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Organization management and Center AC Chairs

**Endorsed** by SMB's ARC **Approved** by SMB **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.



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Function's engagement ToR and reporting engagement results



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

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 Resil-time transition advice NEW (ADV)     PLACEHOLDER	2021-1 POTENTIAL Key operational process design NEW [(ADV)]	Digital strategy development and implementation NEW (A:DV)		
2. CGIAR loses its central role in AR4D	• 2020-2 IA/IP arrangements NEW (ASR)		<ul> <li>Funding strategy framework and managing funder contributions (ASR)</li> <li>Effective oversight of Genebanks platform (ASR)</li> </ul>		
3. Non-adherence to appropriate values	2020-3 Activities to support quality of science     (ADV)	<ul> <li>2021 -2 CGIAR crisis management (ASR)</li> <li>2021-3 Non-research ethical frameworks (ADV)</li> </ul>	<ul> <li>Gender mainstreaming in work place review (ADV)</li> <li>Control environment (ADV)</li> <li>Financing modalities and fund allocation (ASR)</li> <li>Phase II Occupational safety and security (ASR)</li> </ul>		
4. Unsatisfactory evidence and assurance received	<ul> <li>2020-4 Cyber security (ASR)</li> <li>2020-5 General data management within CGIAR NEW (ASR)</li> </ul>	<ul> <li>2021-4 Research data management practices in CGIAR (ASR)</li> <li>2021-5 Project management (ADV)</li> </ul>	<ul> <li>Decision-making within CGIAR NEW (ADV)</li> <li>CGIAR M&amp;E arrangements (ADV)</li> <li>Performance management system implementation (ASR)</li> </ul>		
5. Poor execution	<ul> <li>2020-6 Assurance processes for Center controls and potential malpractices NEW (ADV)</li> <li>2020-7 Follow up on IAF recommendations (ASR)</li> </ul>	<ul> <li>2021-6 CGIAR System Risk Management Framework implementation (ASR)</li> <li>2021-7 Talent management (ADV)</li> <li>2021-8 Follow up on IAF recommendations (ASR)</li> </ul>	<ul> <li>Shared Advisory Secretariat operations (ASR)</li> <li>System policies (ASR)</li> <li>Board effectiveness (ADV)</li> <li>Community of practices (ADV)</li> <li>Study of financial management maturity(ADV)</li> <li>Follow up on IAF recommendations (ASR)</li> </ul>		
Total	7	8	7 of 16		

ASR – Assurance engagements ADV – Advisory engagements



### Introduction

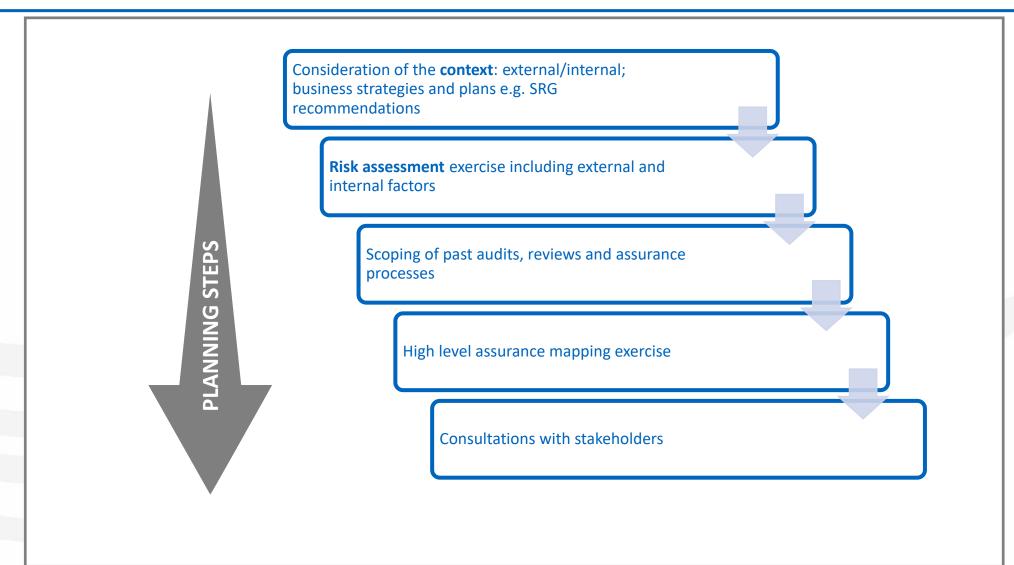
This document sets out a proposed strategy for the delivery of assurance and advisory services to the System Management Board, its Audit and Risk Committee, System Council and its Assurance Oversight Committee, and management of the System Organization on governance, on risk and control frameworks CGIAR 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



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### Context: Global hot spots (Gartner review) and their 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



**IT Governance** 

**Data Governance** 

Cybersecurity

Vulnerabilities

**Data Privacy** 

Organizational

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





### 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)









A. DELIVERY. Deliver good science, partnerships and other research outputs that provide critical improvements for food security, nutrition and resilience to climate change B. RELEVANCE.
Establish and maintain
CGIAR as a relevant
and sustainable tool
for agricultural
research for
development

C. REPUTATION. Make the association with CGIAR a rewarding and rational decision D. RELIABILITY. Fulfill formal commitments

E. EFFICIENCY.
Generate all benefits
mentioned above
efficiently and provide
"value for money"

KEY FAMILIES OF RISK IDENTIFIED BY SYSTEM ORGANIZATION

1. CGIAR is no longer a front runner 2. CGIAR loses its central role in AR4D 3. Nonadherence to appropriate values 4. Unsatisfactory evidence and assurance received

5. Poor execution

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 PERIODICALLY 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
- Opportunity and risk indicators in Risk Register to be set by the SMB; reviewed annually for appropriateness
- 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

J. I OOI EXECUTION

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

Risks associated with the end state of 'One-CGIAR' were discussed at the 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 timelines (as presented in the above-mentioned document, pages 27-30) of change activities. The early reflections on these risks are on the

next page.

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



SRG recommendations

#### 1. One mission



#### 2. Unified governance



4. A new research modality



3. Institutional integration



5. More, and pooled funding

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## 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. Institutional integration 2. A new research modality 5. More, and pooled funding





				<u> </u>
	Sources	Risks	Consequences	Work plan reference
Objectives	<ul> <li>Transition timelines slip e.g. One CGIAR Management Committee is not in place by April 2020 to spearhead the changes</li> <li>Change fatigue, resistance to change, culture that is not conducive to change</li> <li>Major funder supporting change pulls out</li> <li>Business as usual takes over</li> </ul>	Prolonged transition period or the reform stalls	<ul> <li>Loss of trust in the transformation</li> <li>Funder support wanes</li> <li>Change project fails</li> </ul>	• 2020-1
Assets	<ul> <li>Underlying processes to manage data IA/IP are weak</li> <li>Inadequate data migration/ transfer (2021/2022)</li> <li>Inadequate hand-over processes as new structures are implemented</li> <li>Roles and responsibilities during the transition are not well defined</li> <li>Legacy processes are not modified or not modified on time</li> <li>BAU processes are neglected</li> </ul>	<ul> <li>Loss of data</li> <li>Loss of intellectual assets/property</li> <li>Monetary losses</li> </ul>	<ul> <li>Reduced organizational resiliency</li> <li>Reduced capability as key assets are lost or not utilized efficiently</li> <li>Crisis is not adequately managed</li> </ul>	<ul><li>2020-2</li><li>2020-3</li><li>2020-5</li></ul>
Stakeholders/ reputation www.cgiar.org	<ul> <li>Uncertainties are taken advantage of during the transition or disgruntled employees damage organization's assets/reputation</li> <li>Pressure to cut corners to speed up the transition</li> <li>Disruption to research and BAU activities</li> <li>HR transition is poorly managed/lack of communication</li> </ul>	<ul><li>Fraud/malpractice</li><li>Loss of talent</li></ul>	<ul> <li>Reputational damage</li> <li>Increased cyber risks</li> <li>Loss of trust in the transformation</li> <li>Lack of short-term supply of talent to implement the change</li> <li>Loss of knowledge</li> </ul>	• 2020-1 • 2020-6



# Proposed 2020-2022 CGIAR System Internal Audit Function work plan

**Engagement moved forward** 

lew engagemer

ngagement postpone

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]	2020 -1 Real-time transition advice NEW (ADV) PLACEHOLDER	<ul> <li>2021-1 POTENTIAL Key operational process design NEW (ADV)</li> </ul>	Digital strategy development and implementation NEW (ADV)
2. CGIAR loses its central role in AR4D		• 2020-2 IA/IP arrangements NEW (ASR)		<ul> <li>Funding strategy framework and managing funder contributions (ASR)</li> <li>Effective oversight of Genebanks platform (ASR)</li> </ul>
3. Non-adherence to appropriate values	<ul> <li>2018 – New Anti-harassment and whistle-blowing practices (ADV)</li> <li>2019-2 Ethical research frameworks (ASR)</li> <li>2019-3 CGIAR staff security frameworks (ASR)</li> <li>2019-4 Effective staff grievance practices (ADV)</li> </ul>	2020-3 Activities to support quality of science (ADV)	<ul> <li>2021 -2 CGIAR crisis management (ASR)</li> <li>2021-3 Non-research ethical frameworks (ADV)</li> </ul>	<ul> <li>Gender mainstreaming in work place review (ADV)</li> <li>Control environment (ADV)</li> <li>Financing modalities and fund allocation (ASR)</li> <li>Phase II Occupational safety and security (ASR)</li> </ul>
4. Unsatisfactory evidence and assurance received	<ul> <li>2018-1 Independence of external auditors (ADV)</li> <li>2018-2 Baseline study of quality of Centers internal audit services (ADV)</li> <li>2018-3 Procurement policy status at CGIAR (ADV)</li> <li>2019-5 Assurance activities across the System (ADV)</li> </ul>	<ul> <li>2020-4 Cyber security (ASR)</li> <li>2020-5 General data management within CGIAR NEW (ASR)</li> </ul>	<ul> <li>2021-4 Research data management practices in CGIAR (ASR)</li> <li>2021-5 Project management (ADV)</li> </ul>	<ul> <li>Decision-making within CGIAR NEW (ADV)</li> <li>CGIAR M&amp;E arrangements (ADV)</li> <li>Performance management system implementation (ASR)</li> </ul>
5. Poor execution	<ul> <li><u>2018-4</u> Active Directory (ASR)</li> <li><u>2018-5</u> CGIAR System Risk Management self-assessment tool (ASR)</li> <li><u>2018-6</u> Common IT systems (ASR)</li> <li>2019-6 Cloud computing (ASR)</li> <li>2019-7 Review of investment policies &amp; practices (ADV)</li> </ul>	<ul> <li>2020-6 Assurance processes for Center controls and potential malpractices NEW (ADV)</li> <li>2020-7 Follow up on IAF recommendations (ASR)</li> </ul>	<ul> <li>2021-6 CGIAR System Risk Management Framework implementation (ASR)</li> <li>2021-7 Talent management (ADV)</li> <li>2021-8 Follow up on IAF recommendations (ASR)</li> </ul>	<ul> <li>Shared Advisory Secretariat operations (ASR)</li> <li>System policies (ASR)</li> <li>Board effectiveness (ADV)</li> <li>Community of practices (ADV)</li> <li>Study of financial management maturity(ADV)</li> <li>Follow up on IAF recommendations (ASR)</li> </ul>
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
1	2020 -1 Real-time transition advice NEW PLACEHOLDER	Advisory	<ul> <li>One CGIAR agenda will have a profound effect on all elements of the CGIAR structures and activities</li> <li>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</li> </ul>	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	2020 -2 IA/IP arrangements NEW	Assurance, 40	<ul> <li>Assets are more vulnerable in times of change</li> <li>Intellectual Assets (IA) are the main product of CGIAR activities</li> <li>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</li> </ul>	<ul> <li>The engagement will aim to explore:</li> <li>To what extent IA are known and registered;</li> <li>Opportunities to increase capacity to utilize IP to enhance adoption of research results.</li> <li>Work scope is different to mandate of SCIP Group (no duplication of effort)</li> </ul>
II	2020 -3 Activities to support quality of science	Advisory	<ul> <li>Research is the core CGIAR activity; research quality assurance (QA) is important for the research to meet stakeholder expectations</li> <li>Leading world research institutions implement QA mechanisms for their scientific research activities</li> <li>As CGIAR re-thinks the structure of its research, early establishment of common quality standards is paramount to support the credibility of the reforms</li> </ul>	<ul> <li>The engagement will reflect on the:</li> <li>Research quality standard setting in the context of the guidance on QoR4D proposed by ISDC;</li> <li>Existing QA processes vis-à-vis the best practices and ISDC's guidance</li> </ul>
l www.cgiar.	<u>2020-4 Cyber</u> <u>security</u> org	Assurance, 25	<ul> <li>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</li> <li>If the phishing attacks succeed, CGIAR entities risk losing assets, data and sensitive information which may also result in reputational damage</li> </ul>	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	<ul> <li>Data is now widely recognized as one of the key organizational assets and an important factor contributing to competitive advantage</li> <li>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</li> <li>It is especially important to take stock of data as CGIAR transforms itself into a more effective institution</li> <li>Not prioritizing data governance is leading organizations to misallocate resources, produce poor quality insights and miss potential business opportunities (Gartner)</li> </ul>	<ul> <li>The objectives of the engagement will be to:</li> <li>Assess the data landscape within CGIAR; its ownership and utilization</li> <li>Identify opportunities to improve data governance.</li> <li>Potential efficiencies to be sought with the engagement 2020-4 Cyber Security.</li> </ul>
1	2020 -6 Assurance processes for Center controls and potential malpractices NEW (ADV)	Advisory	<ul> <li>Potential for malpractices increases in times of change</li> <li>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</li> </ul>	The engagement will assess to what extent CGIAR is set up to manage the risk of fraud in times of change.
1	2020-7 Follow up on IAF recommendations (ASR)	Assurance	<ul> <li>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.</li> </ul>	To provide assurance on the extent of the implementation of agreed management actions due at 31 December 2020 in response to internal audit findings.

<sup>\*</sup> 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 for 2020

- 20% of available audit time allocated to unplanned work for example consultancy work;
- 43% is allocated to advisory work (three out of seven planned 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.

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

