



CGIAR System Internal Audit Function rolling internal audit plan for the period 2020-2022

Purpose

This document presents the proposed 2020-2022 work plan of the CGIAR System Internal Audit Function. The work plan incorporates input from a wide range of stakeholders across the CGIAR System, is endorsed by the System Management Board's Audit and Risk Committee, and has been presented at the annual meeting of the CGIAR Centers' Audit Committee Chairs on 14 January 2020 where it was supported by that group.

The work plan takes into account the significant changes discussed and planned within CGIAR, assumes flexibility to dynamically respond to the needs of CGIAR during the transition period and has an underlying intention to seek synergies and efficiencies within the planned activities.

Action Requested

The System Management Board is requested to <u>approve</u> the 2020-2022 work plan of the CGIAR System Internal Audit Function and associated budget.

Special notice on 'Consent Agenda' status of this document

This paper is being presented to the SMB according to Article 7.1 of the SMB Rules of Procedure, permitting a 'consent agenda' of multiple items being presented for approval via a single vote of the SMB (not item by item). **Should a SMB member wish to remove an individual item from the Consent Agenda, that request should be communicated to the Secretary of the SMB by close of business Paris time on Wednesday 22 January 2020.**

Distribution notice:

This document is internal to the System Management Board and should not be shared in advance of the Board's deliberations.

Document: SMB16-09a Incorporates contributions from: conveners of communities of AC Chairs, DGs, DDG-R, CSE, SIMEC, SPIA and Heads of Center Internal Audit with input from the System Organization management and Center AC Chairs Endorsed by SMB's ARC Version: January 2020



Rolling work plan 2020-2022

CGIAR System Internal Audit Function

Purpose: This document presents a 3-year risk-based rolling internal audit plan for CGIAR System for the period 2020-2022. The plan is framed in the context of the CGIAR System 'Risk Families' as agreed in November 2017 and the CGIAR change agenda. It seeks to give reasonable coverage on risk areas where internal audit is the appropriate assurance process taking count of work of other assurance providers (including internal audit processes of the Centers). The Internal Audit Function plan does not duplicate or replace Center/regional internal audit plans.

Action requested: CGIAR System Management Board is requested to approve the plan.

Document category: Internal Working Document. The document is internal to CGIAR and should not be shared to external to CGIAR parties without authorization of the Head of the CGIAR System Internal Audit Function and the Chair of the SMB's Audit and Risk Committee.





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Summary of the proposed CGIAR System Internal Audit Function 2020-2022 work plan

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Engagement moved forward New engagement Engagement postponed							
System risk families	2020	2021	2022 (indicative areas)				
1. CGIAR is no longer a front runner	2020-1 Real-time transition advice NEW (ADV) PLACEHOLDER	 2021-1 POTENTIAL Key operational process design NEW {(ADV) 	 Digital strategy development and implementation NEW. (ADV) 				
2. CGIAR loses its central role in AR4D	 2020-2 IA/IP arrangements NEW (ASR) 		 Funding strategy framework and managing funder contributions (ASR) Effective oversight of Genebanks platform (ASR) 				
3. Non-adherence to appropriate values	 2020-3 Activities to support quality of science (ADV) 	 2021 -2 CGIAR crisis management (ASR) 2021-3 Non-research ethical frameworks (ADV) 	 Gender mainstreaming in work place review (ADV) Control environment (ADV) Financing modalities and fund allocation (ASR) Phase II Occupational safety and security (ASR) 				
4. Unsatisfactory evidence and assurance received	 2020-4 Cyber security (ASR) 2020-5 General data management within CGIAR NEW (ASR) 	 2021-4 Research data management practices in CGIAR (ASR) 2021-5 Project management (ADV) 	 Decision-making within CGIAR NEW (ADV) CGIAR M&E arrangements (ADV) Performance management system implementation (ASR) 				
5. Poor execution	 2020-6 Assurance processes for Center controls and potential malpractices NEW (ADV) 2020-7 Follow up on IAF recommendations (ASR) 	 2021-6 CGIAR System Risk Management Framework implementation (ASR) 2021-7 Talent management (ADV) 2021-8 Follow up on IAF recommendations (ASR) 	 Shared Advisory Secretariat operations (ASR) System policies (ASR) Board effectiveness (ADV) Community of practices (ADV) Study of financial management maturity(ADV) Follow up on IAF recommendations (ASR) 				
Total	7	8	7 of 16				



Introduction

This document sets out a proposed strategy for the delivery of assurance and advisory services to the System Management Board, its Audit and Risk Committee, System Council and its Assurance Oversight Committee, and management of the System Organization on governance, on risk and control frameworks CGIAR System-wide in the period of 2020-2022 in accordance with the ToR and the Charter of the CGIAR System Internal Audit Function.

Aiming to provide best possible assurance and advisory services, the audit plan presented herein takes into account the following:

- the CGIAR System's Risk Management Framework approved in 2017 Q4 by the System Management Board and the System Council;
- striving to **avoid duplication** with other assurance providers;
- **Centers' internal audit needs** are met through arrangements funded and organized by Centers themselves with no or limited role of Internal Audit Function. Providing assurance on individual CRP risks and controls is also a responsibility of the Centers;
- Internal Audit Function's *strategy* approved by the Audit and Risk Committee in April 2018;
- Considering unprecedented change agenda and ambitious timelines, the **work plan will be reviewed** regularly during the year to take stock of changing risk landscape within the process of transformation. Therefore the work plan for 2020 is indicative of information available at the time of the audit planning; it is anticipated that the work plans for 2021-2022 may need to be significantly revised as institutional changes take shape
- The plan also seeks **synergies and efficiencies** within the planned engagements e.g. between the cyber security and data management reviews.



How the work plan was developed



Context: Global hot spots (Gartner review) and their Low relevance A High relevance relevance to CGIAR

Global organizations such as CGIAR face a number of challenges that resonate within CGIAR context:

Key drivers:

- Complexity and interconnectedness of risks
- Looming economic downturn
- CGIAR: interlinkages between Centers and increasing fraud risks
- Robotic process automation (RPA) governance challenges
- Piecemeal modernization of legacy systems
 CGIAR: inherent fragmentation of ICT systems
- Data over-retention
- Insufficient preparation for data migration
 CGIAR: fragmented data & limited overall data management governance
- Employee security behaviors
- Cyber-physical convergence CGIAR: under-resourced and fragmented ICT to combat cyber risks; disgruntled employees due to change
- Increasing regulatory complexity
- Underestimation of the need to protect employee data CGIAR: ethical and reputational dimension
- Fragmented risk management
- Lack of Board attention to resiliency practices e.g. BCP and DR CGIAR: Crisis management especially important in the times of

change www.cgiar.org

Risk Culture Third-Party and Ecosystems Decision Making Regulatory **IT Governance** Developments Project Data Governance Management Strategic Cybersecurity Workforce Vulnerabilities Planning Supply Chain **Data Privacy** Artificial Organizational Intelligence (Al Resilience

Key drivers:

- Extension of liability
- Deeper entanglement of third parties CGIAR: ethical dimension of third party practices



- Regulatory focus on cybersecurity
- Waste reduction and climate resiliency CGIAR: reputational challenge and compliance with funder regulations
- Ill-defined project strategies
- Siloed project execution
- CGIAR: robustness of change project management and in general of project management methodologies used
- Workforce re-skilling
- Growth of non-traditional working arrangements CGIAR: talent management to support the change agenda and future CGIAR
- Environmental disasters
- Tariffs and trade policy
- CGIAR: increased cost-base for CGIAR operations
- Unintended consequences of AI
- Vulnerabilities of AI algorithms CGIAR: the risk is on the rise for CGIAR





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Context: Internal developments

The CGIAR System Internal Audit Function's work plan was developed in the context of major efforts taking place to transform CGIAR System into an agile, innovative and effective research institution. They include:

- 2019-2021 Business Plan as a first major effort to transform CGIAR agenda;
- Recommendations by the System Reference Group calling for greater convergence under 'One CGIAR' with wide-range implications for the governance, internal services, funding modalities and program implementation within CGIAR;
- Review and overhaul of ethical policy frameworks;
- Establishment of renewed advisory services with the Shared Secretariat based in Rome. The proposed work plan takes into account the revised structures of the System advisory services, their Terms of References and preliminary work plans as presented to the System Council.

CGIAR operational objectives and risk families (BAU)



The change agenda provides great opportunities as well as challenges for CGIAR. Risks associated with the outcomes of the change and the change management process will need to be managed in parallel with business-as-usual risks.

SRG recommendations mapped to CGIAR risk families

		'CGIAR RISK FAMILIES'	– SET AND REVIEWED PERIODICALL	Y BY SYSTEM COUNCIL		
	1. CGIAR is no longer a front runner	2. CGIAR loses its central role in AR4D	3. Non-adherence to appropriate values	4. Unsatisfactory evidence and assurance received	5. Poor execution	Risks associated with the end state of 'One-CGIAR'
		were discussed at the				
suc	1.1 Science relevance/ cutting edge 1.2 Competitive advantage 1.3 Alignment with priorities of international community 1.4 Compelling research agenda	 2.1 IP is used by scientific and development communities 2.2 CGIAR is good partner 2.3 CGIAR activities are coordinated 2.4 Diversity of funding 2.5 Genebanks' unique role 2.6 Delivery on SRF 3.1 Use of ethical research practices 3.2 Values and behaviors support credibility 3.3 Prevention and detection of inappropriate use of funds 3.4 Clarity and transparency of financing 		 4.1 Evidence of impact 4.2 Appropriate use of funds as per work programs and budgets 4.3 Compliance with funder's agreements 4.4 Reliable evidence of delivery 4.5 Effective program management 5.1 IP support GPG 5.2 Talent attraction and retention 5.3 Costs are minimized and assets are safeguarded 5.4 Centers financially stable 5.5 Being part of CGIAR is attractive 		joined ARC/AOC workshop. (Documented within System Council paper 'SC9-02 SRG Recommendations – One CGIAR', page 31) Another group of risks relates to the transition period within the
nendatic	8 1. One	mission				timelines (as presented in the above-mentioned
recommendations			2. Unified governance			document, pages 27-30) of change activities. The
SRG	4. A new rese	early reflections on the these risks are on the				

5. More, and pooled funding

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next page.



Early view on transition risks that feed into the work plan considerations

Change objective: A dynamic reformulation of CGIAR's partnerships, collaboration, knowledge and assets

🎯 1. One	mission 2. Unified governance 3. Institu	tional integration 🛛 🖉 4. A new	research modality \$5. More, and pooled funding
	Sources	Risks	Consequences Work plan reference
Objectives	 Transition timelines slip e.g. One CGIAR Management Committee is not in place by April 2020 to spearhead the changes Change fatigue, resistance to change, culture that is not conducive to change Major funder supporting change pulls out Business as usual takes over 	 Prolonged transition period or the reform stalls 	 Loss of trust in the transformation Funder support wanes Change project fails
Assets	 Underlying processes to manage data IA/IP are weak Inadequate data migration/ transfer (2021/2022) Inadequate hand-over processes as new structures are implemented Roles and responsibilities during the transition are not well defined Legacy processes are not modified or not modified on time BAU processes are neglected 	 Loss of data Loss of intellectual assets/property Monetary losses 	 Reduced organizational resiliency Reduced capability as key assets are lost or not utilized efficiently Crisis is not adequately managed 2020-2 2020-3 2020-5
Stakeholders/ reputation www.cgiar.org	 Uncertainties are taken advantage of during the transition or disgruntled employees damage organization's assets/ reputation Pressure to cut corners to speed up the transition Disruption to research and BAU activities HR transition is poorly managed/lack of communication 	 Fraud/malpractice Loss of talent 	 Reputational damage Increased cyber risks Loss of trust in the transformation Lack of short-term supply of talent to implement the change Loss of knowledge 9

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Proposed 2020-2022 CGIAR System Internal Audit Function work plan

Engagement moved forward New engagement Engagement postponed

System risk families	2018 -2019		2020		2021		2022 (indicative areas)
1. CGIAR is no longer a front runner	[mainly covered by other assurance providers based on assurance mapping however will be under review throughout the plan cycle]	ŀ	2020–1 Real-time transition advice NEW (ADV) PLACEHOLDER	•	2021-1 POTENTIAL Key operational process design NEW (ADV)	•	Digital strategy development and implementation NEW (ADV)
2. CGIAR loses its central role in AR4D		·	2020-2 IA/IP arrangements NEW (ASR)			•	 Funding strategy framework and managing funder contributions (ASR) Effective oversight of Genebanks platform (ASR)
3. Non-adherence to appropriate values	 <u>2018 – New Anti-harassment and whistle-blowing practices (ADV)</u> 2019-2 Ethical research frameworks (ASR) 2019-3 CGIAR staff security frameworks (ASR) 2019-4 Effective staff grievance practices (ADV) 	•	2020-3 Activities to support quality of science (ADV)	•	management (ASR)	•	 Gender mainstreaming in work place review (ADV) Control environment (ADV) Financing modalities and fund allocation (ASR) Phase II Occupational safety and security (ASR)
4. Unsatisfactory evidence and assurance received	 <u>2018-1</u> Independence of external auditors (ADV) <u>2018-2</u> Baseline study of quality of Centers internal audit services (ADV) <u>2018-3</u> Procurement policy status at CGIAR (ADV) 2019-5 Assurance activities across the System (ADV) 		2020-4 Cyber security (ASR) <mark>2020-5 General data management</mark> within CGIAR NEW (ASR)		2021-4 Research data management practices in CGIAR (ASR) 2021-5 Project management (ADV)	•	CGIAR M&E arrangements (ADV)
5. Poor execution	 <u>2018-4</u> Active Directory (ASR) <u>2018-5</u> CGIAR System Risk Management self-assessment tool (ASR) <u>2018-6</u> Common IT systems (ASR) 2019-6 Cloud computing (ASR) 2019-7 Review of investment policies & practices (ADV) 		2020-6 Assurance processes for Center controls and potential malpractices NEW (ADV) 2020-7 Follow up on IAF recommendations (ASR)	•	Management Framework implementation (ASR) 2021-7 Talent management (ADV)	•	 System policies (ASR) Board effectiveness (ADV) Community of practices (ADV) Study of financial management maturity(ADV)
Total	13		7		8		7 of 16



Proposed 2020-2022 CGIAR System Internal Audit Function's work plan commentary

- In 2019 seven engagements were planned (With six delivered. One engagement cancelled as substantial review work commissioned by management has been done in the area). The same level of effort is maintained throughout 2020-2022;
- Every engagement will take into consideration change activities and associated risks;
- The 2020 engagements are classed as **Priority I and Priority II**. Priority II proposed engagements will be first considered to be replaced with any urgent work reflecting emerging risks/concerns during the year;
- The following areas are considered **high risk** but not included in 2020 plan:
 - **Crisis management**. The possibility of a crisis increases during changes and so having robust crisis management mechanisms is important. A recommendation has been made in the 2019 engagement on occupational safety and security to establish a System-wide crisis management mechanism. This will need to be revisited when the new governance structure is established;
 - **Project management frameworks**. According to Gartner nearly 70% of projects fail outright due to poor project management. Suggested to revisit in 2021 when policies for 'One-CGIAR' are developed;
 - Communication during the change. The view is that internal audit might not be the best assurance provider on the topic;
 - Talent management and NARS (National Agricultural Research System) partnerships landscape as raised by the System Council. These topics will be monitored throughout 2020 for potential inclusion in the work plan.
- For the year 2022, the list of indicative engagements is longer to include a menu of possible topics to consider for a review within the changing risk/priority landscape.



Details of 2020 engagements

Priority	Engagement	Type & cost, \$000*	Rationale	Potential objectives and scope
I	2020 -1 Real-time transition advice NEW PLACEHOLDER	Advisory	 One CGIAR agenda will have a profound effect on all elements of the CGIAR structures and activities Internal Audit Function strives to proactively support CGIAR in its efforts to transform into a more effective, dynamic and innovative institution. To achieve that, Internal Audit Function needs to provide A real-time advice and input to aid management in implementing the changes 	Working under formal ToR agreed with ARC and management, and reflecting the pace and milestones of the change implementation, Internal Audit Function will offer input and advice on the on-going basis to aid effective and efficient planning, implementation and performance management of the change project
II	<u>2020 -2 IA/IP</u> arrangements NEW	Assurance, 40	 Assets are more vulnerable in times of change Intellectual Assets (IA) are the main product of CGIAR activities If they are not known or securely protected the likelihood of their loss increases as well as CGIAR value; capacity to effectively utilize IP decreases 	 The engagement will aim to explore: To what extent IA are known and registered; Opportunities to increase capacity to utilize IP to enhance adoption of research results. Work scope is different to mandate of SCIP Group (no duplication of effort)
II	2020 -3 Activities to support quality of science	Advisory	 Research is the core CGIAR activity; research quality assurance (QA) is important for the research to meet stakeholder expectations Leading world research institutions implement QA mechanisms for their scientific research activities As CGIAR re-thinks the structure of its research, early establishment of common quality standards is paramount to support the credibility of the reforms 	 The engagement will reflect on the: Research quality standard setting in the context of the guidance on QoR4D proposed by ISDC; Existing QA processes vis-à-vis the best practices and ISDC's guidance
l www.cgiar.c	<u>2020-4 Cyber</u> security	Assurance, 25	 CGIAR entities are subject to relentless phishing attacks. Cyber intrusion is an inevitable event according to the World Economic Forum Global Risk report 2019 which ranks the cyber risk within top five risks If the phishing attacks succeed, CGIAR entities risk losing assets, data and sensitive information which may also result in reputational damage 	This review will focus on cyber security standards, guidelines and procedures across CGIAR as well as user awareness programs, and may include penetration test across CGIAR Centers on a voluntary basis. Potential efficiencies to be sought with engagement 2020-5 Data Management.



Details of 2020 engagements (cont.)

Priority	Engagement	Type & cost, \$000*	Rationale	Potential objectives and scope
I	2020 -5 General data management within CGIAR NEW	Assurance, 25	 Data is now widely recognized as one of the key organizational assets and an important factor contributing to competitive advantage Data is produced at increasing speed within CGIAR; it is held in multiple of ways and mediums with the risk of it being fragmented, inconsistent and becoming fast obsolete It is especially important to take stock of data as CGIAR transforms itself into a more effective institution Not prioritizing data governance is leading organizations to misallocate resources, produce poor quality insights and miss potential business opportunities (Gartner) 	 The objectives of the engagement will be to: Assess the data landscape within CGIAR; its ownership and utilization Identify opportunities to improve data governance. Potential efficiencies to be sought with the engagement 2020-4 Cyber Security.
I	2020 -6 Assurance processes for Center controls and potential malpractices NEW (ADV)	Advisory	 Potential for malpractices increases in times of change With multiple moving parts during the transition, preventing and detecting fraud will be a challenge especially as roles and responsibilities will be transitioning as well 	The engagement will assess to what extent CGIAR is set up to manage the risk of fraud in times of change.
I	2020-7 Follow up on IAF recommendations (ASR)	Assurance	 IIA IPPF Standard 2500 – Monitoring Progress reads: The chief audit executive must establish and maintain a system to monitor the disposition of results communicated to management. 	To provide assurance on the extent of the implementation of agreed management actions due at 31 December 2020 in response to internal audit findings.

* The anticipated costs do not include fixed costs.



Resource allocation for implementation of the CGIAR System internal audit plan

Assumptions used to develop the audit plan	 20% of available audit time allocated to unplanned work for example consultancy work; 43% is allocated to advisory work (three out of seven planned
for 2020	 engagements); 25 days is the average length of an engagement; The plan will be reviewed regularly throughout the year.

- Resources planned to be allocated to CGIAR System internal audit plan
- 2.05 FTEs are allocated to CGIAR System internal audit work supplemented by a small budget for consultant engagement for three specialist audits;
- Administrative assistance is delivered through 0.2 FTE;
- This allows seven planned engagements delivered for the CGIAR System in 2020.



Resource allocation for implementation of the CGIAR System internal audit plan

High level indicative 3-year budget of CGIAR System Internal Audit Function \$,000

Year	2019	2020	2021
Total budget	345	414	375
Increase/-decrease %	-	20%	-9%

Budgetary Assumptions:

1. Number of audits year on year stays the same.

2. Three audits in 2020 will be co-sourced: 2020-2 IA/IP arrangements, 2020-04 Cyber security and 2020-5 General data management within CGIAR reflecting on their specialist nature.

The budget also includes 50% of the EQA costs. EQA had to be partly postponed to 2020 due to circumstances out of IAF control.
 Travel costs include attendance at SC, SMB, ARC, AOC meetings, Audit Committee Chairs' meeting, RIAS (Representatives of Internal

Audit Services), IIA conference, and a CGIAR Internal Audit Community of Practice meeting.

For training needs, the Gartner (our knowledge provider) resources will be utilized.

The consultation processes during the development of CGIAR System Internal Audit Function's engagement ToR and reporting engagement results



Consultations for ToR development

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