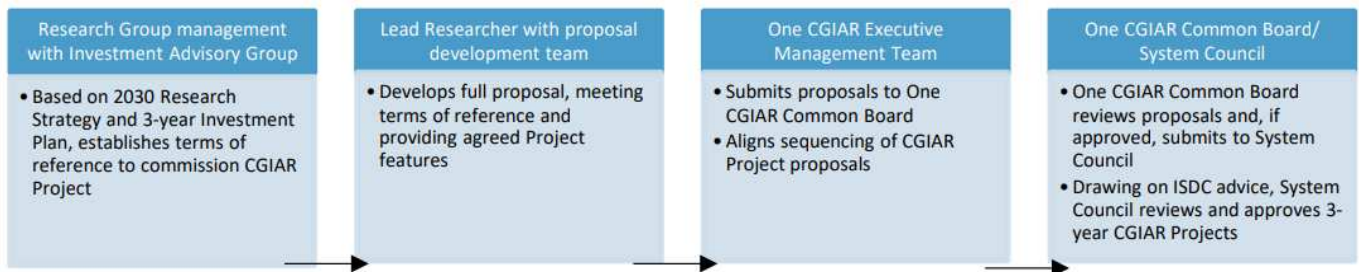
(from System Reference Group Recommendations, approved by System Council, November 2019)

Process for CGIAR Initiative design

- EMT will commission CGIAR Initiatives according to the prioritization presented in the 3-year Investment Plan, subject to availability of funds.
- EMT will draw on the advice of time-bound, topic-bound Research Advisory Groups to establish terms of reference for projects to be commissioned. The Research Advisory Groups will include interested Funders as well as expertise from across CGIAR and from external partner organizations. Detailed membership rules and terms of reference will be defined once an integrated operational structure for One CGIAR is in place. *(note: need discussion and thought on whether RAGs are better at Science Domain level, or more ad hoc project by project basis; pros and cons of each).*
- A designated Lead Researcher (equivalent to a Principal Investigator) will be responsible for convening a proposal development team, comprising CGIAR researchers and partners, and for delivering a full CGIAR Initiative proposal on commission. The Lead Researcher will build and lead a research team to deliver the Project.
- Commissioned projects will all share a set of common features (Annex 2) and will be prepared to a common format.

Process for CGIAR Initiative approvals

- Full proposals for CGIAR Initiatives will be submitted by the Executive Management Team to the System Board
- System Board will submit approved proposals for consideration by the System Council
- System Council will draw on the advice of ISDC
- System Council will make decision to approve, on project by project basis
- CGIAR Initiatives approved by the System Council will be awarded a 3-year grant, subject to stage-gate decision points.



Annex 5. Scientific advisory arrangements in select National Agricultural Research Services, Advanced Research Institutes and Global Funds

Purpose: Review the terms of reference, membership, governance and reporting lines of scientific advisory groups in CGIAR peer organisations. Provide links to strategies and investment plans that scientific advisory groups have generated. To inform EMT design of *Investment Advisory Groups/ Research Advisory Groups* per SC-02¹, and the broader role of external scientific advice in CGIAR.

In addition, provide advice on three conundra:

- **Decision-maker/beneficiary conundrum:** how to optimise research uptake through involvement of delivery partners in research investment prioritisation, without creating conflicts of interest
- **Fairness conundrum:** activist donors on investment advisory groups might have an outside role in influencing expenditure of pooled funding relative to lower-capacity funders who don't engage
- **Player/umpire conundrum:** independent advisory services (CGIAR's ISDC is the important example) may usefully play a role in program design, but would also be responsible for independent assessment of investment proposals arising from those designs

Method:

- 1) Review of formal scientific advisory group arrangements at the identified institutions
 - ➔ Search organization websites for a structured set of search terms.
- 2) Brief online literature review of optimal scientific advisory board structures
 - ➔ A *global challenges 2019* special edition focuses on scientific advisory group design, and reviews existing evidence. The UK Government Office for Science reviewed science advisory councils in 2013. Key points captured below.
- 3) A proposed next step (not conducted due to time constraints) would be a series of qualitative semi-structured interviews to understand performance, advantages and flaws of science advisory boards in different institutions. To investigate the three conundrums and draw out qualitative insights of potential relevance to CGIAR.

Findings:

Table 1 summarizes findings from the website review of existing institutional arrangements in peer organizations. This might provide a useful catalogue, but did not give insights on the three conundrums, or on how to optimal CGIAR institutional design. Whilst scientific advisory groups

¹ OneCGIAR: A bold set of recommendations to the System Council (November 2019)

sometimes published performance reviews of their host organization, no assessment of the scientific advisory groups' own performance was available.

From the sample considered, with the information that was relatively readily available online: the government agencies (China, India, Australia, Brazil) all appeared to have some formal external science advisory boards with clear remits, but with proceedings largely unpublished. The governance structures and remits of scientific advisory groups for academic institutions were less clear. Two multilaterals – FARA and the GIF – were excluded as they appeared to have no external advisory function of any form. However the Funds GEF GFATM and GAFSP had clearly defined, well-resourced and transparent external technical committees that appeared to play critical roles at both project and strategic level.

There is a small literature on the composition and design of scientific advisory groups (Scientific Advisory committees in the language of the review). An [overview of six systematic reviews](#) gives a number of clear recommendations:

- Scientific advisory groups should include **a minimum of six and a maximum of twelve members**. Groups need to be large enough to encourage discussion, diversity and representation, but not too large as to lead to collective shirking or groupthink;
- **Communication** was also noted to be a significant factor in scientific advisory groups' success. The paper recommends that training and support be provided for committee members, as well as clearly delineated protocols and procedures for the group.
- **Diversity is key to avoid bias:** it is important that scientific advisory groups reflect different specialties, as well as diversity in demographic characteristics, expertise, and initial views on the subject matter, in order to optimize the performance of scientific advisory groups.
- the **consequences of heterogeneity** within scientific advisory groups may pose a barrier to the group achieving their optimal performance, particularly when working on technically demanding material. In order to overcome this barrier, the paper suggests implementing training measures and appointing experienced facilitators to fill gaps in knowledge and procedure, as suggested by the gathered evidence
- **Decision-making processes are important:** voting good for ranking options, but poor for normative decisions, and can lead to decision distortion through formation of alliances etc.

[Another overview paper](#) suggests three proximal determinants for effectiveness of advice from scientific advisory groups: 1) quality; 2) relevance and 3) legitimacy: *Quality* involves the scientific adequacy and accuracy of the committee's advice. *Relevance* relates to the extent to which the committee's advice speaks to decisions to be made. *Legitimacy* reflects whether the process of generating the committee's advice is respectful of stakeholders' divergent values, unbiased in its conduct, and fair in its treatment of opposing views and interests

Reflections:

There are multiple potential designs. The key question to define, which should inform design, is: what problems are the CGIAR seeking to address with a scientific advisory group? The political economy in which the scientific advisory groups must operate, and the problem it seeks to address, will inform design parameters like transparency, composition, remit, resources. A clear theory of change setting out how the scientific advisory group might give **the right advice, in the right way, at the right time**, to add value and impact to the organization, and ensure its benefits outweigh its direct and hidden costs, might be helpful. Some potential parameters detailed below:

- **Perception** – Is the scientific advisory group needed to increase legitimacy to external stakeholders?) Relevant parameters – composition (political); transparency and visibility (to key audiences); perceived independence
- **‘Internal’ function** – Does the scientific advisory group have the right skills, capacities, time to deliver its remit to sufficient standard? Relevant parameters – composition (to avoid group think and bias); finances and secretariat (to ensure adequate resource to deliver mandate); integration into broader organization processes (to ensure low transaction costs and high value add when delivering mandate); independence (and the value of independence vs the dis-value of distance-from-consequences-of-advice)
- **‘External’ function** – Is the scientific advisory group an integral part of the program cycle/stage-gating process, or focused on strategy, or free to set its own lines of enquiry, like an external scrutiny body? How well does scientific advisory group advice correspond to opportunities for change?
- **Incentive-compatibility / fit within political economy** – Giving the right advice, in the right way, at the right time to add value and impact to the organization. Clarity on how exactly this will work for each stage, and what exactly is required. To ensure that the costs (measurable and hidden) are likely to be less than the benefits (measurable and hidden)
- **Life cycle** – timebound with regards to specific task or terms of reference? if it performs poorly, how can it evolve? Length of tenure of members etc?

Summary table

<u>Institution</u>	<u>Terms of Reference</u>	<u>Membership</u>	<u>Reporting lines</u>	<u>Links to reports, proceedings, outcomes</u>
<u>Chinese Academy of Agricultural Sciences</u>	CAAS have, or had, an International Advisory Board as reported here , established in 2007.	<u>Not readily available online ('n/a')</u>	<u>n/a</u>	<u>n/a</u>
Indian Council of Agricultural Research	Link (p26 – 29) for ToRs of <u>Research Advisory Committees of ICAR Institutes</u>	<u>Each Committee is chaired and largely staffed by external scientists. Two people representing agricultural and rural interests are also members, as is the Director of the individual ICAR Research Institute, and an ICAR Assistant DG.</u>	<u>Committees report to the ICAR Director General who has considerable individual power: including to appoint each Committee Chair, to amend or disregard Committee recommendations, and to adjudicate disputes between Committees and Research Institute leadership.</u>	<u>n/a</u>
<u>EMBRAPA (Brazilian Agricultural Research Organisation)</u>	Link to an outline remit of <u>EMBRAPA's National Advisory Board (Conselho Assessor Nacional - CAN)</u>	Link to membership, of 40, which is <u>drawn from a blend of public and private sector membership organisations</u>	<u>Advises the Executive Board of Embrapa</u>	<u>n/a</u>

<u>Institution</u>	<u>Terms of Reference</u>	<u>Membership</u>	<u>Reporting lines</u>	<u>Links to reports, proceedings, outcomes</u>
CSIRO (Australia Commonwealth Scientific and Industrial Research Organisation)	<p>Board Science Excellence Committee (BSEC) (Charter here).</p> <p>Business Advisory Committees (CBAC) (Charter here). Established for different areas of CSIRO 'business'.</p>	<p>Recent BSEC Membership available here. Largely overlaps with CSIRO's overall Board.</p> <p>Membership of different CBACs 'seek to achieve balance across experiences and backgrounds from industry, government, academia and the community.' Agriculture and Food Advisory Committee membership available here</p>	<p>CSEC reports to the CSIRO Board. It conducts independent scrutiny to inform Board (and so CSIRO) strategy. Inc. commissioning independent impact evaluations etc.</p> <p><u>CBACs are advisory only.</u> <u>Agendas are set by CBAC</u> <u>Chairs in consultation with the relevant CSIRO Director</u></p>	<p>A 2016 review by EY found <u>significant governance problems in CSIRO's science prioritisation and implementation processes.</u> <u>CSIRO Board accepted all recommendations</u></p>
<u>UC Davis College of Agricultural and Environmental Sciences</u>	<p><u>No ToRs for the 'Dean's Advisory Council' are readily available online</u></p>	<p><u>Membership of the Dean's Advisory Council here. Detailed below.</u> <u>Wholly private sector.</u></p>	<p><u>Unclear. The Dean's Advisory Council has no formal status in the Bylaws and regulations of the faculty here</u></p>	<p><u>Ad-hoc committee findings here</u></p> <p><u>Academic and Strategic Plan 2015 is prominently referenced, created by an ad-hoc Academic and Strategic Planning Committee</u></p>

<u>Institution</u>	<u>Terms of Reference</u>	<u>Membership</u>	<u>Reporting lines</u>	<u>Links to reports, proceedings, outcomes</u>
Wageningen University and Research	<u>Engagement in shaping research strategy appears to be built into the process of research scoping and collaboration, rather than coming from a standing science advisory committee.</u>	There is a ‘ <u>Scientific Advisory Board</u> ’ but this appears to be focused on <u>equipment procurement.</u> (link)	n/a	No advisory board outputs available online. However other relevant documents include: - The positioning of research at Wageningen University; - Strategic Plan - Annual report 2018
Montpellier University of Excellence	<u>Muse International Advisory Board</u> ‘will play a key consulting role in terms of steering and strategic guidance for the development of the MUSE initiative and provide recommendations in the areas of education, research, and international outreach.’ Link	Membership is composed of ‘ <u>strategic international academic partners, founding-member companies of the MUSE foundation, representatives of civil society, development organisations and think tanks.</u> ’ Link	MIAB formulates recommendations to the MUSE Board of Directors It is facilitated by MUSE Executive team	n/a

<u>Institution</u>	<u>Terms of Reference</u>	<u>Membership</u>	<u>Reporting lines</u>	<u>Links to reports, proceedings, outcomes</u>
Cornell University College of Agriculture and Life Sciences (CALs)	The CALS Advisory Council serves as the primary external advisory group for the dean and academic leadership, inc. concerning strategic issues and programs in teaching, research, and extension in the college. CALs is also served by several other councils who given specific advice for units and departments within our college. Link	A very large membership, almost <u>exclusively alumni of CALs, with exception of a small handful of officials from New York State Department of Agriculture and Markets.</u>	<u>Unclear</u>	CALs latest Strategic Plan is here . The Strategic Plan was created by an ad-hoc Strategic Plan Committee, composed of faculty.
<u>Global Environment Facility</u>	The Scientific and Technical Advisory Panel (STAP) provides the GEF with scientific and technical advice on policies, operational strategies, programs and projects. ToRs here and website here	Panel and secretariat membership: link Chair – academic Panel members on mitigation, adaptation, biodiversity, chemicals and waste, land degradation, international waters. Largely senior academic, with some broader multilateral and NGO experience.	<u>The STAP Chair reports to every GEF Council meeting. The STAP also publishes its own research.</u>	<u>Chair’s reports to the GEF Council here, and to the GEF Assembly here. STAP Screening Reports of GEF project proposals here. STAP reviews of GEF research modalities here. Other STAP research publications here</u>

<u>Institution</u>	<u>Terms of Reference</u>	<u>Membership</u>	<u>Reporting lines</u>	<u>Links to reports, proceedings, outcomes</u>
<p><u>Global Fund (to fight Aids, Tuberculosis and Malaria)</u></p>	<p>ToRs for the Technical Review Panel here. Three responsibilities</p> <p><u>1: reviewing funding requests for highest impact</u></p> <p><u>2: provide strategic advice to the Board</u></p> <p><u>3: Reporting on lessons learned to inform strategy, policy and operations</u></p>	<p>Current membership here.</p> <p>The TRP is a pool of experts across six focus areas: HIV, malaria, tuberculosis, human rights and gender, resilient and sustainable systems for health, and strategic investment and sustainable financing.</p> <p>TRP members are drawn from this pool to serve on a review panel. Serving Members elect a Chair and two Vice-chairs from amongst their membership.</p>	<p>The TRP reports to and is accountable to the Board through the Strategy Committee.</p>	<p><u>Technical review panel reports are here</u></p>
<p><u>Global Agriculture and Food Security Programme</u></p>	<p><u>The Technical Advisory Committee ToRs are here</u></p>	<p><u>Membership is comprised of up to 12 technical experts from both low- and high- income countries. The membership of the TAC is diverse, reflecting expertise from various geographical regions, as well as sub-sectoral skills. Current members here</u></p>	<p><u>The role of the TAC is to provide due diligence on the quality of submitted agriculture and food security strategies and investment plans, and GAFSP proposals, and to submit to the Steering Committee funding recommendations for their consideration.</u></p>	<p>n/a</p>